**Polygonum austiniae** Greene
synonym: *Polygonum douglasii* Greene ssp. *austiniae* (Greene) A.E. Murray
Austin's knotweed
Polygonaceae - buckwheat family
status: State Threatened, BLM strategic rank: G4 / S1

**General Description:** Low annual, basally branched, ascending to erect, green to purplish, more or less scurfy, 5-10 (20) cm tall. Leaves numerous, jointed at base, blades 1-veined, the lower ones ovate, elliptic, or broadly oblanceolate, 5-15 mm long, narrowed to a very short petiole, gradually reduced and becoming sessile upward, transitioning to small bracts. Leaf margins papillose to minutely toothed. Stipules 3-5 mm long, forming a coarsely lacerate sheath around the stem.

**Floral Characteristics:** Cymes with 1-4 flowers, terminal and in the axils of all but the lowermost leaves; pedicels exserted from the stipule sheaths, 1-2.5 mm long, soon reflexed. Flowers (1.8) 2-2.6 mm long, fused for 1/4-1/5 their length; tepals 5, overlapping, greenish with whitish or pinkish margins. Stamens 5-8. Styles 3, distinct, barely 0.5 mm long. Blooms June to August.

**Fruits:** Achenes enclosed in the flowers, 3-angled, black, nearly smooth, shiny, 2-2.5 mm long, ovate in outline but tapered to both ends.

**Identification Tips:** *Polygonum douglasii* and *P. majus* have larger stipular sheaths, flowers, and seeds than those of *P. austiniae*. *P. engelmannii* has linear-oblanceolate leaves with smooth margins, while *P. austiniae* has broadly elliptic or ovate leaves with papillose to minutely toothed margins.

**Range:** Eastern B.C., Alberta, WA, central OR, south to northeast CA and NV, and east to southcentral MT and WY.

**Habitat/Ecology:** Dry to moist flats or banks, from sagebrush plains to lower mountains, often with ponderosa pine (*Pinus ponderosa*). The WA occurrences are found in dry lithosols with fine basalt gravels; associates include stiff sagebrush (*Artemisia rigida*), thyme buckwheat (*Eriogonum thyoides*), sagebrush violet (*Viola trinervata*), chaparral willowherb (*Epilobium minutum*), northern biscuitroot (*Lomatium farinosum*), bigseed biscuitroot (*L. macrocarpum*), Sandberg's bluegrass (*Poa secunda*), bulbous bluegrass (*Poa bulbosa*), large knotweed (*Polygonum majus*), and soft brome (*Bromus hordeaceus*). Elevations in WA: 450-700 m (1470-2240 ft).

**Comments:** Plants are extremely small and easily overlooked. As an annual, this species is vulnerable to fluctuations in climatic conditions and competition from invasive plants. It is also rare in B.C., Alberta, MT, and WY.

**References:** Flora of North America 1993+, vol. 5.

Adapted from *Field Guide to the Rare Plants of Washington*
http://www.washington.edu/uwpress/search/books/CAMFIE.html