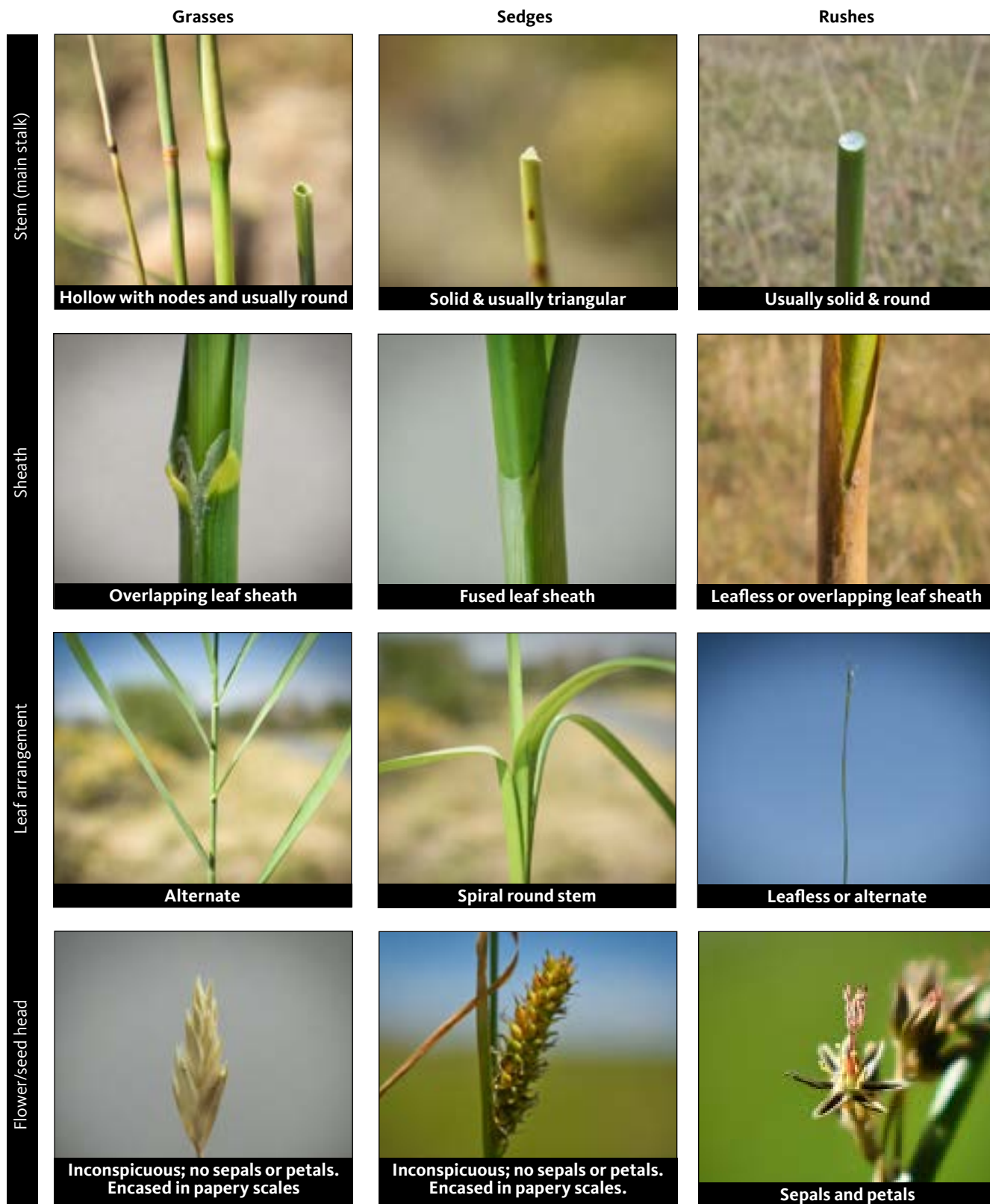


Appendix C: Riparian vegetation



Credit: © Oregon State University

Figure C.1. Comparing characteristics of grasses, sedges and rushes.

Table C.1. Wetland and greenline stability ratings of common riparian plants pictured in this appendix¹.

Species	Plant code	Common name	Wetland rating*	Growth form ^{2,3}	Greenline stability rating ⁴	Figure #
<i>Juncus balticus</i>	JUBA	Baltic rush	FACW	Rhizomatous	8.5	C.2
<i>Juncus nevadensis</i>	JUNE	Sierra rush	FACW	Rhizomatous	5	C.3
<i>Schoenoplectus acutus</i>	SCACO4	Hardstem bulrush	OBL	Rhizomatous	8.5	C.4
<i>Carex aquatilis</i>	CAAQ	Water sedge	OBL	Rhizomatous	8.5	C.5
<i>Carex nebrascensis</i>	CANE	Nebraska sedge	OBL	Rhizomatous	8.5	C.5
<i>Carex athrostachya</i>	CAAT3	Slenderbeak sedge	FACW	Bunch	2	C.6
<i>Carex praegracilis</i>	CAPR5	Clustered field sedge	FACW	Rhizomatous	8.5	C.7
<i>Carex utriculata</i>	CAUT	Beaked sedge	OBL	Rhizomatous	8.5	C.8
<i>Carex pellita</i>	CAPE42	Woolly sedge	OBL	Rhizomatous	8.5	C.9
<i>Carex aurea</i>	CAAU3	Golden sedge	FACW	Bunch	5	C.10
<i>Carex simulate</i>	CASI2	Short-beak sedge	OBL	Rhizomatous	8.5	C.11
<i>Carex abrupta</i>	CAAB2	Abrupt-beak sedge	FAC	Rhizomatous	5	C.12
<i>Eleocharis palustris</i>	ELPA3	Common spikerush	OBL	Rhizomatous	5	C.13
<i>Typha latifolia</i>	TYLA	Broad-leaf cattail	OBL	Rhizomatous	8.5	C.14
<i>Equisetum laevigatum</i>	EQLA	Smooth scouring rush	FACW	Rhizomatous	2	C.15
<i>Phleum pratense</i>	PHPR3	Common timothy	FAC	Bunch	2	C.16
<i>Poa pratensis</i>	POPR	Kentucky bluegrass	FAC	Rhizomatous	2	C.17
<i>Phalaris arundinacea</i>	PHAR3	Reed canary grass	FACW	Rhizomatous	7	C.18

¹Lorenzana, J.A., D.A., Weixelman and S.E., Gross, 2017, Plant Guide for Resource Managers: USDA USFS, Pacific Southwest Region R5-TP-042.1475

²USDA-Plants Database plants.usda.gov

³Wilson, B. L. (2008). Field Guide to the Sedges of the Pacific Northwest. Oregon State University Press.

⁴Ability of a species to stabilize streambanks. Low numbers indicate plants likely contribute little to bank stabilization while high numbers indicate greater ability to stabilize banks. The stability rating of individual plants is multiplied when they grow in interconnected colonies.

*See Table C.2 below

Table C.2. Wetland rating definitions

OBL	Obligate: Almost always occur in wetlands
FACW	Facultative wet: Usually occur in wetlands
FAC	Facultative: Occur in wetlands and nonwetlands
FACU	Facultative upland: Usually occur in nonwetlands, but may occur in wetlands
UPL	Upland: Almost always occur in nonwetlands



Figure C.2. Baltic rush: differentiated from the Sierra rush by the continuation of a stem-like feature past the flower (subtending bract).



Figure C.3. Sierra rush: unlike Baltic rush, stalk ends in a loose branching cluster of flowers (terminal panicle).

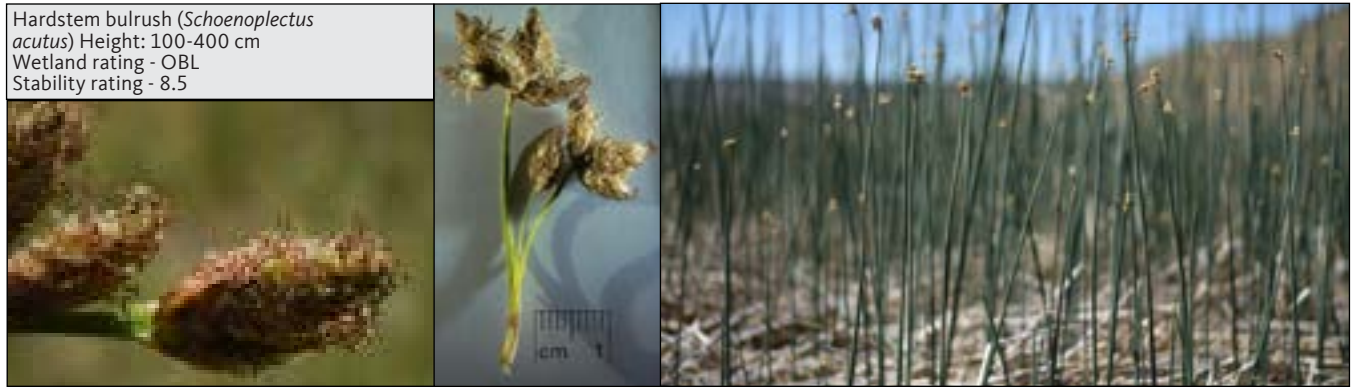


Figure C.4. Hardstem bulrush is a member of the sedge family but has round stems similar to a rush. It is generally larger and darker green compared to rushes.



Figure C.5. Water sedge and Nebraska sedge function and look similarly. They can only be distinguished by subtle differences in perigynia (specialized bract surrounding the seed/fruit).



Figure C.6. Slenderbeak sedge: This sedge has an oval shaped flower cluster (inflorescence) and a distinctively long bract.



Figure C.7. Clustered field sedge has a dense cluster of flowers in a loose cylindrical shape.



Figure C.8. Beaked sedge (also known as Northwest Territory sedge): This sedge is distinct from others in having comparatively broad leaves (>1cm).



Figure C.9. Woolly sedge: This sedge is distinct as it is one of two that has hairy perigynia (comparison in Figure C.20).



Figure C.10. Golden sedge is distinguished by its yellow-orange, pumpkin-like perigynia.



Figure C.11. Short-beak sedge is distinguished by its short, pump, dark brown perigynia.



Figure C.12. Abrupt-beak sedge have a single, dense seed head. Perigynia are dark brown with beak-like tips.

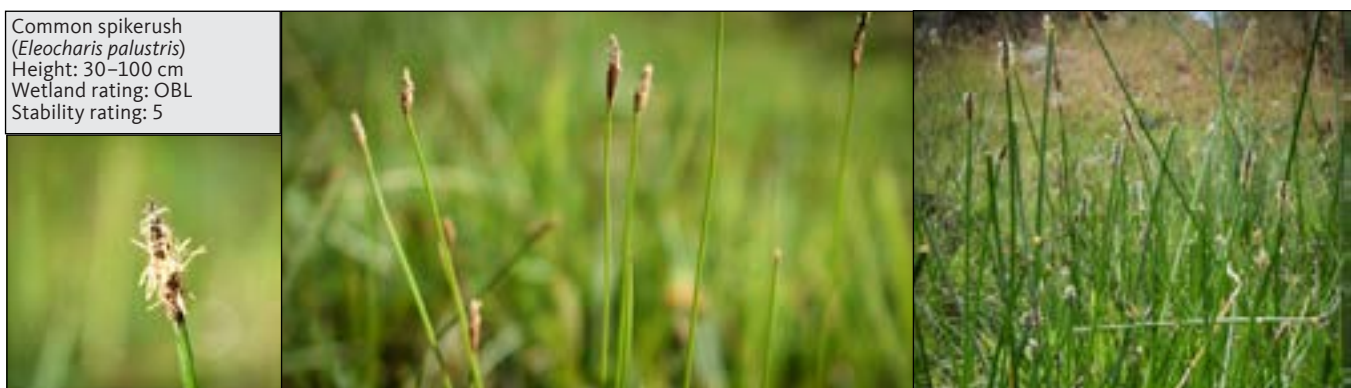


Figure C.13. Common spikerush has a matchstick-like green stem and a single flowering spike.

Broad-leaf cattail (*Typha latifolia*)
 Height: 150–300 cm
 Wetland rating: OBL
 Stability rating: 8.5



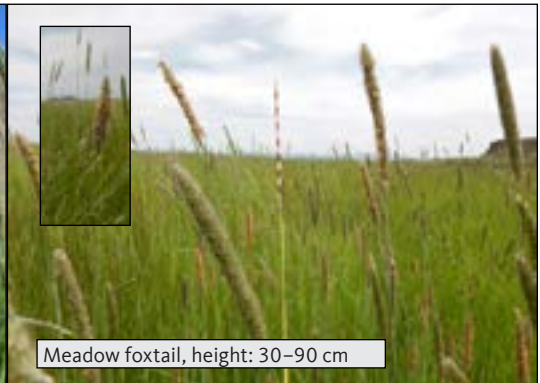
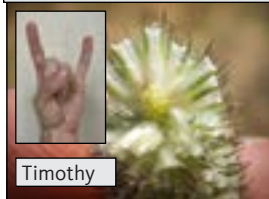
Figure C.14. Broad-leaf cattail can be easily distinguished by its large size and distinctive corn-dog-like seed head that appears covered in soft down in late summer/fall.

Smooth-scouring rush (smooth horsetail) (*Equisetum laevigatum*)
 Height: 20–150 cm
 Wetland rating: FACW
 Stability rating: 2



Figure C.15. Smooth scouring rush is leafless with a cylindrical stem punctuated by dark horizontal bands. It's topped by a single cone.

Common timothy (*Phleum pratense*)
 Wetland rating: FAC
 Stability rating: 3
 Meadow foxtail (*Alopecurus pratensis*) Wetland rating: FAC
 Stability rating: 2



Timothy

Timothy, height: 50–100 cm

Meadow foxtail, height: 30–90 cm

Figure C.16. Meadow foxtail is generally shorter and darker green than common Timothy. Timothy has “rock on” shaped awns, whereas meadow foxtail has a single awn.



Figure C.17. Kentucky bluegrass is much smaller in stature than reed canary grass. Leaves have a boat-shaped tip. It grows in a continuous, rhizomatous mat.

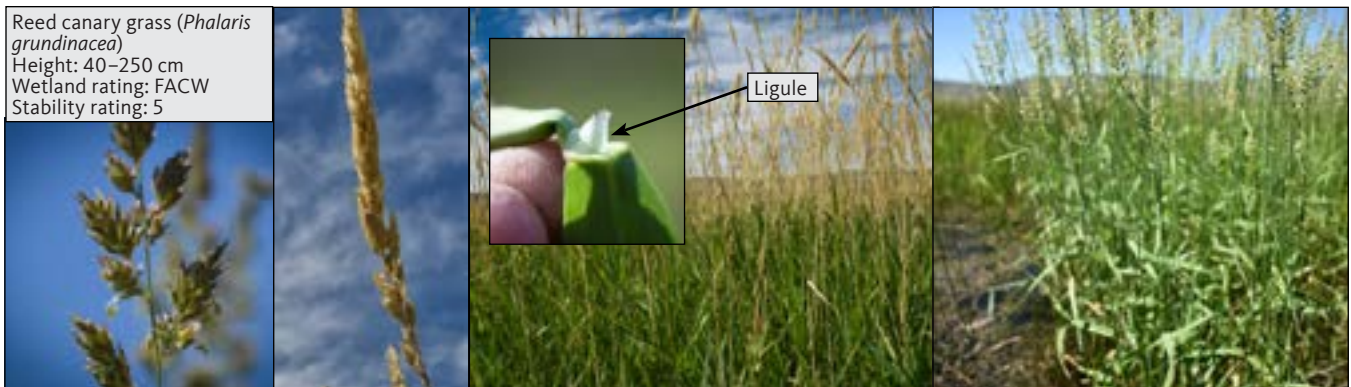


Figure C.18. Reed canary grass: The color and spread of this grass's spikelets can look quite different throughout the season (see Figure C.19). Its seed head is denser than that of Kentucky bluegrass and has an obvious white ligule.

Seasonal range of color for reed canary grass (a pseudoriparian species)



Figure C.19. The range of color of reed canary grass flower cluster (inflorescence).

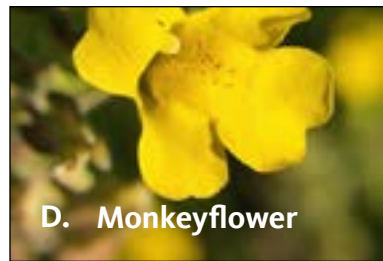
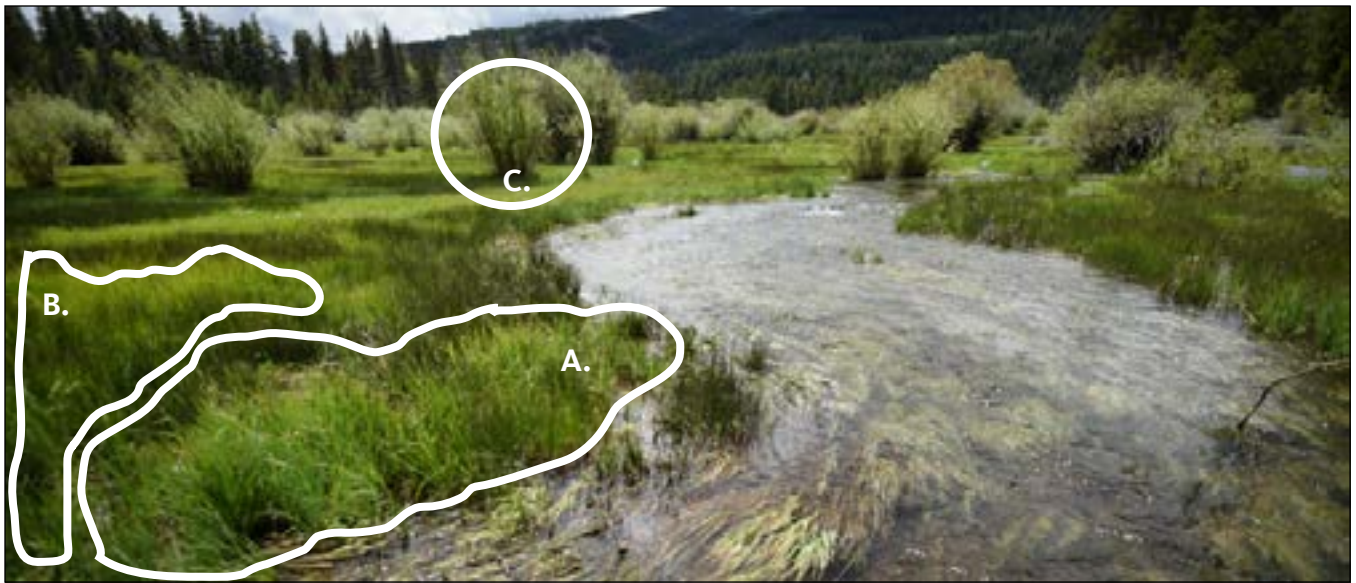


Figure C.20. Recognizing riparian vegetation (A: sedges, bright green, B: rushes, darker green, C: willows, woody, D: monkey flower, yellow) at a glance by color and texture.



Figure C.21. Recognizing riparian vegetation at a glance by color and texture. Spikerushes (A) and Kentucky bluegrass (B) are small-statured plants. Hardstem bulrush (C), Reed canarygrass (D) and basin wildrye (E) are large-statured plants growing 6 feet or taller.



Figure C.22. Common riparian woody vegetation, including alders (top left), willows (top right), cottonwoods (middle left), Woods' rose (middle right), Russian olive (bottom left) and Tamarisk (bottom right). Inset photos show close-up of leaves.