

Appendix S4. Ecosphere. J. Boone Kauffman, Dian Lyn Cummings, Cimarron Kauffman, Robert L. Beschta, Jeremy Brooks, Keeley MacNeill, William J. Ripple. Bison influences on composition and diversity of riparian plant communities in Yellowstone National Park.

Table S1. The frequency (%) and relative abundance (%) of species in the floodplain and greenline portions of the riparian zones, Yellowstone National Park. Freq 1 is the frequency in the 12.2 x 12.5 cm plot, freq 2 is the frequency in the 25 x 25 cm plot and freq 3 is the frequency in the 50 x 50 cm plot. Species are presented as alpha codes where the entire species names can be found in Appendix S2: Table S1.

Chalcedony Creek								
Species	Floodplain			Relative abundance	Greenline			Relative abundance
	% freq 1	% freq 2	% freq 3		% freq 1	% freq 2	% freq 3	
ACMI	2	3	10	1.2	<b>2</b>	7	22	2.0
AGGL	2	2	3	0.6	<b>0</b>	3	3	0.2
AGRE	2	2	3	0.6	<b>0</b>	0	0	0.0
AGSM	2	3	7	1.0	0	0	0	0.0
ASTER	42	58	65	15.4	33	52	57	11.3
BRIN	5	13	20	3.2	25	30	37	7.5
BROMUS-A	2	5	5	1.0	2	3	5	0.8
CAREX-O	2	12	23	2.9	7	13	22	3.1
CEVI	0	0	7	0.2	0	0	3	0.1
CIAR	0	0	10	0.4	3	10	13	1.0
DACA	3	10	13	1.1	3	3	3	0.4
EQAR	0	0	3	0.1	15	22	28	5.2
FESTUCA	0	0	7	0.2	0	0	0	0.0
FRVI	3	3	3	0.5	0	0	0	0.0
JUBA	7	10	15	2.9	3	3	3	0.4
JUNCUS	0	0	10	0.4	0	0	3	0.1
LUPINUS	2	2	8	1.0	0	0	0	0.0
PHPR	45	58	62	15.7	0	0	0	0.0
PODO	5	8	13	2.4	33	52	65	11.8
POGR	3	10	15	2.4	0	3	7	0.3
POHI	5	5	17	2.4	0	2	15	1.1
POPR	67	77	78	21.5	53	63	68	15.4
POSA	7	18	33	4.9	0	2	10	0.8
SEIN	3	3	3	0.5	0	0	0	0.0
TAOF	38	55	62	14.4	53	65	75	15.9
THAR	0	3	7	0.4	0	0	0	0.0
TRRE	3	8	20	2.6	17	23	42	6.4
UNK FORB	0	0	3	0.1	0	0	0	0.0
ROCU	0	0	0	0.0	0	3	3	0.2
SILA	0	0	0	0.0	0	3	3	0.2

SILENE	0	0	0	0.0	0	3	3	0.2
VEAM	0	0	0	0.0	5	7	13	1.9
AGROSTIS	0	0	0	0.0	0	0	3	0.1
ALAE	0	0	0	0.0	3	5	7	1.2
ANRO	0	0	0	0.0	2	2	3	0.5
CAAQ	0	0	0	0.0	7	7	7	1.7
CACA	0	0	0	0.0	2	5	12	1.3
CAUT	0	0	0	0.0	17	18	18	4.5
DECE	0	0	0	0.0	3	7	7	0.6
ELPA	0	0	0	0.0	3	3	5	1.0
EPGL	0	0	0	0.0	7	10	12	2.3
ERSP	0	0	0	0.0	0	3	3	0.2
GLST	0	0	0	0.0	0	0	3	0.1

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## Crystal Creek

	Floodplain				Greenline			
	% freq 1	% freq 2	% freq 3	Relative abundance	% freq 1	% freq 2	% freq 3	Relative abundance
ACMI	7	10	20	2.1	0	3	3	0.2
ACRI	0	0	3	0.2	0	0	0	0.0
AGGL	0	3	3	0.2	0	0	0	0.0
AMAL	2	2	7	0.6	0	7	7	0.3
ANRO	0	0	3	0.1	0	0	0	0.0
ASTER	5	8	14	3.1	5	7	12	2.9
BRMA	5	7	12	1.4	0	2	3	0.3
BRSP	3	5	5	0.8	0	5	7	0.6
CAAU	0	3	7	0.5	5	8	15	1.7
CACA	3	3	3	0.3	0	0	3	0.1
CAPE	22	30	42	5.6	18	25	37	5.0
CAREX-O	5	10	15	1.7	8	12	17	2.3
CARO	0	3	7	0.2	0	0	0	0.0
CAUT	0	0	3	0.1	2	5	12	1.0
CIAR	7	10	20	1.1	0	0	3	0.1
CISC	3	3	10	0.5	0	0	0	0.0
ELCI	0	0	3	0.1	0	0	0	0.0
ELGL	7	10	13	0.9	0	0	0	0.0
EPAN	10	17	23	2.9	7	13	27	2.7
EPGL	0	0	3	0.2	8	13	13	2.2
EQAR	7	12	22	2.3	20	30	43	5.7
EQHY	5	12	20	2.0	17	27	43	5.2
FESTUCA	0	3	13	0.4	0	0	3	0.1
FRVI	32	42	47	7.4	28	40	47	7.2
GAPA	7	12	20	2.2	5	12	25	2.4
GEMA	0	2	8	0.5	0	0	3	0.2
GEVI	18	40	63	6.9	5	15	42	3.4
HELA	0	0	7	0.2	0	0	0	0.0
JUBA	8	13	15	2.2	17	17	20	3.5
KOCR	0	0	3	0.1	0	0	0	0.0
LILE	0	2	3	0.2	0	0	0	0.0
LUPINUS	3	3	3	0.3	0	0	0	0.0
MEAR	3	3	3	0.3	3	5	10	1.1
MECI	0	0	3	0.1	0	2	5	0.3
MUST ANN	3	3	3	0.3	0	0	0	0.0
PHPR	23	37	53	6.7	3	8	12	1.3
PODO	0	3	3	0.2	0	0	0	0.0
POFR	0	10	13	0.6	0	0	0	0.0
POGR	0	0	3	0.1	0	0	3	0.1

POHI	3	3	3	0.3	0	0	0	0.0
POPR	72	78	80	14.8	28	35	42	6.7
POTR	0	0	3	0.1	3	3	7	0.4
RILA	3	13	17	0.9	2	5	12	1.0
ROWO	13	33	62	6.0	17	37	67	6.9
SABE	3	3	7	0.8	0	3	10	0.7
SALU	0	0	3	0.1	3	3	13	1.2
SEIN	10	20	20	1.5	12	23	28	3.8
SILENE	2	3	7	0.7	0	0	3	0.1
SMST	22	28	42	5.5	13	23	37	4.4
SOCA	10	20	33	3.6	22	32	42	5.9
STOC	0	0	3	0.1	0	0	0	0.0
SYAL	12	15	28	3.3	0	0	5	0.3
TAOF	3	7	13	1.3	2	7	8	0.9
THOC	10	13	25	2.9	10	17	30	3.4
TRRE	5	8	10	1.4	10	10	10	2.0
VIAD	2	5	18	1.3	0	7	7	0.3
ZYVE	0	3	3	0.2	2	5	13	1.1
UNK FORB	0	0	0	0	3	7	7	0.5
VEAM	0	0	0	0	0	0	3	0.1
AGIN	0	0	0	0	0	3	13	0.4
ALIN	0	0	0	0	2	2	5	0.5
ANAR	0	0	0	0	8	10	15	2.1
ELIN	0	0	0	0	0	3	7	0.3
GALI ANN	0	0	0	0	0	0	3	0.1
GLST	0	0	0	0	12	13	25	3.1
HABR-A	0	0	0	0	2	5	7	0.8
LOIN	0	0	0	0	3	5	8	1.0
PHAR	0	0	0	0	0	0	3	0.2
SARI	0	0	0	0	17	17	27	1.9
SIMO	0	0	0	0	0	3	3	0.2

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EF Blacktail Creek

Species	Floodplain			Relative abundance	Greenline			Relative abundance
	% freq 1	% freq 2	% freq 3		% freq 1	% freq 2	% freq 3	
ACMI	23	38	50	5.6	2	5	10	1.4
AGGL	0	0	3	0.1	0	0	0	0.0
AGIN	0	3	3	0.1	0	0	3	0.1
AGSM	3	7	9	1.4	0	0	0	0.0
ANMU	0	3	13	0.3	0	0	0	0.0
ANRO	7	10	13	1.5	0	0	0	0.0
ARLO	0	7	10	0.7	7	10	10	2.5
ARLU	3	8	13	1.2	0	0	0	0.0
ARTR	0	0	3	0.1	0	0	0	0.0
ASAG	3	10	20	0.8	0	0	0	0.0
ASTER	17	26	34	5.8	13	18	31	8.4
BRIN	0	0	7	0.1	0	0	0	0.0
BRMA	3	7	7	0.4	0	0	0	0.0
BROMUS-								
A	3	8	22	1.5	0	0	0	0.0
CAPE	0	3	7	0.2	20	25	32	7.2
CAREX-O	8	23	28	2.8	0	7	10	1.2
CARO	3	7	23	1.5	0	0	0	0.0
CARY								
ANN	3	3	3	0.3	0	0	0	0.0
CIAR	0	0	3	0.1	0	0	0	0.0
CIDO	0	0	3	0.1	5	5	8	1.7
CISC	0	0	7	0.1	0	0	0	0.0
DECE	3	3	3	0.3	0	0	0	0.0
DEOC	0	0	3	0.1	0	0	0	0.0
EQAR	3	7	7	0.8	3	12	18	2.7
EQHY	3	7	22	1.5	0	0	7	0.5
FESTUCA								
FRVI	45	55	58	8.4	7	12	18	3.2
GAPA	7	8	10	1.3	8	13	18	3.6
GEMA	3	3	3	0.3	0	0	3	0.1
GETR	0	3	3	0.1	0	0	0	0.0
GEVI	10	23	33	1.6	0	5	8	1.0
GRSQ	3	7	7	0.4	0	0	0	0.0
JUBA	7	10	20	1.8	13	20	27	2.7
LILE	3	15	22	1.8	0	0	0	0.0
LUSE	5	12	18	1.7	0	0	0	0.0
PENST	2	2	3	0.3	0	0	0	0.0
PHPR	50	63	68	9.6	10	12	20	3.8



Geode Creek								
Floodplain				Greenline				Relative abundance
Species	% freq 1	% freq 2	% freq 3	Relative abundance	% freq 1	% freq 2	% freq 3	
ACMI	18	28	40	5.6	7	8	12	2.8
AGGL	7	7	20	1.1	0	0	0	0.0
AGROSTIS	40	45	50	9.4	20	23	33	4.0
AGSM	0	0	3	0.1	0	0	0	0.0
ALAP	0	3	3	0.2	0	0	0	0.0
ANAR	0	0	3	0.1	0	3	13	1.4
ARLO	0	3	15	1.0	0	0	7	0.6
ASTER	10	21	32	5.9	10	17	27	7.9
BRMA	7	17	33	1.7	0	0	0	0.0
CAAQ	28	37	43	7.3	37	47	58	14.8
CACA	18	25	28	4.8	28	37	45	11.5
CAPE	0	3	3	0.2	0	0	0	0.0
CAREX-O	8	23	33	3.9	3	5	10	1.8
CARO	0	0	3	0.1	0	0	0	0.0
CASTI	7	10	10	0.9	0	0	3	0.3
CAUT	0	3	13	0.4	7	12	20	3.7
CIAR	0	3	3	0.2	0	0	0	0.0
COLI	0	0	10	0.3	0	0	0	0.0
DEOC	3	7	10	0.6	0	0	0	0.0
EPAN	15	25	40	5.1	3	12	17	2.9
EPGL	7	15	27	3.0	10	27	35	6.8
FESTUCA	0	7	10	0.4	0	0	0	0.0
FRVI	32	40	53	8.4	10	13	17	4.2
GALI ANN	0	0	3	0.1	4	4	7	2.5
GAPA	13	20	33	4.3	3	13	17	1.5
GEMA	2	3	8	0.8	0	0	0	0.0
GEVI	2	8	12	1.3	0	2	7	0.7
GRSQ	0	0	3	0.1	0	0	0	0.0
JUBA	7	12	15	2.1	0	3	13	0.7
LASE	0	0	3	0.1	0	3	3	0.3
LUPINUS	10	20	43	2.2	0	7	7	0.6
MECI	0	7	10	0.4	0	0	0	0.0
PEGR	0	3	10	0.4	0	7	10	0.7
PHPR	23	28	47	6.5	5	12	18	3.3
POGR	28	40	48	7.8	0	3	5	0.7

POPR	7	10	13	2.0	2	8	8	1.7
PTGA	7	13	23	1.3	0	0	3	0.1
ROCU	0	0	3	0.1	0	0	0	0.0
SEIN	10	13	13	1.3	3	13	13	1.4
SEPS	10	13	17	2.7	3	7	10	1.0
SILENE	0	2	3	0.3	3	3	3	0.6
SMST	0	0	5	0.3	2	5	7	1.2
STOC	0	0	3	0.1	0	0	0	0.0
TAOF	3	5	18	1.6	2	3	5	1.0
THOC	2	4	11	1.6	5	10	17	3.1
TRRE	3	5	8	1.1	0	0	3	0.1
UNK API	3	3	7	0.4	3	7	10	1.0
UNK FORB	3	3	3	0.4	3	3	3	0.6
VEAM	0	0	0	0	3	7	7	0.8
VIAD	0	0	0	0	5	10	20	3.3
AGST	0	0	0	0	7	10	13	1.5
ALAE	0	0	0	0	0	3	3	0.3
ALIN	0	0	0	0	0	2	3	0.4
CIDO	0	0	0	0	0	3	3	0.3
EQAR	0	0	0	0	0	0	3	0.3
GLST	0	0	0	0	0	0	3	0.1
POFR	0	0	0	0	0	0	3	0.1
SAGE	0	0	0	0	0	7	15	1.8
SALU	0	0	0	0	7	22	30	5.4
THAR	0	0	0	0	0	3	3	0.3

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Jasper Creek

Species	floodplain			Relative abundance	Greenline			Relative abundance
	% freq 1	% freq 2	% freq 3		% freq 1	% freq 2	% freq 3	
ACMI	27	40	62	8.5	13	23	42	5.1
AGIN	0	0	3	0.1	0	0	3	0.1
AGROSTIS	0	0	3	0.1	0	0	0	0.0
ANRO	0	0	10	0.3	3	3	3	0.4
ARLU	13	25	37	4.8	20	23	42	5.8
ASTER	13	22	37	4.6	28	37	50	8.0
BRIN	0	0	10	0.3	3	7	7	1.1
BROMUS-A	2	3	8	0.8	3	3	3	0.4
CAPE	0	0	3	0.1	18	27	35	5.5
CAREX-O	3	13	27	2.5	2	5	12	1.1
CECE	0	0	7	0.2	0	0	0	0.0
CISC	0	3	7	0.3	0	0	0	0.0
ELGL	0	0	3	0.1	0	0	0	0.0
FESTUCA	0	3	7	0.3	0	0	0	
FRVI	23	33	40	6.6	8	18	38	4.1
GAPA	3	5	18	1.6	3	7	12	1.4
GEMA	0	5	7	0.6	3	5	7	1.0
GETR	3	3	10	0.5	0	0	0	0.0
GEVI	7	17	35	3.5	0	2	10	0.6
HOUM	3	3	3	0.4	0	0	0	0.0
JUBA	5	8	10	1.5	2	3	10	0.9
MEAR	7	10	13	1.0	3	7	12	1.4
MECI	0	0	10	0.3	3	10	10	0.7
MUST ANN	0	0	3	0.1	0	0	0	0.0
PHPR	55	60	68	13.0	48	58	63	12.2
PODO	3	3	3	0.4	0	3	3	0.2
POGR	27	38	48	7.6	8	30	47	5.2
POPR	75	78	78	16.7	53	62	72	13.4
POSA	0	3	7	0.3	0	0	0	0.0
ROWO	20	38	45	6.7	27	37	53	8.0
SAEX	7	7	10	0.8	7	8	13	1.9
SEIN	0	7	13	1.2	13	18	28	4.1
SMST	3	5	15	1.5	3	13	33	1.5
SOCA	10	15	28	3.5	5	10	23	2.4
TAOF	3	5	10	1.2	0	7	13	0.6
THAR	0	7	7	0.4	3	3	3	0.4
THOC	18	25	33	5.2	3	7	33	2.6

TRRE	3	3	3	0.4	2	2	3	0.5
UNK FORB	3	3	3	0.4	0	0	0	0.0
VIAD	5	10	12	1.7	3	3	3	0.4
BORAGE	0	0	0	0	0	0	10	0.3
CACA	0	0	0	0	10	15	22	3.2
DECE	0	0	0	0	3	3	3	0.4
EPGL	0	0	0	0	3	7	10	0.6
EPIL ANN	0	0	0	0	0	0	3	0.1
GLST	0	0	0	0	7	7	7	0.7
HELA	0	0	0	0	0	3	3	0.3
HELA	0	0	0	0	0	0	0	0.0
JUNCUS	0	0	0	0	3	3	7	0.5
POAN	0	0	0	0	3	3	5	0.8
POFR	0	0	0	0	0	0	3	0.1
PTGA	0	0	0	0	3	3	3	0.4
ROCU	0	0	0	0	0	3	10	0.4
RUCR	0	0	0	0	2	3	8	0.8
SYAL	0	0	0	0	3	7	10	0.6

Lost Creek

Species	floodplain			Relative abundance	Greenline			Relative abundance
	% freq 1	% freq 2	% freq 3		% freq 1	% freq 2	% freq 3	
ACMI	12	30	45	3.9	7	7	10	1.7
ANMA	3	7	7	0.4	0	0	0	0.0
ANMU	3	7	15	1.1	0	0	0	0.0
ANRO	5	8	13	1.3	0	0	0	0.0
ARTR	3	3	3	0.3	0	0	0	0.0
ASTER	7	11	17	3.3	13	17	28	4.1
BRIN	0	0	3	0.1	0	0	0	0.0
BROMUS-A	13	30	40	1.9	0	3	7	0.3
CAAQ	3	10	10	0.5	60	68	72	14.8
CAPE	8	18	32	2.7	5	7	12	1.6
CAREX-O	18	42	50	5.1	10	15	25	3.4
CAUT	0	0	3	0.1	27	35	45	7.6
CEVI	5	10	12	1.3	0	3	3	0.2
CIAR	15	40	57	5.1	2	7	12	1.2
DECE	0	0	3	0.1	0	3	3	0.2
EQHY	38	53	67	7.9	5	7	10	1.5
FESTUCA	3	3	7	0.7	3	10	10	1.5
FRVI	58	68	75	10.4	3	7	18	1.8
GAPA	3	3	7	0.3	0	0	3	0.1

GEMA	10	20	27	2.7	0	3	17	1.1
JUBA	55	62	63	9.4	13	22	33	4.7
KOCR	0	3	3	0.1	0	0	0	0.0
LILE	0	0	3	0.1	0	0	0	0.0
MEAR	3	3	3	0.3	8	22	37	4.3
PHPR	63	75	80	11.3	5	12	13	2.0
POFR	8	8	25	2.0	0	3	7	0.6
POGR	17	33	43	4.4	5	10	20	2.3
POPR	68	75	75	11.5	5	12	17	2.2
POTR	0	0	3	0.1	0	0	0	0.0
RANUN	0	3	3	0.1	2	2	5	0.6
SEIN	25	37	47	5.3	12	23	43	5.1
SIMO	0	0	3	0.1	0	0	0	0.0
SMST	3	3	10	0.4	0	3	3	0.2
SOCA	10	17	33	2.8	18	27	27	5.1
STOC	0	0	7	0.1	0	0	0	0.0
TAOF	0	10	13	0.5	3	3	3	0.4
TRRE	5	8	8	1.1	0	0	3	0.1
VIAD	3	6	14	1.6	13	20	43	2.6
UNK FORB	0	0	0	0	2	3	3	0.6
VEAM	0	0	0	0	3	5	10	1.2
AGROSTIS	0	0	0	0	2	7	10	1.1
ALAE	0	0	0	0	3	3	3	0.4
ARLO	0	0	0	0	0	3	3	0.4
Botrychlum	0	0	0	0	0	0	3	0.1
CACA	0	0	0	0	53	60	62	13.0
EPGL	0	0	0	0	22	37	48	7.3
GALI ANN	0	0	0	0	5	10	13	1.9
GLST	0	0	0	0	3	3	3	0.4
PAFI	0	0	0	0	7	10	10	1.0
RUCR	0	0	0	0	0	2	8	0.6
SAGE	0	0	0	0	0	0	3	0.1
SILENE	0	0	0	0	2	2	5	0.6

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Rose Creek

Species	floodplain			Relative abundance	Greenline			Relative abundance
	% freq 1	% freq 2	% freq 3		% freq 1	% freq 2	% freq 3	
ACMI	7	7	10	1.1	0	0	3	0.2
AGIN	10	12	13	3.2	7	15	25	3.2
AGROSTIS	0	7	7	0.5	3	7	13	0.8
ARLO	5	7	12	2.0	0	3	13	0.5
ASTER	2	2	8	0.9	10	15	30	3.9
BRIN	25	32	42	8.7	13	23	33	5.0
CAREX-O	17	20	23	5.4	8	8	13	2.3
CEVI	0	2	3	0.4	18	27	32	5.7
CIAR	12	27	45	6.7	33	45	65	10.7
COLI	3	3	3	0.5	0	0	0	0.0
DECE	0	3	7	0.4	0	0	3	0.2
HELA	3	3	3	0.5	0	3	7	0.3
HOBR	8	13	23	3.8	3	3	3	0.4
PHPR	32	43	62	11.9	37	55	58	11.3
POGR	0	0	10	0.7	3	5	8	1.2
POPR	75	80	80	22.0	77	77	82	18.8
SEIN	2	3	7	0.9	0	3	3	0.2
TAOF	72	75	77	20.9	58	75	80	16.4
THAR	0	0	10	0.4	3	7	7	0.6
TRRE	23	32	50	9.1	40	45	58	11.1
RUCR	0	0	0	0.0	0	0	7	0.2
AGST	0	0	0	0.0	7	13	20	<b>1.4</b>
BORAGE	0	0	0	0.0	0	3	3	<b>0.2</b>
CAAQ	0	0	0	0.0	10	13	18	3.1
EPGL	0	0	0	0.0	2	2	7	0.7
EQAR	0	0	0	0.0	0	3	3	0.2
JUBA	0	0	0	0.0	2	3	5	0.7
JUNCUS	0	0	0	0.0	3	3	3	0.4
VEAM	0	0	0	0.0	0	3	3	0.2

WF Antelope Creek

Species	floodplain			Relative abundance	Greenline			Relative abundance
	% freq 1	% freq 2	% freq 3		% freq 1	% freq 2	% freq 3	
ACMI	23	52	67	8.3	0	0	0	0.0
AGGI	3	3	17	0.7	0	0	0	0.0
AGGL	0	3	7	0.3	0	0	0	0.0
AGIN	0	0	3	0.1	0	0	0	0.0
ARCA	0	0	13	0.3	0	0	0	0.0
ARLO	3	8	13	1.4	2	5	8	1.2
ASSP	0	0	7	0.2	0	0	0	0.0
ASTER	13	28	38	4.7	15	37	50	8.7
ASTRAG	0	0	7	0.2	0	0	0	0.0
BORAGE	3	5	8	1.0	0	0	3	0.1
BRMA	12	13	17	2.7	0	0	0	0.0
BROR	0	3	3	0.2	0	0	0	0.0
CAPE	0	3	3	0.2	0	3	3	0.2
CAREX-O	3	7	13	1.3	2	2	5	0.7
CARO	2	3	15	1.1	0	0	0	0.0
CASTI	0	3	8	0.6	0	0	0	0.0
CISC	0	0	3	0.2	0	0	0	0.0
COLI	0	0	3	0.2	0	0	0	0.0
EPAN	0	2	15	0.8	2	3	15	1.6
EPIL ANN	0	7	10	0.4	0	0	0	0.0
EQAR	0	0	3	0.2	30	38	58	11.6
ERSP	0	0	7	0.2	0	0	0	0.0
FESTUCA	10	17	30	3.3	0	3	3	0.2
FRVI	65	68	70	13.4	3	7	18	2.4
GAPA	3	10	30	2.3	0	3	13	0.6
GEMA	3	5	8	1.0	3	3	7	0.6
GETR	0	3	3	0.2	0	0	0	0.0
GEVI	3	7	20	0.8	0	2	7	0.6
GRSQ	3	10	17	0.8	0	0	0	0.0
LUPINUS	0	13	30	2.2	0	3	3	0.2
PEGR	0	3	3	0.2	2	3	7	1.0
PENST	2	5	8	0.8	0	0	0	0.0
PHPR	78	83	83	16.2	10	17	17	2.0
PODO	0	0	3	0.1	0	0	0	0.0
POGR	12	23	50	4.8	0	0	3	0.1
POPR	2	5	8	0.8	0	0	0	0.0
PTGA	2	7	17	1.3	0	0	0	0.0

RILA	0	0	3	0.1	0	0	3	0.1
ROWO	0	3	3	0.2	3	3	10	0.7
SEIN	0	0	7	0.2	0	0	0	0.0
SESE	0	10	17	0.7	0	0	0	0.0
SILENE	7	7	10	0.8	0	0	0	0.0
SOCA	10	22	28	3.5	3	5	12	1.7
STOC	3	3	7	0.4	0	0	0	0.0
TAOF	8	18	40	3.8	3	7	15	2.1
THOC	3	5	13	1.3	8	10	22	3.6
TRRE	60	63	73	12.8	3	10	22	2.8
UNK API	5	8	28	2.3	0	0	0	0.0
VIAD	2	3	8	0.8	0	0	7	0.2
UNK FORB	0	0	0	0.0	0	0	10	0.4
ALIN	0	0	0	0.0	8	10	15	3.1
AMCI	0	0	0	0.0	0	3	13	0.6
ANRO	0	0	0	0.0	0	0	3	0.1
BRIN	0	0	0	0.0	0	0	3	0.1
CAAQ	0	0	0	0.0	42	53	65	15.0
CAAU	0	0	0	0.0	0	0	3	0.2
CACA	0	0	0	0.0	12	25	43	6.8
CAUT	0	0	0	0.0	3	7	18	2.4
CIDO	0	0	0	0.0	5	8	18	2.7
EPGL	0	0	0	0.0	8	23	33	5.4
GALI ANN	0	0	0	0.0	0	7	7	0.5
GLST	0	0	0	0.0	2	2	5	0.7
HELA	0	0	0	0.0	0	0	3	0.1
JUBA	0	0	0	0.0	2	2	7	0.9
JUNCUS	0	0	0	0.0	2	2	5	0.7
LOIN	0	0	0	0.0	2	2	8	1.0
LUZULA	0	0	0	0.0	0	3	7	0.4
MUST ANN	0	0	0	0.0	0	0	3	0.1
PAFI	0	0	0	0.0	7	10	25	3.6
POASP	0	0	0	0.0	0	0	3	0.1
PUPA	0	0	0	0.0	3	7	7	0.7
SAGE	0	0	0	0.0	3	7	8	1.6
SALU	0	0	0	0.0	15	20	32	6.1
SAWO	0	0	0	0.0	0	0	7	0.2
SMST	0	0	0	0.0	7	8	17	2.8

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