

A Conservation Plant Released by the Natural Resources Conservation Service Cape May Plant Materials Center, Cape May, NJ

'Ocean View' Beach Plum

Prunus maritima Marsh.



'Ocean View' beach plum (Prunus maritima Marsh.) is a cultivar released in 1992. Photo by, USDA-NRCS, Cape May Plant Materials Center, Cape May, NJ.

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Description

Beach plum (*Prunus maritima* Marsh.) is a native, perennial shrub that grows of 4–7 ft on coastal sand dunes and up to 16–18 ft when grown inland. Stem diameter can range from 4–8 inches at the root collar. The root system penetrates deep into the soil, and as lower branches are covered by shifting sands, adventitious roots develop. Colonies formed from this layering effect can expand up to 20 feet.

The ovate-shaped leaves of beach plum are firm, alternate, and dull green; they are rough and ridged above, paler and finely hairy beneath. The leaves are half as wide as they are long, measuring $1\frac{1}{2}-2\frac{1}{2}$ inches long. Each leaf is attached to the branches with a stout, hairy, and often granular stalk. The leaf edges are finely serrated, with broadly triangular to semi-circular shaped, abruptly pointed teeth.

Flowers emerge before the leaves from April to early May. Each white flower measures ½–½ inch across, with very hairy stalks and sepals. Flowers develop in axillary clusters of two or three. After pollination occurs by bees or wind, the flowers become pinkish in color. The round, purple, edible fruit is ½–¾ inches in diameter and ripens in early September.

Source

'Ocean View' beach plum is a cultivar release developed as a composite germplasm from several native populations. Seed collections were taken from natural stands in New Jersey, Delaware, and Massachusetts. This cultivar was developed and released in 1992 by the Cape May Plant Materials Center, in Cape May Court House, NJ.

Conservation Uses

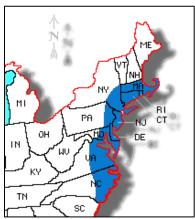
Beach plum is most useful in the secondary stabilization and restoration of coastal sand dunes. Beach plum shrubs stabilize the transition zone between climax forests and frontal dune pioneer grasses such as American beachgrass.

As a potential fruit crop that can be grown in dry, nutrient-poor sandy sites, it has great potential in low-input sustainable agricultural systems. A beach plum growers association was created in Cape May County, NJ to facilitate the development and promote commercial fruit production of this native plum.

This native shrub provides food and habitat for songbirds, gamebirds, and small mammals. There has been anecdotal evidence that it has also been used as a nesting site for glossy ibis (Post, 1962). The beach plum also attracts a large number of native bees, and its early spring bloom is beneficial to honey production.

Area of Adaptation and Use

Although indigenous to the mid-Atlantic coastal region, beach plum has been planted successfully on more inland sites. It is well-adapted to droughty sites with moderately fertile, slightly acidic, loamy and sandy soils. Beach plum does not perform well on heavy clay soils, but will tolerate moderately well-drained conditions. Beach plum is distributed throughout the Northeast.



Map of 'Ocean View' beach plum area of adaption and recommended area of use.

For a current distribution map, please consult the Plant Profile page for this species on the PLANTS Web site.

Establishment and Management for Conservation Plantings

For nursery production, seed should be sown in the fall into raised beds. The root systems of one-year old seedling are very vigorous and are desirable for transplanting when 46–61 cm (18–24 in) tall.

Fall sowing works best to utilize natural stratification forces to break seed dormancy. If spring sowing is selected, the seed must be exposed to a cool/moist stratification for at least 30 days prior to planting. Similar to other stress-tolerant, pioneer plants that grow in infertile soils, they have slow growth and photosynthetic rates (Uva and Whitlow, 2007). Beach plum produces fruit in 3–4 years and matures in 7–8 years.

Shrubs can be trained to a modified central leader form to keep plants to a manageable height and encourage lower fruit development. Plant spacing should be 8 ft in the row and 16 ft between rows to allow space for mowing equipment. Prune in early spring/late winter before "bud break". Once the orchard is established, pruning should be done annually. Thinning will reduce excess fruit loads and minimize biennial bearing.

Control competing weeds through the establishment period to improve seedling survival. Applying mulch and manually removing weeds will help suppress weeds. Caution should be used when fertilizing beach plum during the first two years of growth as fertilization will encourage the growth of competing weeds and grasses. Research by Uva and Whitlow (2007) found that fertilization did increase plant size and fruit production, and so should be considered after any weed infestation has been suppressed. Once this shrub is established it requires little or no maintenance.

Ecological Considerations

Beach plum can be negatively affected by several pests and diseases including: black rot; plum pockets; fruit rot; scale; mildew; plum curculio; and aphids. If infestations become excessive, chemical control can be used. Refer to extension service recommendations for treatment and control.

Seed and Plant Production

Despite a century of interest in developing a beach plum cultivar that can be suitable for large scale commercial production and distribution, most fruit is still gathered from wild, native stands that tend to produce unreliable yields. The cultivar 'Ocean View' is open-pollinated and produces white blooms in mid-May. Beach plum tends to

bear fruit on alternate years and the fruit quality varies widely (Uva, 2003). The fruit has a high phenolic content, acidity, and antioxidants. (Uva, 2004). The fruit is used to produced jam, jelly, and wine mainly for cottage and niche market industries. Cold and wet weather during the bloom period can reduce pollination and fruit yield.

Availability

For conservation use: For sources of supply for 'Ocean View' beach plum or for more information on the availability, planting and use, contact your local NRCS office or Soil and Water Conservation District.

For seed or plant increase: 'Ocean View' beach plum is an eastern US cultivar release. NRCS maintains foundation stock at the Cape May Plant Materials Center in Cape May Court House, NJ. Seed is available from a limited number of commercial nurseries in the northeastern United States and other parts of the US.

Citation Release brochure for 'Ocean View' beach plum (*Prunus maritima*). USDA-Natural Resources Conservation Service, Cape May Plant Materials Center. Cape May, NJ 08210. Published July, 2012

For additional information about this and other plants, please contact your local USDA Service Center, NRCS field office, or Conservation District http://www.nrcs.usda.gov/, and visit the PLANTS Web site http://plants.usda.gov or the Plant Materials Program Web site http://www.plant-materials.nrcs.usda.gov