

Appendix S2. 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. Plant species encountered in plots sampled in riparian zones of Yellowstone National Park, 2020. Nomenclature follows that of Hitchcock and Cronquist (2018).

<u>Scientific name</u>	<u>Synonym</u>	<u>Common Name</u>	<u>Alpha code</u>	<u>wetland Indicator score</u>	<u>Hydrophyte</u>
Acantherum richarsonii	Acantherum richarsonii	Needlegrass	ACRI	5	2
Achillea millefolium	Achillea millefolium	Yarrow	ACMI	4	2
Acnatherum occidentale	Stipa occidentalis	Needlegrass	STOC	4	2
Agoseris glauca	Agoseris glauca	False dandelion	AGGL	3	1
Agrostis stolonifera	Agrostis stolonifera	Bentgrass	AGST	3	1
Agrostis spp	Agrostis sp	Bentgrass	Agrostis sp	3	1
Allium brevistylum	Allium brevistylum	Short-styled Onion	ALBR	2	1
Allium sp	Allium sp	Onion	ALLIUM	2	1
Alnus incana	Alnus incana	Thin leaf Alder	ALIN	2	1
Alopecurus aequalis	Alopecurus aequalis	Little foxtail	ALAE	1	1
Alopecurus pratensis	Alopecurus pratensis	Meadow foxtail	ALPR	3	1
Amelanchier alnifolia	Amelanchier alnifolia	Serviceberry	AMAL	4	2
Anaphalis margaritaceae	Anaphalis margaritaceae	Pearly Everlasting	ANMA	4	2
Androsace filiformis	Androsace filiformis	Fairy candelabra	AMFI	2	1
Anenome multifida	Anenome multifida	Pacific anenome	ANMU	2	1
Angelica arguta	Angelica sp	White angelica	ANAR	2	1
Antennaria microphylla	Antennaria rosea	Rose pussytoes	ANRO	3	1
Apiaceae (unknown)	Apiaceae (unknown)	Unknown umbel	UNK API	3	1

<i>Arnica longifolia</i>	<i>Arnica longifolia</i>	Seep-spring Arnica	ARLO	2	1
<i>Artemisia cana</i>	<i>Artemisia cana</i>	Silver sage	ARCA	4	2
<i>Artemisia ludoviciana</i>	<i>Artemisia ludoviciana</i>	Louisiana wormwood	ARLU	4	2
<i>Artemisia tridentata tridentata</i>	<i>Artemisia tridentata tridentata</i>	Basin big sagebrush	ARTR-T	5	2
<i>Artemisia tridentata vaseyana</i>	<i>Artemisia tridentata vaseyana</i>	Mountain Big Sagebrush	ARTR-V	5	2
<i>Astragalus</i> spp	<i>Astragalus</i> spp	Locoweed	ASTRAG	3	1
Boraginaceae (annual unknown)	annual borage	Borage	BORAGE	2	1
<i>Botrychium</i> spp (unknown species)	<i>Botrychium</i> spp (unknown species)	Moonwort	Botrychium	3	1
Brassicaceae (unknown)	Brassicaceae (unknown)	Unknown mustard	MUST ANN	3	1
<i>Brodiaea rosea</i>	<i>Brodiaea rosea</i>	Indian valley Brodiaea	BRRO	2	1
<i>Brodiaea</i> spp	<i>Brodiaea</i> spp	Brodiaea	BRSP	2	1
<i>Bromus</i> annual (<i>B. japonicus</i> et al.)	<i>Bromus</i> annual (<i>B. japonicus</i> et al.)	Japanese/annual Brome	BROMUS-A	2	1
<i>Bromus inermis</i>	<i>Bromus inermis</i>	Smooth Brome	BRIN	5	2
<i>Bromus sitchensis</i>	<i>Bromus marginatus</i>	Mountain Brome	BRMA	5	2
<i>Calamagrostis canadensis</i>	<i>Calamagrostis canadensis</i>	Bluejoint reedgrass	CACA	2	1
<i>Campanula rotundifolia</i>	<i>Campanula</i>	Harebell	CARO	4	2
<i>Carex aquatilis</i>	<i>Carex aquatilis</i>	Water sedge	CAAQ	1	1
<i>Carex aurea</i>	<i>Carex aurea</i>	Golden sedge	CAAU	2	1
<i>Carex microptera</i>	<i>Carex microptera</i>	Ball Sedge	CAMI	2	1
<i>Carex pellita</i>	<i>Carex pellita</i>	sedge	CAPE	1	1
<i>Carex</i> species (ovales)	<i>Carex</i> (oval species)*	Ball Sedges	CAREX	1	1
<i>Carex utriculata</i>	<i>Carex utriculata</i>	Inflated sedge	CAUT	1	1
Caryophyllaceae (unknown annual)	Caryophyllaceae (unknown annual)	ANN PINK	CARY ANN	3	1
<i>Castilleja</i> spp.	<i>Castilleja</i> spp.	Indian paintbrush	CASTI	3	1

Cerastium glomeratum	Cerastium viscosum	Sticky Chickweed	CEVI	4	2
Cicuta douglasii	Cicuta douglasii	Douglas's Water Hemlock	CIDO	1	1
Cirsium arvense	Cirsium arvense	Creeping Thistle	CIAR	3	1
Cirsium scariosum	Cirsium scariosum	Elk Thistle	CISC	3	1
Collomia linearis	Collomia linearis	Narrow-leaf collomia	COLI	4	2
Danthonia californica	Danthonia californica	California oatgrass	DACA	3	1
Dasiphora fruticosa	Potentilla fruticosa	Shrubby cinquefoil	POFR	4	2
Delphinium occidentale	Delphinium occidentale	Duncecap larkspur	DEOC	4	2
Deschampsia cespitosa	Deschampsia cespitosa	Tufted hairgrass	DECE	2	1
Eleocharis palustris	Eleocharis palustris	Creeping spikerush	ELPA	1	1
Epilobium (unknown annual)	Epilobium (unknown annual)	Annual epilobium	EPIL ANN	3	1
Epilobium angustifolium	Epilobium angustifolium	Fireweed	EPAN	4	2
Epilobium glaberrimum	Epilobium glaberrimum	Willoweed	EPGL	2	1
Epilobium paniculatum	Epilobium paniculatum	Willoweed	EPPA	2	1
Equisetum arvense	Equisetum arvense	Horsetail	EQAR	3	1
Equisetum hyemale	Equisetum hyemale	Horsetail	EQHY	2	1
Erigeron (unknwn species)	Erigeron sp	Pubescent fleabane	ERSP	3	1
Erythranthe guttata	Mimulus guttatus	Monkeyflower	MIGU	1	1
Erythranthe moschata	Mimulus moschostos	monkey flower	MIMO	1	1
Festuca sp (unknown annual)	Festuca sp (unknown annual)	Festuca ann	FESTUCA	3	1
Frageria virginiana	Frageria virginiana	Strawberry	FRVI	4	2
Galium (unknown annual)	Galium (unknown annual)	Galium annual	GALI ANN	3	1
Galium palustre	Galium palustre	Bedstraw	GAPA	2	1
Geranium viscosissimum	Geranium viscosissimum	Sticky geranium	GEVI	4	2

Geum macrorphyllum	Geum macrorphyllum	Large-leaved avens	GEMA	3	1
Geum triflorum	Geum triflorum	Prairie-smoke avens	GETR	4	2
Glyceria striata	Glyceria striata	Fowl mannagrass	GLST	1	1
Grindelia squarrosa	Grindelia squarrosa	Gumweed	GRSQ	4	2
Heracleum maximum	Heracleum lanatum	Cow parsnip	HELA	3	1
Hordeum brachyantherum	Hordeum brachyantherum	Foxtail	HOBH	2	1
Juncus balticus	Juncus balticus	Baltic rush	JUBA	1	1
Juncus spp (terminal inflor)	Juncus spp (terminal inflor)	Rush	JUNCUS	2	1
Koeleria macrantha	Koeleria cristata	Junegrass	KOCR	3	1
Lactuca serriola	Lactuca serriola	Prickly lettuce	LASE	3	1
Leymus cinereus	Elymus cinereus	Great Basin wildrye	ELCI	3	1
Linum lewisii	Linum lewisii	Flax	LILE	4	2
Lonicera involucrata	Lonicera involucrata	Twinberry	LOIN	3	1
Lupinus (Unknown species)	Lupinus	Lupine	LUPINUS	4	2
Lupinus argenteus	Lupinus argenteus	Lupine	LUAR	4	2
Lupinus sericeus	Lupinus sericeus	Lupine	LUSE	3	1
Luzula (Unknown species)	Luzula	Wood rush	LUZULA	3	1
Maianthemum stellatum	Smilacina stellata	Star-flowered false soloman seal	SMST	3	1
Mentha canadensis	Mentha arvensis	European mint	MEAR	2	1
Mertensia ciliata	Mertensia ciliata	mountain bluebells	MECI	2	1
Packera pseud aurea	Senecio pseud aureus	Streambank butterweed	SEPS	2	1
Parnasia fimbriata	Parnasia fimbriata	Fringed grass of parnassus	PAFI	1	1
Pascopyrum smithii	Agropyron smithii	Western wheatgrass	AGSM	4	2
Pedicularis groenlandica	Pedicularis groenlandica	Elephant head	PEGR	1	1

Penstemon	Penstemon	Penstemon	PENST	2	1
Perideridia montana	Perideridia gardneri	Gardiners yampah	PTGA	3	1
Phalaris arundinaceae	Phalaris arundinaceae	Reed canarygrass	PHAR	2	1
Phleum pratense	Phleum pratense	Meadow timothy	PHPR	3	1
Plantago major	Plantago major	Plantain	PLMA	3	1
Platanthera aquilonis	Habenaria aquilonis	Green flowered orchid	HABR-A	2	1
Poa pratensis	Poa pratensis	Kentucky bluegrass	POPR	3	1
Poa sandbergii	Poa sandbergii	Sandbergs bluegrass	POSA	4	2
Poa Sp. (unknown)	Poa Sp. (unknown)	Poa sp	POASP	3	1
Polygonum douglasii	Polygonum douglasii	Douglas's knotweed	PODO	4	2
Populus tremuloides	Populus tremuloides	Quaking aspen	POTR	4	2
Potentilla ansirina	Potentilla ansirina	Stolon cinquefoil	POAN	3	1
Potentilla gracilis	Potentilla gracilis	Graceful cinquefoil	POGR	3	1
Potentilla hippiana	Potentilla hippiana	Wooly cinquefoil	POHI	3	1
Ranunculaceae (unknown)	Ranunculaceae (unknown)	Unknwn buttercup	RANUN	3	1
Ranunculus aquatilis	Ranunculus aquatilis	Water buttecup	RAAQ	1	1
Ribes lacustre	Ribes lacustre	Black current	RILA	3	1
Rorippa curvisiliqua	Rorippa curvisiliqua	Watercress	ROCU	1	1
Rosa woodsii	Rosa woodsii	Woods rose	ROWO	4	2
Rumex crispus	Rumex crispus	Curly dock	RUCR	3	1
Salix bebbiana	Salix bebbiana	Bebb's willow	SABE	2	1
Salix exigua	Salix exigua	Coyote willow	SAEX	2	1
Salix geyeriana	Salix geyeriana	Geyer's willow	SAGE	2	1
Salix lasiandra	Salix lasiandra	Whiplash willow	SALA	2	1

Salix lutea	Salix lutea	Yellow willow	SALU	1	1
Salix wolfii	Salix wolfii	Wolf willow	SAWO	2	1
Senecio intergerrimus	Senecio intergerrimus	Western groundsel	SEIN	4	2
Senecio serra	Senecio serra	Tall butterweed	SESE	4	2
Shepherdia canadensis	Shepherdia canadensis	Buffaloberry	SHCA	5	2
Silene (unknown species)	Silene sp	Wild pink	SILENE	3	1
Silene latifolia	Silene latifolia	Evening catchfly	SILA	4	2
Sisynchrium montanum	Sisynchrium montanum	Blue-eyed grass	SIMO	3	1
Solidago lepida	Solidago canadensis	Goldenrod	SOCA	4	2
Spiranthes romanzoffiana	Spiranthes romanzoffiana	Ladies tresses	SPRO	2	1
Symphotrichium ascendens	Aster sp	Aster	ASTER	3	1
Taraxacum officinale	Taraxacum officinale	Dandelion	TAOF	4	2
Thalictrum occidentale	Thalictrum occidentale	Meadow Rue	THOC	4	2
Thinopyrum intermedium	Agropyron intermedium	Intermediante wheatgrass	AGIN	4	2
Thlaspi arvense	Thlaspi arvense	Pennycress	THAR	5	2
Torreyochloa pallida	Puccinellia pauciflora	Pale false mannagrass	PUPA	2	1
Toxicoscordian venosum	Zygadenus venosus	Meadow death camas	ZYVE	4	2
Tragopogon dubius	Tragopogon dubius	Yellow salsify	TRDU	4	2
Trifolium repens	Trifolium repens	White slover	TRRE	3	1
Urtica dioica	Urtica dioica	Stinging nettle	URDI	3	1
Veronica americana	Veronica americana	Speedwell	VEAM	3	1
Vicia americana	Vicia americana	American vetch	VIAM	3	1

Literature cited

Hitchcock C.L. and A. Cronquist. 2018. Flora of the Pacific Northwest. University of Washington Press. Seattle 852p.