mm (0.2 to 0.5 in.) long. The type specimen, collected in 1920 by R. D. Harwood, is from Bear Valley in the San Bernardino Mountains. E. k. var. austromontanum was originally described by Munz and Johnston (1924). Though later treated as a subspecies by Stokes (1936), this designation is not generally accepted (Munz and Reveal 1968, Hickman 1993). This taxon is similar in appearance to E. k. var. kennedyi (Kennedy's buckwheat) (Munz and Reveal 1968). Although the two taxa are very similar in morphology and habitat characteristics, E. k. var. kennedyi can usually be distinguished by its smaller leaves, 2 to 4 mm (0.08 to 0.16 in.) long, and achenes, 2 mm (0.08 in.) long (Reveal 1979). Another species that could potentially be confused with E. k. var. austromontanum is E. wrightii ssp. subscaposum, which has a branched inflorescence and is found in yellow pine forest (Neel and Barrows 1990).

Eriogonum kennedyi var. austromontanum is known from six populations in the San Bernardino Mountains, primarily in the Bear Valley and Baldwin Lake areas (Krantz 1981a, Neel and Barrows 1990). E. k. var. austromontanum is known to occur on Forest Service, CDFG, and private land. The construction of the Big Bear Lake reservoir in the 1880's began habitat loss for this species. This area in the San Bernardino Mountains likely contained extensive meadows and pebble plains. Since then, cattle trampling, mining, timber harvest, off-road vehicle use, fuelwood harvesting, campground and ski area development, and urbanization have continued to affect habitat of this species.

*Poa atropurpurea* is a perennial in the grass family (Poaceae) with creeping rhizomes and erect stems from 3 to 4.5 dm (12 to 18 in.) high. The inflorescence is a dense spikelike panicle, with smooth, faintly nerved lemmas 2.5 to 3 mm (0.1 to 0.12 in.) long, and glumes 1.5 to 2 mm (0.06 to 0.08 in.) long. This species flowers from early May to June or July. P. atropurpurea was described by Scribner (1898) based on specimens collected by S. B. Parish in 1894 at Bear Valley. *P. atropurpurea* is known to occur in meadows of the Big Bear area in the San Bernardino Mountains and in the Laguna Mountains in San Diego County from about 1,800 to 2,300 m (6,000 to 7,500 ft) in elevation (Sproul 1979, Krantz 1981b, Curto 1992). Several other native and at least one exotic species of Poa can be found within the range of P. atropurpurea, including P. fendleriana (mutton grass), P. incurva, P. nevadensis (Nevada bluegrass), P. pratensis (Kentucky

bluegrass), and *P. secunda* (*scabrella*) (Malpais bluegrass). *P. atropurpurea* is distinguished from *P. pratensis* by its smaller stature, contracted panicle, and lemmas that lack a tuft of cobwebby hairs at the base (Pierce and Beauchamp 1979). *P. atropurpurea* and *P. pratensis* are distinguished from the other sympatric *Poa* species by creeping rhizomes (Munz 1974).

Habitat for Poa atropurpurea is known to exist on Forest Service, CDFG, municipal, and private land in the San Bernardino Mountains. Eleven known population centers of P. atropurpurea currently are known to exist. These populations are distributed within a 13 km (8 mi) radius of the town of Sugarloaf (Krantz 1981b). Of these, two localities are on Forest Service land (Holcomb Valley and Wildhorse Meadows), one is administered by CDFG (North Baldwin), one is cooperatively owned by the Forest Service and a private youth camp (Hitchcock Ranch), and seven are privately owned. Eight of the 11 known sites are less than 2.5 hectares (ha) (6 acres (ac)) in size. Fewer than 40 ha (100 ac) of habitat for this species are known to remain in the San Bernardino Mountains: about 9 ha (23 ac) are administered by the Forest Service, 2 ha (5 ac) by the CDFG, and 28 ha (69 ac) are privately owned (Krantz 1981b). In 1979, four known populations of P. atropurpurea occurred in the Laguna Mountains. Sproul (1979) reported this taxon to be "one of the rarest and most threatened plants in the Laguna-Morena area." From 1981 until 1993, P. atropurpurea was considered to be extirpated from the Laguna Mountains because no individuals could be found despite repeated surveys for this taxon (Curto 1992; Kirsten Winter, U.S. Forest Service, pers. comm. 1993). In spring of 1993, two sites that currently support P. atropurpurea were located in the Laguna Mountains within the Cleveland National Forest (Raymond Vizgirdas U.S. Fish and Wildlife Service biologist, pers. comm. 1993). Each of the 2 populations consists of about 50 individuals (Winter, pers. comm. 1993).

Habitat loss for this species began in the 1880's with the construction of the Big Bear Lake reservoir in the San Bernardino Mountains in an area that likely contained extensive meadows and pebble plains. Since then, grazing, cattle trampling, mining, timber harvest, offroad vehicle use, fuelwood harvesting, campground and ski area development, and urbanization have continued to affect habitat for this species.

*Taraxacum californicum* is a thickrooted perennial in the sunflower family (Asteraceae), 0.5 to 2 dm (0.2 to 0.7 ft)

high, with light green, oblanceolate, subentire to sinuate-dentate leaves from 5 to 12 cm (2 to 5 in.) long and 1 to 3 cm (0.4 to 1.2 in.) wide. The numerous light yellow flowers are borne on leafless stalks, and bloom from May to August. The outer phyllaries (outer bracts beneath the inflorescence) are erect, lance-ovate, 5 to 7 mm (0.2 to 0.3 in.) long; the inner phyllaries are lancelinear, 12 to 15 mm (0.5 to 0.6 in.) long. This species has been previously treated as T. officinale var. lividum by Koch (in Hall 1907), as T. lapponicum by Handel-Mazzetti (1907), as T. ceratophorum by Sherff (1920), and T. ceratophorum var. bernardinum by Jepson (1925). T. californicum was described by Munz and Johnston (1925) based on specimens collected by S.B. and W.F. Parish at Bear Valley in 1882. Munz and Johnston (1924) emphasized the morphological distinctiveness of *T. californicum*, in addition to its extremely disjunct distribution. They elevated this taxon to species status primarily on the basis of its small achenes and erect appressed phyllaries. T. californicum is readily distinguished from other members of this genus within its range by its lighter green foliage, subentire leaves, erect phyllaries, and paler yellow flowers (Krantz 1980).

Taraxacum californicum occurs in moist meadow habitats in the San Bernardino Mountains from 2.000 to 2,800 m (6,700 to 9,000 ft) in elevation, often in association with Poa atropurpurea and other rare species. This species is known to occur on Forest Service, CDFG, municipal, and private land. Fewer than 15 occurrences of T. californicum currently are known, with population sizes ranging from 2 to 300 individuals. About half of these occurrences are located within or adjacent to developed areas such as Big Bear City, Big Bear Lake Village, and Sugarloaf in San Bernardino County. Habitat loss for this species began in the 1880's with the construction of the Big Bear Lake reservoir in the San Bernardino Mountains in an area that likely contained extensive meadows and pebble plains. Since then grazing, cattle trampling, mining, timber harvest, offroad vehicle use, fuelwood harvesting, campground and ski area development, and urbanization continue to affect habitat for this species.

Both *Poa atropurpurea* and *Taraxacum californicum* are found in wet meadow habitats, primarily in the northeastern San Bernardino Mountains. These taxa are further restricted to the relatively open edges or ecotonal (border) areas that offer less competition from more mesic species such as *P. pratensis, Carex* spp. or