Pink sandverbena (Abronia umbellata var. breviflora)



ENDANGERED



Flowers (left), habit (center), and habitat (right) of pink sandverbena. Photos by ODA staff (left and center) and Thomas Kaye (right). If downloading images from this website, please credit the photographer.

Family

Nyctaginaceae

Taxonomic notes

Synonyms: Abronia umbellata ssp. breviflora, Abronia umbellata ssp. acutalata, Abronia umbellata var. acutalata, Abronia breviflora, Abronia acutalata

The number of taxa included within the *Abronia umbellata* complex has varied with different treatments of the group. Based on genetic and morphometric studies of *A. umbellata* populations, we consider *A. umbellata* var. *acutalata* to be included within var. *breviflora*.

Plant description

Pink sandverbena can be either an annual or occasionally a short-lived perennial. It is a tap-rooted glandular-puberulent forb with few to several prostrate branches up to 1 m (-1.5) long. Leaf blades are fleshy, light green, oval to oblong-ovate with somewhat irregular margins, 2-6 cm long, with slender petioles about as long as the blades. Flowers are grouped in ball-like clusters of 8-20 (average 14-15) subtended by 5 (4) lanceolate involucral bracts, with clusters born at the ends of stalks growing out from the stems. Individual plants produce from one to thousands of flower clusters, depending on conditions. The perianth is glandular-puberulent, the perianth tube greenish or yellowish to pink and 0.6-0.8 cm long. The corolla limbs are pinkish-purple to deep reddish-magenta, 0.5-0.8 cm broad. Flowers have a yellowish-white eyespot 0.25-0.3 cm in diameter surrounding the throat. The fruit is a single-seeded anthocarp, usually 1.0-1.2 cm long, with 3-5 broad wings that are usually equal to or wider than the fruit body and often prolonged above the fruit apex.

Distinguishing characteristics

Abronia umbellata ssp. *breviflora* is the only pinkish-purple-flowered coastal *Abronia* species in Oregon. When flowering, it is easily distinguished from the yellow-flowered *A. latifolia* with which it co-occurs. *Abronia umbellata* ssp. *umbellata*, another purple-

flowered *Abronia*, overlaps in range with *A. umbellata* ssp. *breviflora* in California, but is distinguished from the latter taxon by its longer perianth tube (usually 0.9-1.3 cm long).

When to survey

Surveys for pink sandverbena should be completed when the species is in flower, from June through September, when it can be readily distinguished from the yellow-flowered *Abronia latifolia*, which occupies the same habitat and is vegetatively quite similar. Flowering times vary depending on site conditions and have been reported as early as April and as late as November.

Habitat

The habitat in which pink sandverbena occurs varies across the geographic range of the species. In the northern portion of its range, from Oregon north to Vancouver Island, most populations occur on broad beaches and/or near the mouths of creeks and rivers. The species usually occurs on beaches in fine sand between the high-tide line and the driftwood zone, in areas of active sand movement below the foredune. At the southern end of its range, from the northern California border southward, pink sandverbena is increasingly found in foredunes and more stabilized sand.

Associated plant species that often occur in direct proximity to pink sandverbena on open beaches include *Cakile maritima*, *C. edentula*, and *Abronia latifolia*. Other species that often occur in the vicinity of pink sandverbena, usually on adjacent foredunes, include *Ammophila arenaria*, *Leymus mollis*, *Lathyrus japonicus*, *L. littoralis*, *Honkenya peploides*, *Convolvulus soldanella*, and *Ambrosia chamissonis*.

Range

Historically known along beaches from Vancouver Island to northern California, pink sandverbena has significantly declined within the past century. The species was thought to be extinct in the northern portion of its range, from Washington northward, until two individuals were found on Vancouver Island in 2000. However, this population has not re-established itself in subsequent years. In 2006, another two individuals were discovered in Willapa Bay in Washington. Over the past three decades, the number of populations of pink sandverbena in Oregon has declined from about 10 to about five, with the most stable of these populations occurring along the southern Oregon coast. California hosts the greatest number of populations, the majority of which occur in Humboldt and Del Norte counties.

Oregon counties

Clatsop, Coos, Curry, Douglas, Lane, Lincoln, Tillamook

Federal status

Species of Concern

Threats

One of the primary threats to pink sandverbena is competition from the invasive European beachgrass (*Ammophila arenaria*), a species that stabilizes foredunes and destroys the low-hummocky, discontinuous nature of the foredune system in which pink sandverbena and other native species once thrived. European beachgrass, a nonnative species, was introduced to the coastal dunes of Oregon in the early 1900s and now covers vast expanses of prime pink sandverbena habitat and easily outcompetes this and other native forbs. Habitat disturbance by off road vehicles and heavy trampling by humans also threatens pink sandverbena.

Conservation planning

An interagency <u>Conservation Strategy</u> (pdf document, 425 kB) for pink sandverbena was developed by the U.S. Forest Service, U.S. Bureau of Land Management, Oregon Parks and Recreation Department, and Institute for Applied Ecology in 2006.

The Western Snowy Plover, a bird species federally listed as threatened by the U.S. Fish and Wildlife Service, occupies the same habitat as pink sandverbena. Recovery efforts for these and other rare coastal natives should be coordinated to maximize conservation results.

Did you know?

Pink sandverbena was the first North American plant species collected and described from west of the Mississippi River. French gardener Jean-Nicolas Collignon collected pink sandverbena on the California coast in 1786, and French biologist Jean-Baptiste Lamarck described and named the species *Abronia umbellata* in 1791.

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