Vascular Plants of Williamson County

Helenium autumnale – WINGED SNAKEWEED, COMMON SNEEZEWEED, FALL SNEEZEWEED [Asteraceae]

Helenium autumnale L., WINGED SNAKEWEED, COMMON SNEEZEWEED, FALL SNEEZEWEED. Perennial herb, taprooted, not rosetted, mostly 1-stemmed at base, forming new flowering branches from the canopy downward, ascending, in range to 45 cm tall; shoots with mostly cauline leaves, in range soft-pubescent with arching short hairs and scattered subsessile and sessile glandular hairs. Stems: cylindric at base and above strongly winged with vertical, bladelike projections, axis to 4 mm diameter, tough aging woody, wings 2-4 mm wide decurrent in pairs from each leaf blade extending 1 internode (node-to-node), green, with nonglandular hairs and scattered glandular hairs. Leaves: helically alternate, simple, sessile, without stipules; blade obovate or elliptic to lanceolate, $33-135 \times 9-45$ mm, tapered at base, serrate to entire or remotely toothed on margins, acute at tip, pinnately veined with a pale green midrib raised on lower surface, surfaces uniformly short-hairy, lower surface also with scattered glandular hairs. **Inflorescence:** heads, with 1–several heads in leafy cymelike array terminal on each shoot, head radiate, in range 20–32 mm across and with 8–13 widely spreading pistillate ray flowers and 200–500 bisexual disc flowers, disc hemispheroid to 12 mm across, bracteate; peduncle in range to 70 mm long, 5-ridged or 8-ridged, and flared approaching head, having bracts at top subtending involucre (calyculus), bracts 10–12, fused at base as plate 4–5 mm across, free portion triangular arching upward, ca. 6×2 mm later strongly reflexed and inrolled to the lower side, light green, 3-veined at base, upper surface glabrous, lower surface with nonglandular and glandular hairs; **involucre** of 15–26 phyllaries in 2–3 series, phyllaries appressed to flowers, ovate, ca. 3 × 1 mm, upper surface glabrous, lower surface like calyculus; receptacle spheroid, to 2.5 mm across, lacking bractlets (paleas), glabrous but inconspicuously low-ridge between ovaries. **Ray flower:** pistillate, bilateral, 4.5–7 mm across (corolla limb); calyx (pappus) of 6–9 scales, ovate to lanceolate, $0.4-1 \times 0.3-0.4$ mm, translucent, slightly jagged on margins (not entire), most scales with terminal awn to 1.3 mm long, later spreading; **corolla** typically 3-lobed; tube often absent = flatened base 3 × 1 mm long, pale yellow with 5 parallel veins; exposed limb fan-shaped and flat, in range $5-8 \times 4.5-7$ mm, brilliant vellow with darker veins, sinuses 2-3 mm deep, lobes rounded to obtuse 1.5–2 mm wide having 2 or 3 veins entering each lobe (no veins to sinuses), upper surface glabrous, lower surface gland-dotted with spheric glandular hairs and pubescent with yellowish, short, thick hairs; stamens absent; pistil 1; ovary inferior, wedge-shaped and angled, ca. 1.5×0.7 mm, greenish, having strips of upward-pointing short hairs beneath each pappus scale and gland-dotted with scattered sessile glandular hairs, 1-chambered with 1 ovule; style exserted, 2–2.5 mm long, 2-branched, orangish yellow, the stigmatic branches divergent and ca. 0.8 mm long. **Disc flower:** bisexual, radial, 1 mm across, 4.5–5 mm long; calyx (pappus) of 5–7 erect scales, ovate, $0.4-1 \times$ 0.3–0.4 mm, translucent, slightly jagged on margins, typically scales with terminal awn to 1.3 mm long; **corolla** 4–5-lobed, in range ca. 3 mm long; tube \pm 0.25 mm long, whitish; throat slightly funnel-shaped, ca. 2.5×0.8 mm, greenish yellow, 4–5-veined, constricted at throat base, gland-dotted with sessile glandular hairs; lobes suberect, deltate, 0.4 mm, greenish yellow, densely papillate-hairy on outer face and in bud; stamens 4–5, fused to

top of corolla tube; filaments flattened, ca. 1.5 mm long; anthers fused in cylinder surrounding style, basifixed, dithecal, 1.5 mm long including acute appendages (0.3 mm long) at tip, orangish yellow, longitudinally and inwardly dehiscent; pollen orangish; **pistil** 1; ovary inferior, wedge-shaped and angled, ca. 1.5×0.5 –0.6 mm, pale green, having strips of upward-pointing short hairs along ribs and gland-dotted with scattered sessile glandular hairs, 1-chambered with 1 ovule; style exserted above anthers, \pm 3 mm long, 2-branched, orangish yellow, the stigmatic branches widely spreading later coiled, ca. 0.6 mm long. **Fruits:** cypselae (achenes), compressed wedge-shaped and angled, in range 1.5– 2×0.6 –0.7 mm, brown, 5-ribbed, 5–9 pappus scales and having a strip of ascending white hairs beneath each scale, faces with scattered resin droplets; pappus scales scarious, on ray flowers widely spreading, with terminal awn from midpoint or lower (rarely short and lacking awn), 0.4–0.40.2 mm long, somewhat jagged on margin.