

Common Plantain *Plantago major*

Plantaginaceae—Plantain family

by Tom Reaume © 2010 Nature Manitoba

Grant: **Manitoba** 

A perennial wildflower (some blooming in their first year) 10–60 cm tall with a short hairless **caudex** 0.7–2 cm thick, usually with a dark band around it; **fibrous roots** numerous, tan, 5–15 cm long by 1–1.5 mm thick; in lawns, pastures, roadsides, farmyards, ditches, fields and along cracks in sidewalks.

● **FLOWERS** green, blooming March–November; **inflorescence** a spike, one per leaf base, dense but open near the base, 4–33 cm long by 3–5 mm wide (to c. 10 mm wide with fruit); **peduncles** 1–25 per plant, tough, 4–28 cm long by 1–4 mm thick, slightly hairy when new to glabrous; **subtending bracts** (of flowers) one per flower, 1.5–2.3 mm long by c. 1 mm wide (flat), pointed, the central keel raised and rounded, surrounded by a thin hyaline margin and apex, similar to the sepals in shape and texture, not longer than the top of the sepals, located on the outer (dorsal) side of the ascending and appressed flowers, its tip usually between two sepals (calyx lobes); **rachis** erect, green, hairless to slightly hairy, c. 0.5 mm thick; **flowers** numerous, crowded above, 5-ranked in a spiral, perfect, sessile, 2–3 mm wide by 4–5.6 mm long; **sepals** 4, each 1.6–2.5 mm long, united at their bases, with a wide green raised midvein (keel) with hyaline borders, glabrous, persistent with fruit; **corolla** tubular, 4-lobed, hyaline, transparent, the lobes pointed, tan and c. 0.8 mm long by c. 0.6 mm wide, at first erect around the base of the style, then exerted and reflexed as the stamens appear; **stamens** 4, exerted; **filaments** white, c. 3 mm long, ascending, attached at the base of the anther where the basal split begins; **anthers** 1–1.2 mm long by c. 0.4 mm wide, yellow to purplish brown, the pointed bases spreading and the apices pointed; **pistil** 1, each 2–2.5 mm long, erect; **ovary** green, hairless, smooth, c. 0.5 mm long and wide, tapered quickly to the style; **style** 1, 2–2.5 mm long by c. 0.2 mm thick (including the white hairs), whitish, exerted before the stamens, erect to slightly bent, hairless at the base right above the ovary, persistent.

● **FRUIT** a capsule (pyxis), hairless, somewhat shiny, 2–4 mm long by 1–2 mm wide, the cap separating near the middle along one suture; **cap** 2–2.5 mm long by 1.5–2 mm wide, tip covered by persistent corolla, purplish as it ripens, tan when ripe, pliable, smooth, 4-veined, base of pyxis remains within the calyx lobes; **seeds** 6–30 per capsule, dark brown, shiny, irregular in shape, 0.8–1.7 mm long by 0.6–1 mm wide by 0.4–0.6 mm thick, with fine narrow dark ridges, slightly sticky when wet, arranged lengthways along both sides of the flat, 2 mm long by c. 1.4 mm wide vertical placenta.

● **LEAVES** all basal in a tight, spiral rosette, simple, entire to slightly toothed, spreading to ascending, the rosette 10–65 cm across; **blades** glabrous to slightly hairy, often wrinkled, 3.5–20 cm long by 2–18 cm wide, abruptly tapered at base, rounded at apex, margins wavy, with 5–9 parallel veins, these raised below and continue along the rounded underside (dorsal) of the petiole; **petioles** tough, veiny, 1.5–22 cm long by 4–8 mm wide and thick, deeply grooved above, green to reddish.

● **STEM** absent.

● **RANGE:** (CAN) 12 provinces; (USA) 50 states; naturalized.



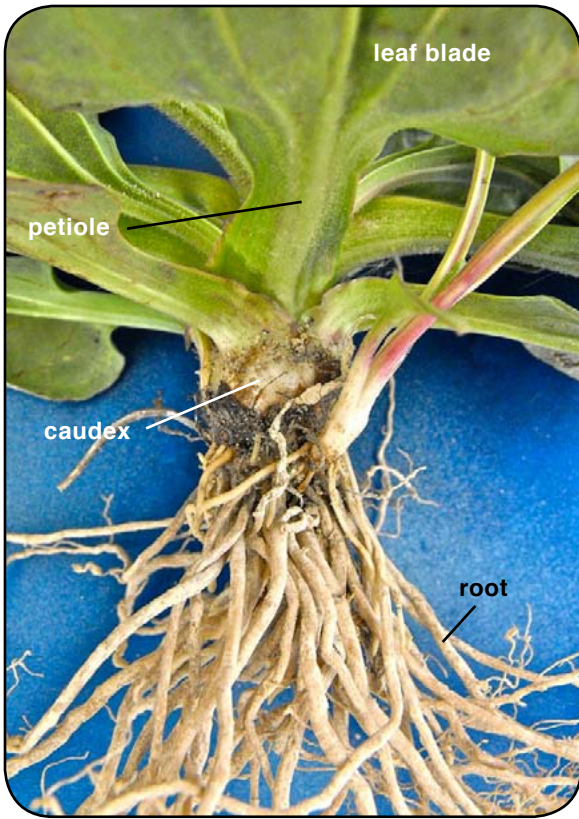
Scattered small Common Plantain plants occupy the cracks in a sidewalk in the Exchange Area in Winnipeg, Manitoba



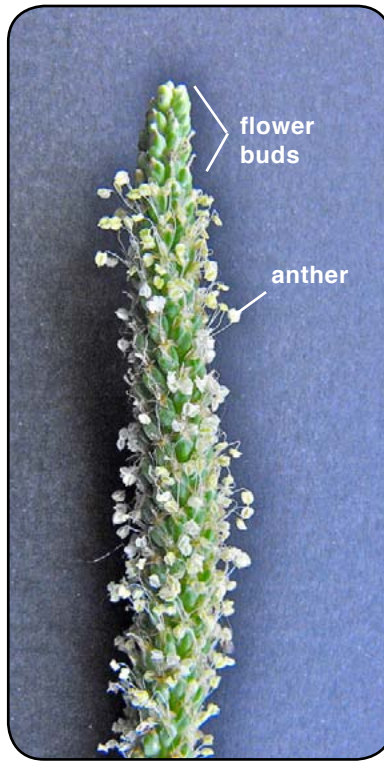
A small trodden plant c. 13 cm wide with several spikes post anthesis with green fruit ripening; in courtyard of a cafe



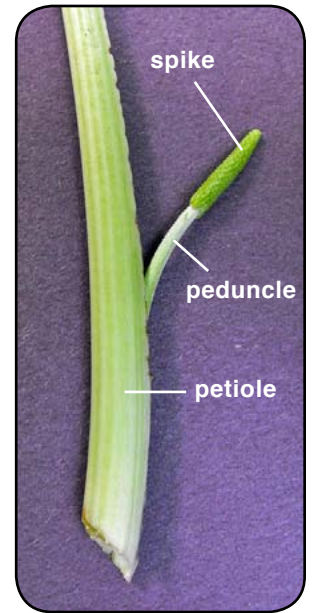
A group of vigorous large plants 32 (14–50) cm tall by 43 (25–60) cm wide along the fertile shore of the Assiniboine River



Lower vegetative part of Common Plantain; caudex 1.6 cm wide, tan roots 1–1.5 mm wide



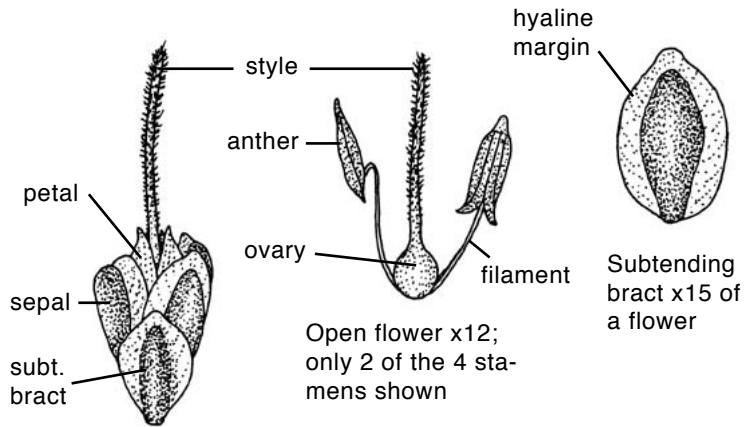
Spike 6.3 cm long by 8 mm wide with spent anthers



New spike 1.6 cm long emerging from the base of a leaf's petiole



A ground view of a cluster of stalks 10–15 cm tall in a mowed lawn in Winnipeg, Manitoba; fruit are ripening in ascending capsules



Flower x 12; starting to open

Open flower x12; only 2 of the 4 stamens shown

Subtending bract x15 of a flower



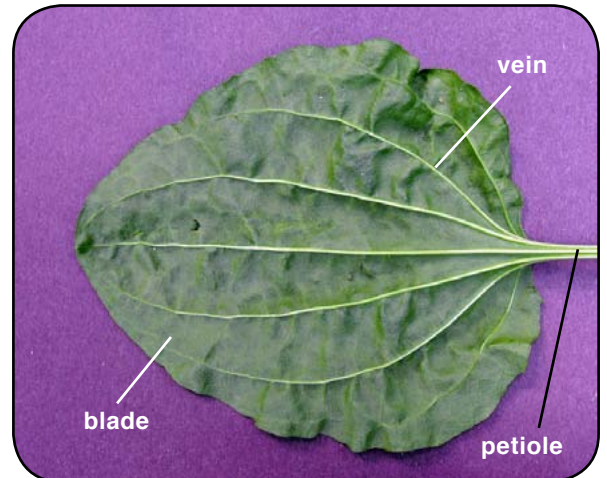
Leaf blade 5.5 cm wide; above (ventral side)



flower

Young spike 3.5 cm long with styles starting to emerge

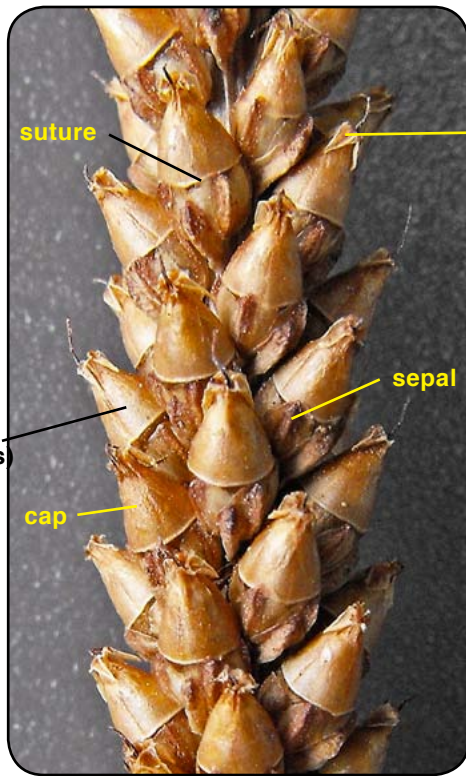
peduncle



Leaf blade 11 cm wide; below (dorsal side)



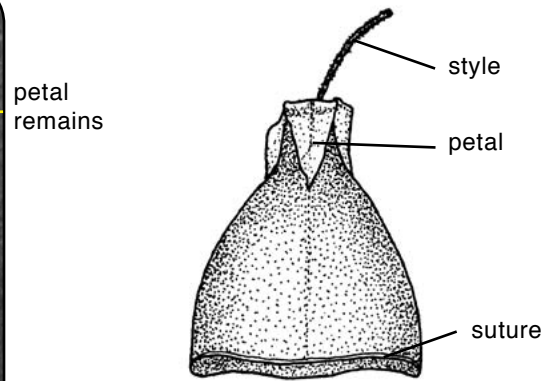
Fruiting stalk 23 cm long by 8 mm wide



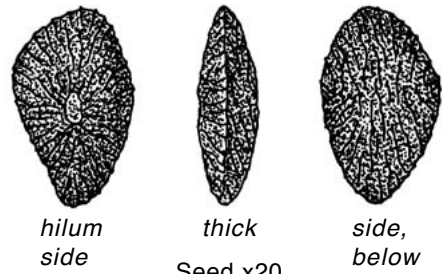
Fruit a capsule (pyxis) with the cap falling to release the seeds in Winnipeg



Fruit widely spaced at the base of the ridged rachis



Fruit cap 2 mm wide x15; when ripe falls from fruit's base



Seed x20



Fruiting plant with 25 spikes and leaves in alley; center leaves still green with younger spikes; outer leaves dry



Spike c. 7 mm wide, post blooming, green shiny capsules starting to ripen with green seeds inside