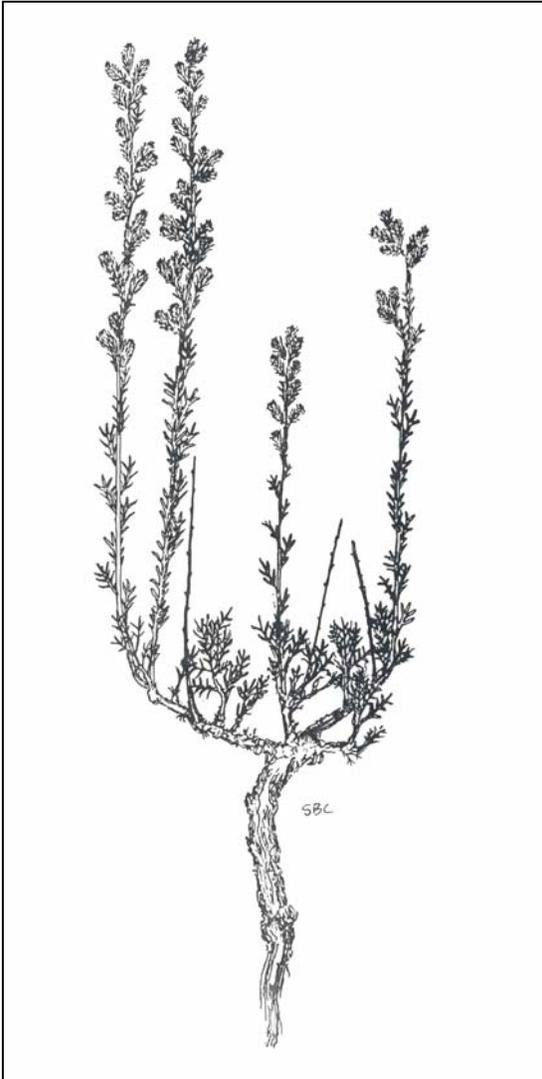*Artemisia pygmaea* **Gray**                                    pygmy sagebrush
ASTERACEAE

Synonyms:     *Seriphidium pygmaeum* (Gray) W.A.Weber



**General Description**.—Pygmy sagebrush is a dwarf, depressed, evergreen, cushion-like shrub less than 20 cm tall.  Bark on older stems becomes dark brown and fibrous with age.  Bark on younger branches is nearly white to straw-colored and somewhat puberulent.  Leaves on vegetative stems are green, nearly glabrous, viscidulous, and are pinnatified with three to 11 lobes, or sometimes may be toothed.  Leaf dimensions range between 2 to 4 mm wide and 2 to 8 mm long.  Leaves on flowering branches are usually reduced and may be entire.  Flower heads contain three to five disc flowers and are arranged into spike-like inflorescences.  Ray flowers are lacking.  Twelve to 18 greenish-yellow involucral bracts subtend each head (Cronquist 1994, McArthur and others 1979).

**Taxonomy.**—No subspecific entities have been described for pygmy sagebrush.  Pygmy sagebrush is known only at the diploid, 2n = 18, chromosome level (McArthur and Sanderson 1999).

**Range.**—The distribution of pygmy sagebrush is limited to approximately 54 km$^2$ in eastern Utah, western Nevada, and northern Arizona (Beetle 1960; McArthur and Plummer 1978; Ward 1953).

**Ecology**.—Pygmy sagebrush grows on calcareous desert soils.  Mean annual precipitation within its range is approximately 200 to 300 mm.  In Nevada, this species is often associated with halophytic threadleaf rubber rabbitbrush [*Chrysothamnus nauseosus* (Pallas ex Pursh) Britton ssp. *consimilis* (Greene) Hall & Clements].  In Utah, some relatively large stands are mixed with black sagebrush (*Artemisia nova* A. Nelson).

**Reproduction**.—Blooming occurs between August and September. Seed matures in October.  Seeds are relatively large compared to those of other subgenus *Artemisia* subgenus *Tridentatae* species (McArthur and others 1979).  Seeds are wind dispersed during late fall or winter.  Seedlings emerge during spring.   Shrubs in research plantings have spread naturally. It also establishes well by transplanting divided plants.  Although it spreads through naturally dispersed seed, artificial seedings have been unsuccessful.

**Management.**—Pygmy sagebrush provides little browse because of its scarcity and size.  It is readily eaten, however, when available.  It is a good candidate to plant in clay soils and may be of considerable value for revegetating mine spoils and roadway disturbances.

**Benefits**.—Although it is not abundant, pygmy sagebrush does provide important soil cover in dry, alkaline habitats where little else grows.  It

also adds to the overall biological diversity to the shrub communities where it is found.

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