

Common Reed Grass *Phragmites australis*

Poaceae—Grass family

by Tom Reaume © 2011 Nature Manitoba

Grant:  Manitoba Hydro

A **perennial grass** 1–4.3 m tall, variable, in conspicuous dense colonies covering several m²; **rhizomes** tan, woody, oval and hollow, 5–50+ cm long by 5–30 mm thick, the soft scales 3–5 cm long, imbricate, new shoots forming in the fall; **roots** tan, spreading, branched, 2–30 cm long by 0.5–3 mm thick; in ditches and borders of lakes, streams and marshes, sometimes in shallow water.

● **FLOWERS** tan and reddish purple, blooming July–November; **inflorescence** a panicle, terminal, one, 6–40 cm long by 3–25 cm wide; **main branches** arched and spreading, 3–15 cm long, often pushed to one side by the wind, lax at maturity, the lower 3–5 nodes in the panicle with several whorled branches and a tangled tuft of white hairs 2–8 mm long where the branches meet the rachis of the inflorescence, upper branches scattered and alternate, the autumnal inflorescence tan, falling the first winter or persisting into the second summer; **spikelets** 3- to 8-flowered, numerous, 10–17 mm long; **rachilla** with numerous white hairs 5–17 mm long, ascending and straight, then spreading in the fall and giving the inflorescence a fluffy appearance; **glumes** 2, unequal, 3-nerved, c. 1.5 mm wide, glabrous, pointed; **1st glume** 3–7 mm long; **2nd glume** 4–12 mm long; **lemmas** 3-nerved with long tapered purple tips, glabrous, the sides folded inward, the lowest the longest at 8–15 mm and its floret staminate; **upper lemmas** c. 4 mm long with pistillate to perfect florets; **paleae** membranous, 2-nerved, 2.5–3.5 mm long; **pistil** c. 3.3 mm long; **ovary** and style c. 1 mm long; **stigmas** 2, white to tan, each part c. 2 mm long by c. 1 mm wide, feathery; **stamens** 3; **anthers** 1.4–2 mm long, pale yellow, exserted.

● **FRUIT** a grain, 1-seeded, tan, 1.3–3 mm long by c. 0.6 mm wide by c. 0.4 mm thick, hairless, tapered at both ends.

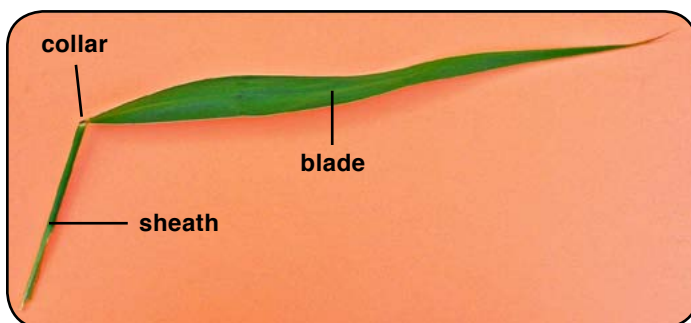
● **LEAVES** prominent, the main ones 7–20 per stem; **blades** flat, glabrous, edges scabrous, tapered to a long fine point, mostly horizontal and largest midway along the stem, 10–55 cm long by 7–45 mm wide, reduced above and below, the midrib raised below (dorsally), young leaves with a tuft of white hairs 2–6 mm long at the collar, lower ones becoming tan and wilting near anthesis, upper ones tan in late summer and remaining on the stem into the fall and winter; **internodal lengths** average 13 (5–22.5) cm, reduced above; **ligules** membranous, 1–2 mm long and fringed with fine white hairs 0.5–1 mm long; **auricles** absent; **sheaths** not keeled, glabrous to slightly hairy along the margins, open to the node from which they developed, especially when tan and dry; **lower sheaths** with an apical blade only 4–25 mm long and usually erect to ascending.

● **STEM** a culm, erect, stiff, round, woody, green above turning reddish purple and shiny below as the sheaths of the leaves fall after anthesis, hollow, the walls c. 1 mm thick, smooth and cane-like when dry, unbranched, persists for c. 2 years, becoming tan then gray by the second year and leafless; **nodes** with a dark horizontal line; **stem base** 6–15 mm thick and smooth.

● **RANGE:** (CAN) 11 provinces; (USA) 49 states; a **native**.



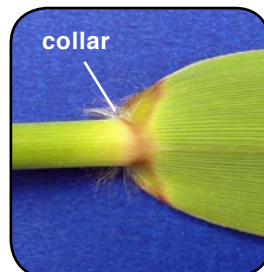
A dense colony of Common Reed Grass 1–3.3 m tall before blooming along a stream bank in Winnipeg, Manitoba



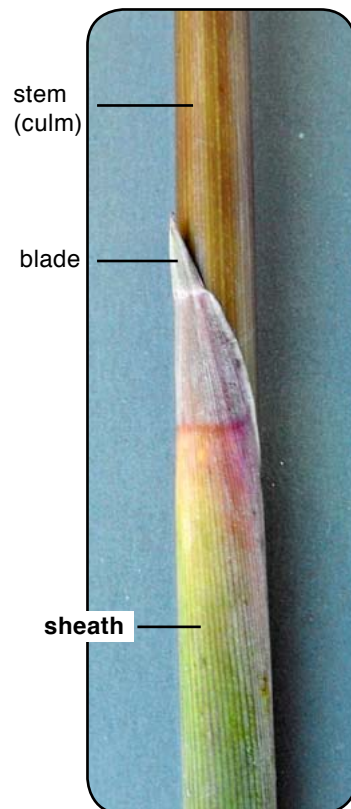
Stem leaf blade 40 cm long



2-year-old gray hollow stem 8 mm wide with a wall 1 mm thick



Hairy collar on young leaf in June; dorsal view



Lower sheath with blade 5 mm long



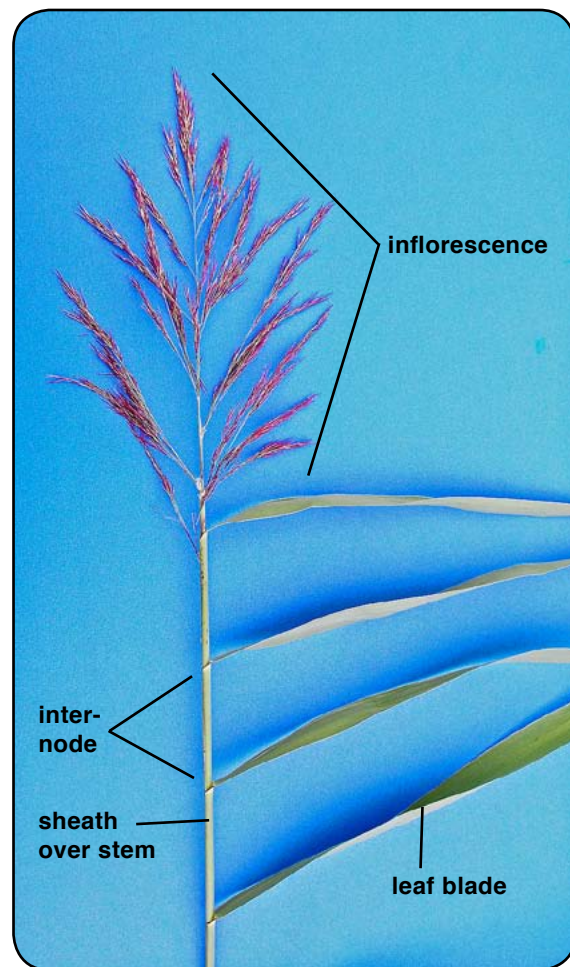
Emerging green inflorescence from upper leaf's sheath



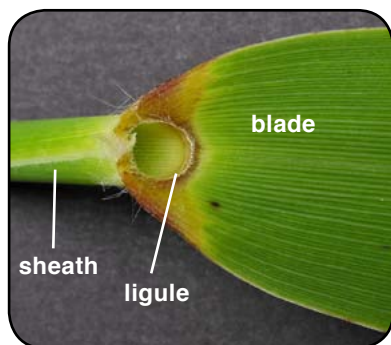
Emerging reddish inflorescence 13 cm long



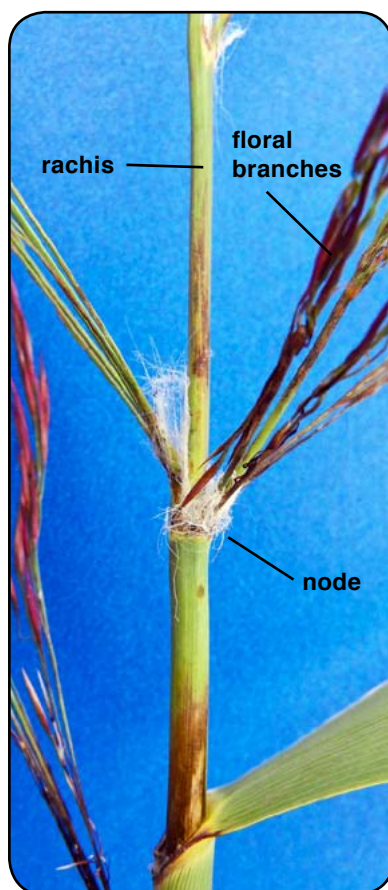
Floral branch 10 cm long in fall



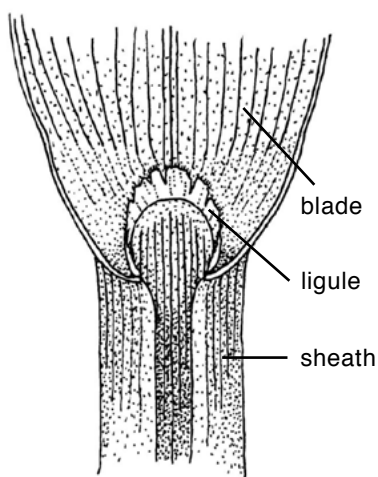
Purplish inflorescence 25 cm long by 18 cm wide, almost fully emerged from the upper sheath; plant 3.2 m tall in Winnipeg, Manitoba



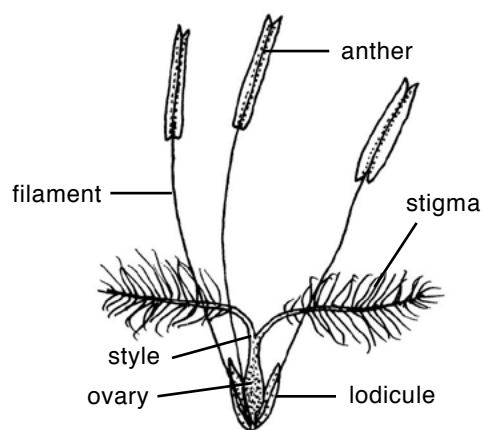
Ligule membranous with a fringe of hairs; a few long hairs at collar



White hairs at base of branches at lower nodes of inflorescence



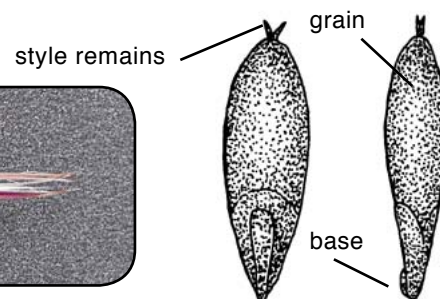
Ligule x4, 1–2 mm long with an apex of white hairs



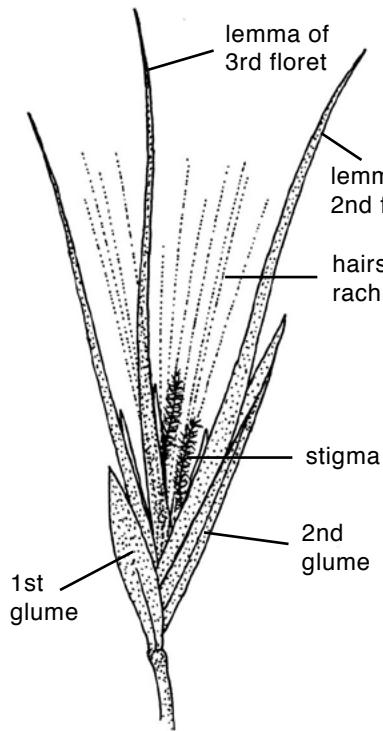
Flower x10



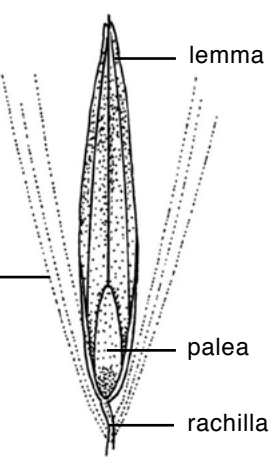
Common Reed Grass floral branch 4.5 cm long with several reddish-purple spikelets with anthers and stigmas (tan) protruding during anthesis



Fruit x20



Spikelet x6, near anthesis



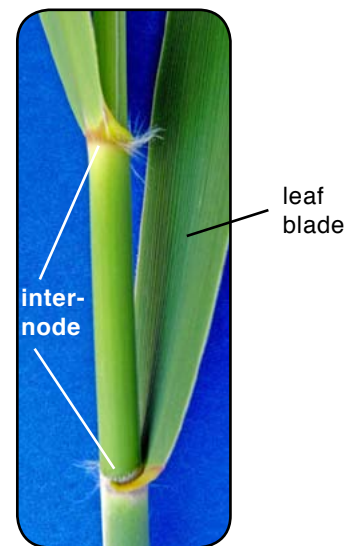
Lemma, palea x5, rachilla hairy



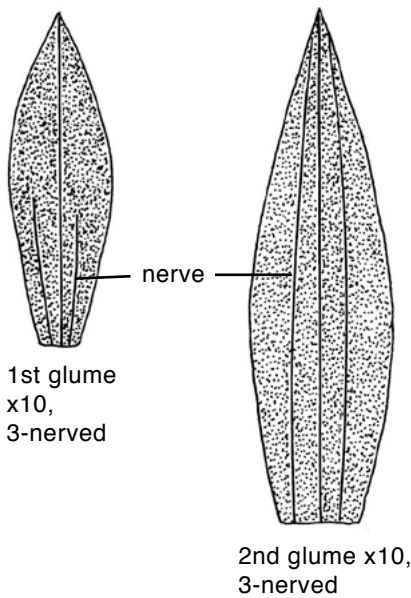
Middle of inflorescence with stigmas exserted from many of the spikelets in Winnipeg, Manitoba



In September the lower stems have shed their tan leaf sheaths to reveal a dark red-purple hue

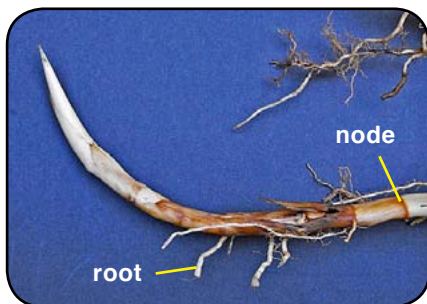


Internodal length is 3.5 cm



1st glume x10, 3-nerved

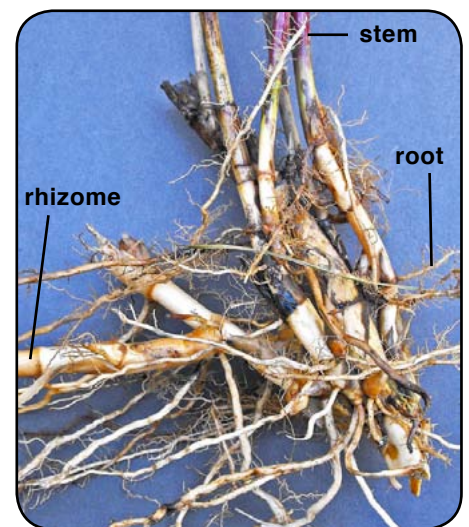
2nd glume x10, 3-nerved



Rhizome with ascending tip that will form a new, above ground plant



Spikelets open in fall; spreading white rachilla hairs produce a fluffy appearance



Common Reed Grass's tangle of rhizomes c. 1 cm wide with tan roots 1–3 mm thick, 2 stem bases purple