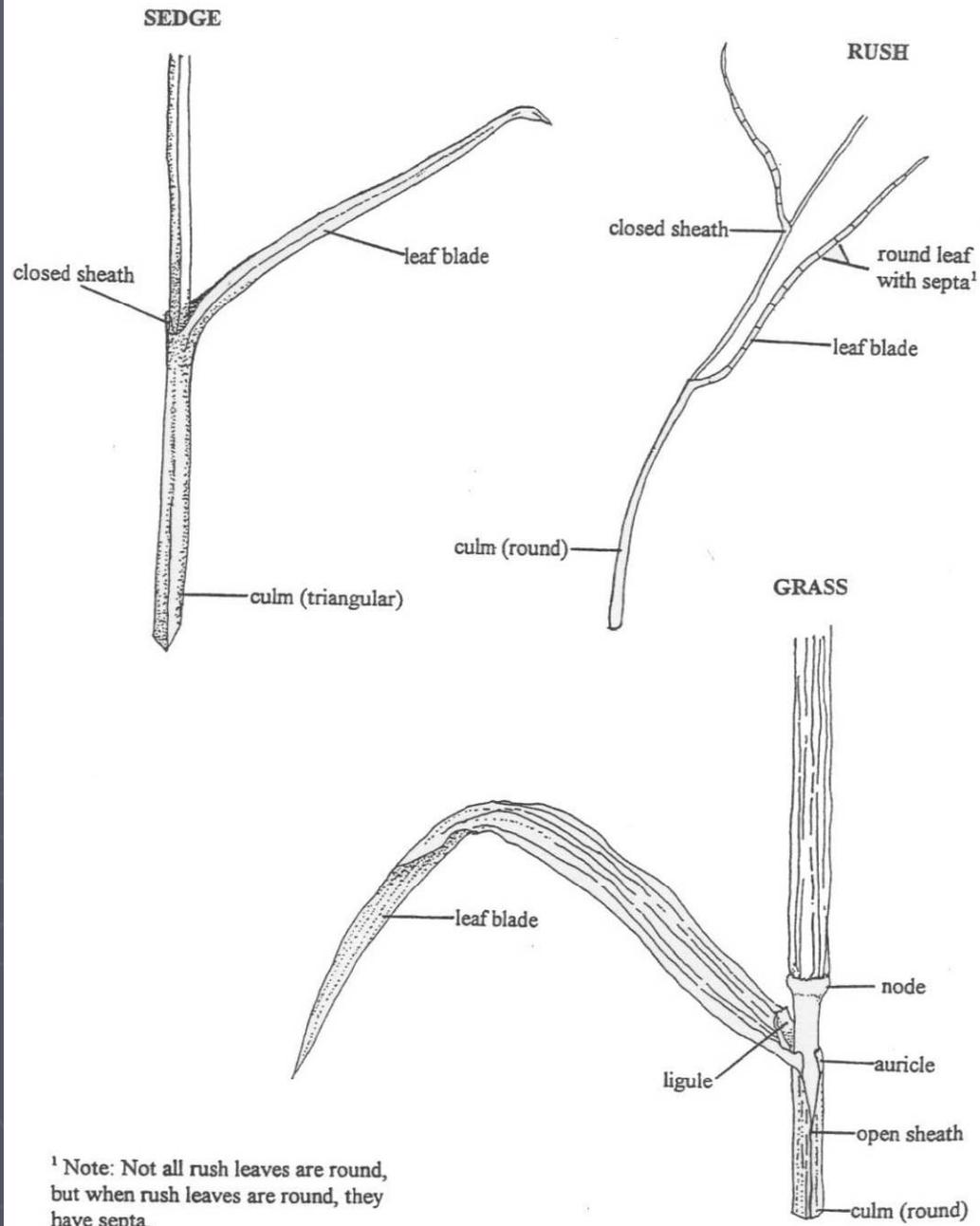


BWSR NRCS Wetland Plant ID Training 2009

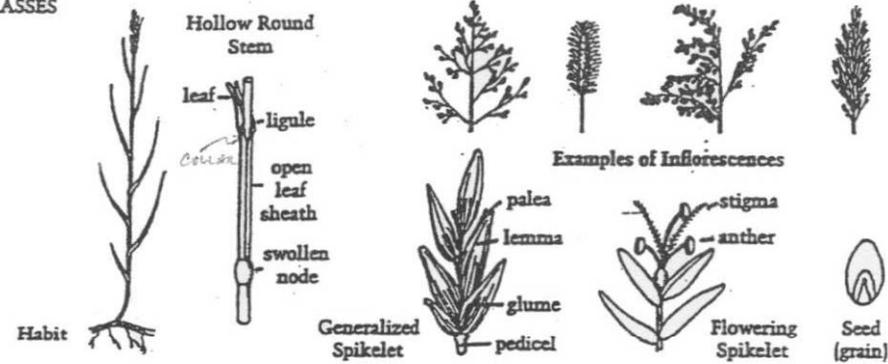
Sedges and Rushes

VEGETATIVE STEMS

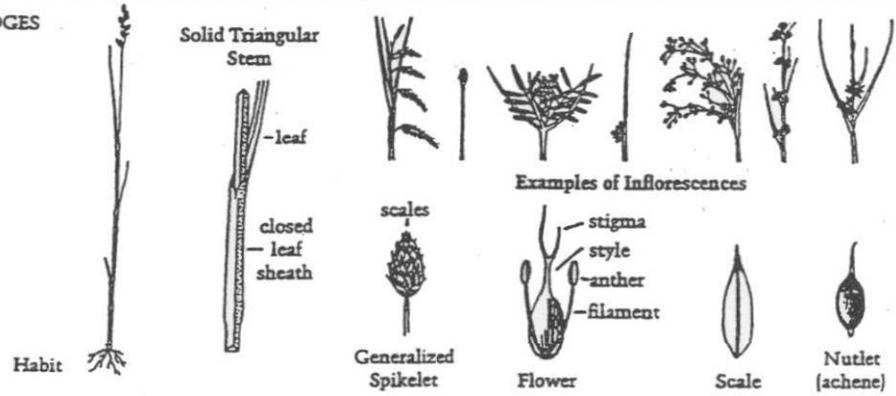


¹ Note: Not all rush leaves are round, but when rush leaves are round, they have septa.

GRASSES



SEDGES



RUSHES

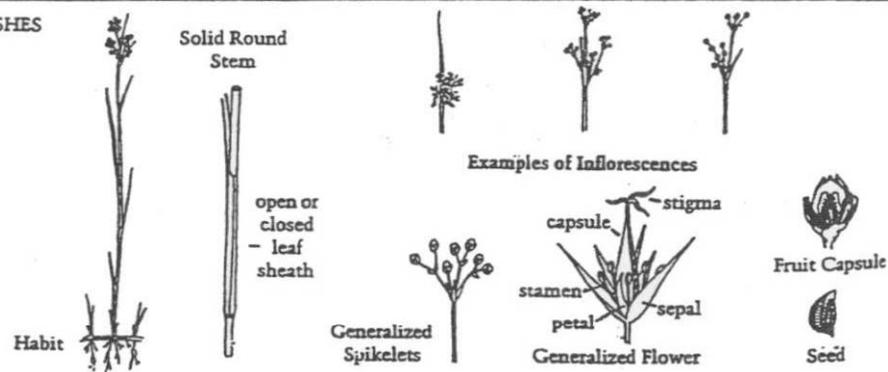


Figure 6. Distinguishing characteristics of grasses, sedges, and rushes. (Source: *Field Guide to Nontidal Wetland Identification*, Tiner 1988)

Carex - True Sedges

(Family : Cyperaceae)

- ▶ Triangular stems
- ▶ 3 leaves
- ▶ Bisexual or unisexual
 - Both male and female on same spikelet
 - Male and female on different spikelets
 - Male and female on different plants
- ▶ Florets terminal or lateral
- ▶ Achenes enclosed in a perigynium

Male



Female

Androgynous

Male and Female flowers separate

Gynecandrous

Questions to ask yourself when IDing *Carex* spp.

- ▶ Sheath: glabrous or pubescent
- ▶ Sheath: Lattice of fibers or papery
- ▶ Sheath: color? (green, purplish, brown, etc.)
- ▶ Spikes: Separate male and female, gynecandrous or androgynous
- ▶ Spikes: upright, sessile, peduncled
- ▶ Perigynia: length
- ▶ Perigynia: pubescent or glaucous
- ▶ Achene: 2 or 3 sided



Lake Sedge

Carex lacustris

- ▶ Leaves coarse, M-shaped, blue-green
- ▶ Lower sheath red to purplish with lattice of fibers
- ▶ Pistillate spikelets attach directly to the stem or have short stalks
- ▶ 2-4 staminate spikelets
- ▶ Perigynium has no hairs, distinctly ribbed, and tapers into a beak. 3-angled nutlet



Lake Sedge

Carex lacustris

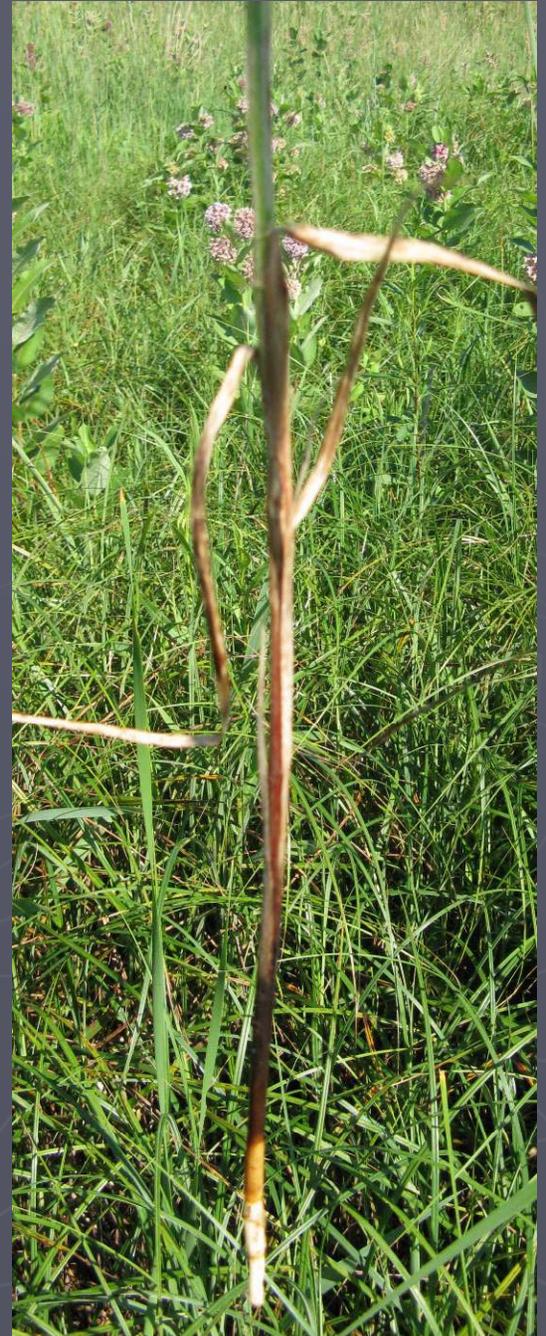


Slough Sedge

Carex atherodes

- ▶ Hairs present on leaves and sheaths!!
- ▶ Purplish at base with lattice of fibers
- ▶ Perigynium has no hairs, distinctly ribbed, and tapers into a beak. 3-angled nutlet





Hummock sedge

Carex stricta OBL

- ▶ Stems usually longer than the leaves (slender)
- ▶ Leaves are V shaped
- ▶ Forms large hummocks
- ▶ Lower sheath with lattice of fibers
- ▶ Perigynia are relatively flat and lack beaks





Hummock sedge

Carex stricta



Stalk-grained sedge

Carex stipata OBL

- ▶ Winged triangular stems
- ▶ Coarse M-shaped leaves are usually shorter than the stem
- ▶ Whitish thin wrinkled sheaths at the base
- ▶ Perigynium is lance-shaped with a beak less than twice as long as the body.
- ▶ Inflorescence appears prickly



Stalk-grained sedge

Carex stipata



Fox Sedge

Carex vulpinoidea OBL

- ▶ Clump-forming
- ▶ Leaves generally longer than the stem
- ▶ Bristle-like bract at base of some spikelets
- ▶ Stems are firm with whitish, thin wrinkled sheaths
- ▶ Perigynia are lance-ovate and taper into a beak.



Fox Sedge

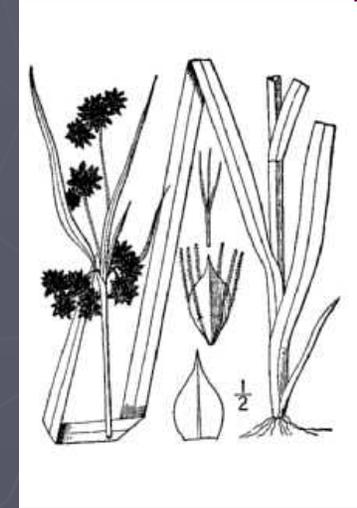
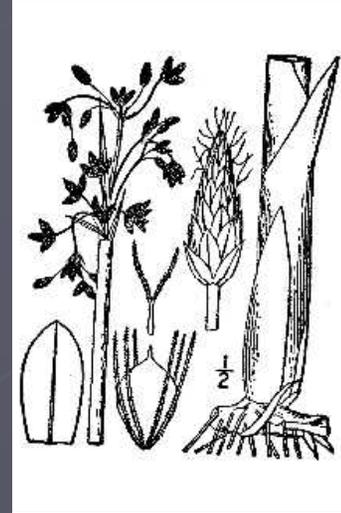
Carex vulpinoidea



Scirpus - Bulrushes

(Family : Cyperaceae)

- ▶ Solid stem; some round, some triangular
- ▶ Leaves present
- ▶ Florets usually whorled
- ▶ Florets are bisexual in same seed head





Softstem Bulrush

*Schoenoplectus
tabernaemontani
(Scirpus validus)*
OBL

- ▶ Round stem
- ▶ Stems spongy and easily compressed
- ▶ More than 10 spikelets (less than 10mm long)



Hardstem Bulrush

Scirpus acutus OBL



River Bulrush

Scirpus fluviatilis OBL



- ▶ Sharply triangle stem
- ▶ Terminal spike
- ▶ Spikelets 1-3 cm long
- ▶ Peduncle and sessile



Green Bulrush

Scirpus atrovirens



- ▶ Rounded triangle stem
- ▶ Terminal spike
- ▶ Spikelets 2-8mm long
- ▶ Peduncle and sessile spherical clusters of spikelets
- ▶ Sheaths green or brown (no red)

Green Bulrush

Scirpus atrovirens OBL



Woolgrass

Scirpus cyperinus OBL



Andrew Hipp

- ▶ Nearly round stem
- ▶ Terminal spike
- ▶ Spikelets 3-8mm long
- ▶ Peduncled
- ▶ Sheaths green or brown (no red)
- ▶ Appearing woolly – long bristles

Woolgrass

Scirpus cyperinus





Yellow Nutsedge

Cyperus esculentus

- ▶ Triangle stem
- ▶ Leaves light yellowish-green, mostly basal
- ▶ Terminal inflorescence
- ▶ Spikelets are bright yellow, extending perpendicular to the main stem.
- ▶ Each spikelet "branch" is 3-12cm long
- ▶ Scales are 2-3mm long



Illus: Weeds of the North Central States

Yellow Nutsedge

Cyperus esculentus



Eleocharis - Spikerushes

(Family : Cyperaceae) All FACW or OBL

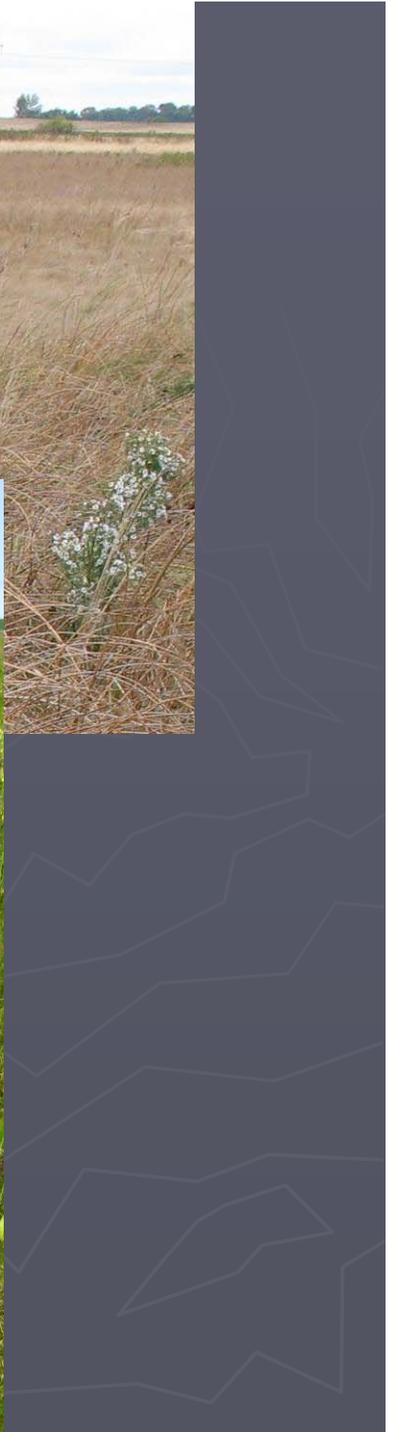
- ▶ Round solid stem (usually)
- ▶ “Leafless”
- ▶ Terminal spike
- ▶ Florets usually whorled



© Patrick J. Alexander

Blunt Spikerush







© Larry Allain

Bald Spikerush



© Larry Allain

Dwarf Spikerush



Common Spikerush

Juncus – True Rushes

(Family : Juncaceae)

- ▶ Solid round (generally) stem
- ▶ Fruit is a capsule with many seeds
- ▶ Flowers are bisexual; lateral or terminal



Soft/Common Rush



Slender Rush

Juncus tenuis FAC

- ▶ 10-80 cm tall
- ▶ Basal leaves only, 1/3 the height of the stem
- ▶ Flowers born singly
- ▶ Terminal flower head
- ▶ Tepals often equal or longer than capsule

