

## **Common *Juncus* (Rushes) of the Northwest**

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**2005**

Adapted and Modified from: Cooke, Sarah S. 1997. *A Field Guide to the Common Wetland Plants of Western Washington & Northwestern Oregon*. Seattle Audubon Society. Seattle, Washington.

This is a selection of the most frequently encountered Rushes seen in the field during wetland delineations. Since only a few species are shown here, if you encounter something not fitting one of these common species, please refer to a more technical manual.

# Key to *Juncus* Species

- 1a. Plants annual with very little root mass; generally less than 30 cm tall; leaves generally less than 1 mm wide; 1-3 flowers per flower cluster.....2
- 1b. Plants perennial; often greater than 30 cm tall; leaves generally greater than 1mm wide; flowers more than 3 per cluster.....3
- 2a. Plants less than 4 cm tall; 1-3 flowers per flower cluster ..... inch-high rush (*Juncus unialis*)
- 2b. Plants often greater than 4 cm tall; flowers single and scattered on inflorescence branches.....toad rush (*Juncus bufonius*)
- 3a. Inflorescence apparently lateral; lowest involucrel bract round in cross section, seemingly a continuation of the main stem.....4
- 3b. Inflorescence apparently terminal; lowest involucrel bract flattened and channeled; shorter than or longer than inflorescence.....7
- 4a. Plants strongly tufted and rhizomatous; stems to 3 mm thick; tepals less than 3.5 mm.....5
- 4b. Plants strongly rhizomatous; stems often wiry, thin or to 5 mm thick; tepals often greater than 3.5 mm.....6
- 5a. Lowest involucrel bract usually less than 1/3 length of stem; stamens usually 3; very common almost everywhere.....soft rush (*Juncus effusus*)
- 5b. Lowest involucrel bract generally greater than 1/3 length of stem; stamens usually 6; found west of the Cascades in Oregon .....grooved rush (*Juncus patens*)
- 6a. Plants of coastal dunes (intertidal swales); flowers congested into tight, 1-3 cm, round head-like clusters; lowest involucrel bract equal to the length of stem (i.e., flower clusters appear to be in the middle of the stem); tepals greater than 5 mm.....salt rush (*Juncus lesueurii*)
- 6b. Plants not restricted to coastal dunes, although common in brackish marshes near the coast; inflorescence more diffuse, open; involucrel bracts often less than 1/2 length of stem (i.e., inflorescence appears higher up along the stem); tepals to 5 mm.....Baltic rush (*Juncus balticus*)
- 7a. Leaves flattened, equitant.....8
- 7b. Leaves rounded or flattened in cross section, not equitant.....9



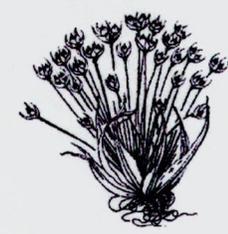
*Juncus tenuis*  
slender rush  
Status: FACW-

- stems slender, rounded, bright green; leaves borne on the lower 1/5 of stem, 1 mm wide, flat; no leaf blades
- auricles membranous, white, 1-5 mm long, rounded, overlapping, appearing as a continuation of the leaf sheath
- inflorescences diffuse, 1-7 cm long, branched terminal, with 10-50 singly born flowers; involucrel bract usually longer than flowers
- tepals green to straw-colored, 4-5 mm long, with a green midrib and white margins; sharp-tipped, tips not curling over
- stamens 6
- capsules subequal to shorter than tepals, straw-colored, oblong to oval; tip abruptly rounded and dimpled
- seeds elliptical, small, with a ridge along the entire length of both sides



*Juncus unialis*  
inch-high rush  
Status: FACW+

- leaves longitudinally channeled or grooved, often inrolled, 0.8-1.0 cm long
- inflorescences 2-3 mm wide, 1-3 flowers terminate the naked stem
- tepals 3 mm long, with thin, transparent margins, and broad, green midribs
- stamens 3



*Juncus patens*  
grooved rush  
Status: FACW



- stems blue-green and round, bearing brownish, loose, pointed sheaths; leaves reduced and bristle-like if present
- inflorescences 2.5-9 cm long, open with 20 or more flowers; appearing lateral
- tepals greenish to light brown, 2.5-3 mm long narrowed, tapered, stiff, with transparent margins, spreading away from capsule
- stamens 6
- capsule almost as long as tepals, swollen-round
- seeds oval with distinct ridge along entire length

*Juncus supiniformis*  
spreading rush  
Status: OBL

- leaves half-round, septate, very thin, needle-like, floating in water, 2-4 per stem; no leaf blades
- inflorescence loose, branched, with 2-6 few-flowered clusters; terminal
- small plantlets often sprout within inflorescence clusters
- tepals brown, 3-4.5 mm long, narrowly lance-shaped, pointed
- stamens 3 or 6
- capsules longer than tepals, cylindrical, abruptly narrowing to sharp beak
- seeds oblong with bluntly pointed tips



- 8a. Inflorescence compact; fewer than 10 flower clusters per inflorescence, each greater than 8 mm broad, appearing as black or dark balls.....daggerleaf rush (*Juncus ensifolius*)
- 8b. Inflorescence open, diffuse; more than 10 flower clusters per inflorescence each less than 6 mm broad.....pointed rush (*Juncus oxymeris*)
- 9a. Leaves septate, round cross section.....10
- 9b. Leaves not septate, with flat/grooved surface facing stem....14
- 10a. Plants rooting at nodes (strawberry-like), forming a continuous carpet; leaves and stems thin.....spreading rush (*Juncus supiniformis*)
- 10b. Plants rhizomatous or tufted, but not as above.....11
- 11a. Tepals longer than the capsule; plants very rhizomatus; stamens 6.....Sierra rush (*Juncus nevadensis*)
- 11b. Tepals generally longer than capsule; plants tufted; rhizomes, if present, very short; stamens 3 or 6.....12
- 12a. Tepals much smaller than capsule; less than 3 mm; stamens 6..jointed rush (*Juncus articulatus*)
- 12b. Tepals equal to or greater than capsule; more than 3 mm long; stamens 3 or 6.....13
- 13a. Inflorescence open, diffuse; stamens 3.....tapertip rush (*Juncus acuminatus*)
- 13b. Inflorescence round; stamens 6.....Mertens' rush (*Juncus mertensianus*)
- 14a. Plants tufted; not restricted to coastal areas, common in disturbed sites.....slender rush (*Juncus tenuis*)
- 14b. Plants rhizomatous; coastal (salt marsh or sandy substrates).....15
- 15a. Plants or coastal salt marshes; 30-70 cm tall; flower clusters usually many in a diffuse inflorescence.....mud rush (*Juncus gerardii*)
- 15b. Plants of sandy substrates (interdunal swales); generally less than 30 cm tall; flower cluster usually few, appearing as large rounded balls.....sickleleaf rush (*Juncus falcatus*)

*Juncus acuminatus*

tapertip rush

Status: OBL

- leaves half-round in cross section, septate
- auricles present of leaf sheaths
- Inflorescence diffuse with 3-30 flower clusters 5-8 mm long, each 5- to 20- flowered, obviously terminal, erect to ascending
- Tepals straw colored or greenish brown, 3-2.5 mm long, sharp pointed
- Stamens 3, occasionally 6
- Capsules equal in length to the tepals, 3-angled, egg-shaped, tapering uniformly to a sharp tip
- Seeds oblong, long-tapered, each end sharp-pointed



*Juncus nevadensis*

Sierra rush

Status: FACW

- leaves 5-20 cm long, semi-flat, septate
- auricles pointed, 1-3 mm long
- inflorescences diffuse, terminal, branched, with 2- to many clusters per branch, each cluster fewer than 12-flowered
- tepals light brown to dark purple-brown, 3-5 mm long, lance-shaped, not curling over
- stamens 6
- capsules shorter than tepals, dark brown, ovoid-elliptic, abruptly tapering to the tip
- seeds oval with bluntly pointed tips



*Juncus articulatus*

jointed rush

Status: OBL

- leaves 1-3 per stem, round in cross-section, septate; no leaf blades
- auricles rounded
- inflorescences spreading, with 10-20 small, 6- to 12-flowered clusters of tiny flowers, appearing terminal
- tepals to 3 mm long, deep brown, occasionally pale, linear and long-pointed
- stamens 6
- capsules exceeding the tepals, ovoid and conical, slightly 3-angled, uniformly tapered, with short, pointed beak
- seeds oval, one end sharp-pointed, other end with flat, blunt tip



*Juncus oxymeris*

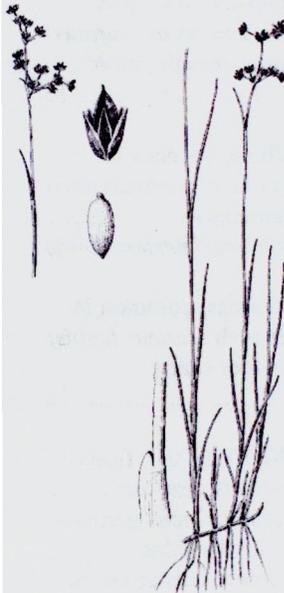
pointed rush

Status: FACW+

- leaf blades equitant-flattened, incompletely septate
- inflorescences of 10-70 large, loose flower clusters 2-5 cm long, each 3- to 12-flowered; terminal
- tepals greenish yellow to brown, 3-4 mm long, lance-shaped, not curling over
- stamens 6
- capsules slightly longer than tepals, long, tapering uniformly to the tip
- seeds oval with bluntly pointed tips



Tepals are equal in length to capsule.



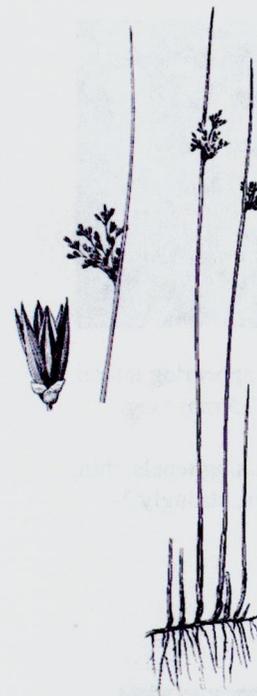


*Juncus lesueurii*

salt rush

Status: FACW

- stems round, lacking septae, basal sheaths dark brown; no leaf blades
- inflorescences tight, globular, born singly, appearing lateral; involucrel bract extends beyond inflorescence
- tepals green in the center and purplish brown along the membranous margins, 5-6 mm long, lance-shaped
- stamens 6
- capsules equal to the inner tepals, oval to rounded, sharp-tipped
- seeds flat, irregularly shaped, with flat or blunt ends



*Juncus balticus*

Baltic rush

Status: FACW+

- stems thin (1-2 mm), wiry flat to only slightly flattened, spiral along length; basal sheaths, no leaf blades
- inflorescences diffuse, appearing lateral; involucrel bract rises stem-like above the flowers
- tepals purplish brown, often with a green center, 3.5-6 mm long, long pointed
- stamens 6
- capsules oval, about as long as inner tepals
- seeds very small and indistinct



*Juncus mertensianus*

Mertens' rush

Status: OBL

- stems half-rounded; leaves 1-4 and basal, septate, thin, weak, rounded; sheaths brown to purple; no leaf blades
- auricles membranous and rounded
- inflorescences 1, occasionally 2, dark, tight, globose, terminal to 2 cm in diameter, with many flowers
- tepals dark brown to purple-black, 3-4 mm long, sharp-pointed, lance-shaped
- stamens 6
- capsules shorter than tepals, oblong, dark brown to purple-brown, rounded abruptly at the tip
- seeds long, tapered at each end, with sharp-pointed tip

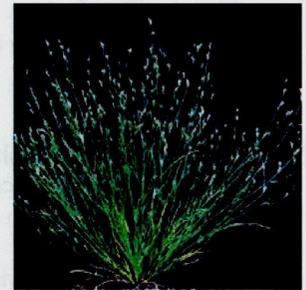


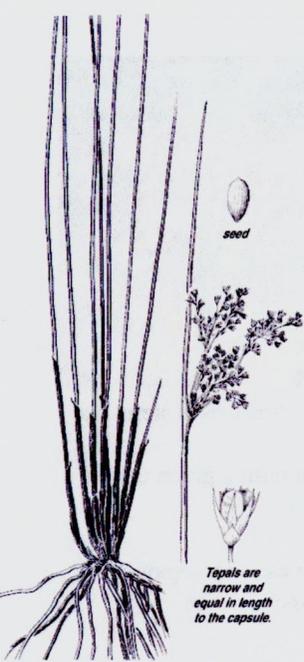
*Juncus bufonius*

toad rush

Status: FACW

- roots very fine and few; lacks rhizomes
- leaves narrow (less than 1 mm), 1-3 per stem, flattened to inrolled, mostly basal; no leaf blades
- inflorescences branching, lateral as well as terminal; flowers usually born singly
- tepals light green, 3-8 mm long, narrowly lance-shaped, pointed
- stamens 6
- capsules shorter than tepals, oblong-elliptic, round-tipped
- seeds oval, flat-tipped, with small, pointed ends





*Juncus effusus*  
soft rush  
Status: FACW

- stems round, stout and sharp; leaves basal, appearing only as brown sheaths; no leaf blades
- inflorescences diffuse to tight, 3-15 cm long, appearing lateral
- tepals greenish or brown, 2.5-3.5 mm long, needle-like
- capsules oval, flat-topped, equaling tepals, thin, soft, light brown to olive brown, strongly 3-angled
- stamens 3
- seeds elliptical



Tepals are narrow and equal in length to the capsule.



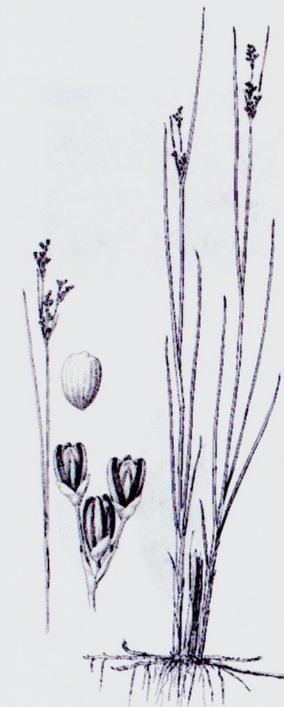
*Juncus falcatus*  
sickleleaf rush  
Status: FACW-

- leaf blades flat, grass-like, 0 3 mm broad
- inflorescences terminal, numerous, half-round clusters, each with more than 7 flowers
- tepals dark chocolate-brown, usually with a broad, greenish midstripe that is minutely roughened, 4-6 mm long, extending as a pointed tip past tepal end
- stamens 6
- capsules shorter than tepals, egg-shaped, leathery, rounded and dimpled at the tip
- seeds flattened, paddle-shaped



*Juncus ensifolius*  
daggerleaf rush  
Status: FACW

- leaf blades strongly equitant flattened, partially septate, 7-15 cm long, 2-5 mm wide
- inflorescences of 1-10 globose flower clusters, 4- to 25-flowered, 3-4 cm long, tightly clumped, black to brownish purple; terminal
- stamens 3 or 6
- tepals pale greenish brown to deep purplish brown, 3-3.5 mm long, lance-shaped
- capsules shorter or longer than tepals, oblong, dark brown, rounded above but abruptly contracted to a sharply 3-angled pointed tip
- seeds oblong with pointed tips



*Juncus gerardii*  
mud rush  
Status: FACW+

- leaf blades flat, grass-like, less than 3 mm broad
- inflorescence diffuse, flowers appear single or in 3s, usually more than 5 clusters; terminal
- tepals dark brown with a greenish midstripe, round tips curled or hooded
- stamens 6
- capsules equal to tepals, oval to elliptical, round-tipped
- seeds oval, flat-topped, and blunt-tipped

