Phalaris aquatica L., BULBOUS CANARY GRASS, HARDING GRASS. Perennial herb, clumpforming, rhizomatous, fibrous-rooted, at maturity many-stemmed at base, cespitose, shoots erect to ascending and terminating in dense inflorescence, in range 50–170 cm tall; shoots mostly with 3–5 basal leaves and 4–6 cauline leaves, glabrous, slightly glaucous; rhizomes vertical and horizontal, 2.5-3 mm diameter, white, internodes short-35 mm long, wavv ridged, solid, with large, ovoid axillary buds on vertical axes; adventitious roots nodal on rhizome and basal nodes. **Stems (culms):** cylindric, to 5 mm diameter (to 10 mm diameter at rhizome), tough, internodes to 250 mm long (midshoot); internodes hollow. Leaves: alternate distichous, simple with sheath; sheath open (upper cauline leaves closed for ca. 1 mm), 90–190 mm long, < internode, separating to base on old lower leaves, sometimes somewhat inflated on flag leaves (with short blade), lacking lobes (auricles) at top; ligule membranous acute to truncate, (2-)4-11(-12) mm long, aging cut (lacerate), minutely scabrous on back surface; blade linear and long-tapered,  $54-530 \times (3.5-)7-$ 11.5(-16) mm, the widest somewhat above sheath, flat, subentire to minutely scabrous on margins, parallel-veined with midrib visible on lower side, upper surface minutely scabrous approaching tip. **Inflorescence:** spikelets, in terminal, dense panicles, panicle cylindric to narrowly conic or narrowly ellipsoid,  $40-145 \times 8-25$  mm in fruit, mostly with rachis concealed but sometimes with ± divergent lateral branches resulting in a slightly lobed inflorescence with exposed rachis, spikelet with 2–3 florets with lower floret or florets sterile and only upper floret fertile, bracteate, glabrous; peduncle long, often > vegetative plant; stalk of spikelet 0.3–1.2 mm long. **Spikelet:** breaking above glumes as 1 unit; **glumes** 2,  $\pm$  oblong and strongly keeled,  $5.8-5.9 \times 1.2-1.5$  mm, 3-veined, narrowly winged approaching tip, wing 0.3–0.6 mm wide; **lemma** (sterile floret) to 1.8 mm long, if 2 sterile florets lower lemma 0.5–1.6 mm long, upper lemma 1.2–1.8 mm long; **lemma** (fertile floret) acuminate-ovate, 3.2–3.5 × 1.2–1.3 mm, 5-veined and folded along midvein, ascending-pilose to sericeous, internally glabrous; **palea** (fertile floret)  $2.5-3 \times 1.2-1.3$ mm, 2-veined and folded between veins, ascending-pilose to sericeous, internally glabrous. **Flower:** bisexual; **perianth** (**lodicules**) 2, free, acuminate-triangular with bulbous base,  $\pm$  $0.6 \times 0.5$  mm, transparent, glabrous; **stamens** 3, free; filaments slender but somewhat stiff,  $\pm$  5.5 mm long, white; anthers fully exserted, dorsifixed, dithecal, 3.2–4.2 mm long, white, dehiscent only near tip; pollen light yellow; **pistil** 1, 3.5–4 mm long; ovary superior, cylindric-narrowly ovoid,  $0.8-1.1 \times 0.4-0.5$  mm, greenish, tapered to style, glabrous, cylindric-narrowly ovoid, < 1 mm long, greenish, glabrous, 1-chambered with 1 ovule; styles 2(-3),  $\pm$  fused at base (if 3 stigmas, arising by forking of the larger branch), exserted and ascending, 3.8–5 mm long, translucent-white, glabrous from base and featherystigmatic (plumose) 2.5–3.2 mm long. Early May–early August.

Naturalized. Perennial herb originally planted on properties throughout the range as a forage grass for livestock and now naturalized and well-established in disturbed grassland and on the edges of woodland, especially growing in heavy clay soil. *Phalaris aquatica* forms conspicuous clumps that permit this species to be readily detected from a distance. This perennial species of *Phalaris* has a terminal bisexual floret in every spikelet. B. A. Prigge & A. C. Gibson