

# Growing Among the Dunes

## A Dune Habitat Plant Guide

by Jill Ocone



*Island Beach State Park offers a self-guided nature trail with marked dune plants and vegetation between the ocean and the bay.*

**S**and dunes are the most important geologic structure on barrier beaches because they provide natural protection from wind, waves, and ocean currents. Naturally built by the wind, sand particles blown from the beach become trapped and held by various types of beach plants. The sand accumulation with its vegetative anchors combine to form hills or ridges called dunes.

Dunes absorb the violent energies

created by high winds, surging waves, and extreme currents spurred by storms to help protect nearby land and structures. There's no question that Superstorm Sandy devastated the Jersey Shore, but local damage would have been considerably worse without the dune systems already in place.

Dunes also provide a habitat for countless species of shore birds, insects, turtles, crabs, and small

animals, and serve as stopovers for migrating birds. Such critters find protection, food, and nesting spots within the dunes' jungle gym of interconnected sands, leaves, flora, vegetation, and sea detritus.

One storm or nor'easter can wipe out years of dunes, and as they return both naturally and with help from humans, various types of plants and shrubs help keep the shore's dune systems stable and strong.

## American Beach Grass

*Ammophila breviligulata*



Jill Ocone

American Beach Grass is the most important dune-building plant in New Jersey and is one of the most prevalent grasses found in coastal seaside communities. Their underground system of rhizomes (roots) spread in all directions for up to twenty feet to create a web-like net which holds the sand above it in place. Sand builds up around the stems as they grow higher to naturally build a dune, but its root system is easily destroyed by human traffic. From May through September, small yellow flowers bloom on spikes that grow from the stems. The plant tolerates high salinity, extreme solar glare, poor soil conditions, and uncertain water supply. The best time of year to plant American Beach Grass is between October and March, because that is when it is dormant.

## Asters

*Symphyotrichum oblongifolium*



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Asters can be found beachside near dune plants and tend to be compact and stiff. They tolerate poor, dry soil conditions, including sand. Their blueish-purplish-pinkish flowers with yellowish centers, which resemble daisies, typically bloom from mid-August through the fall. Bees and butterflies feed upon the perennial's nectar. The leaves of Aster plants emit a pleasing aroma when crushed and are common ingredients in sachets and potpourris.

## Beach Plum

*Prunus maritima*



Gordon Hesse

Because Beach Plums tolerate sandy soil and salty conditions, they are frequently used in dune stabilization efforts. Beach Plums are perennial shrubs that range in size from three to twelve feet tall and produce tart yet edible fruit. Their plums are small and round, varying in size from a penny to a quarter and in color from yellow-orange and red to blue to purple. Beach Plums lend

their name to festivals and seasonal gatherings. (Island Beach State Park's annual Beach Plum Festival will be held on Sunday, September 8 this year.) The plants attract bees and other pollinators and a host of butterflies. Beach Plum juice, fruit, and pulp are used to make jams and jellies, ice cream, iced teas, wine, cocktails, and salad dressings.

## Beach Roses

*Rosa rugosa*



Carol Moroz

Beach Roses are found within dunes because of its ability to withstand salt spray. However, *Rosa Rugosa* is considered an invasive species in many areas, including New Jersey, and are not native to the Garden State. The plants grow to be between four to five feet tall and produce pinkish-purple flowers that resemble roses. Its ripe fruits, or hips, are high in Vitamin C and can be made into teas, jellies, and jams. The plants offer food and cover to birds, deer, and small mammals. Be careful of the plant's fine thorns that densely cover its stems.

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## Watch Where You Walk!

It is a good rule of thumb to avoid exploring dunes as many municipalities have laws prohibiting pedestrian, equestrian, and vehicular traffic to protect them from damage.

State and local laws also protect many areas of sand dunes from development and environmental impact, and dune habitats on private property are strictly off-limits from trespassers.

However, the area around the Interpretive Center and Nature Center at Island Beach State Park offers a self-guided nature trail with marked dune plants and vegetation between the ocean and the bay. The buildings and trail are located about seven miles south of the park's entrance.

Another place to see native dune plants in their natural setting is Cattus Island County Park in Toms River.

Explorers are advised to wear proper shoes, dress for the weather, follow posted rules, and take necessary precautions to avoid exposure to Poison Ivy, extreme sun, and insects while traversing permissible dune areas.

**Blueberry Bushes**  
*Vaccinium cyanococcus*



Jill Ocone

Blueberry bushes can be found all over New Jersey and thrive in sandy soil conditions, making them a common dune resident. They typically grow up to two feet tall and flower in the spring. Blueberries mature from small white circles about the size of peppercorns to green then blue berries that are ready to be picked in early-to-mid summer. Their foliage transforms into striking yellows and reds come autumn. Blueberry Bushes are good choices for borders, hedges, and groundcover. Blueberries are one of nature’s most beneficial foods, but be on the lookout for birds! Numerous species, especially catbirds, can pick bushes clean of just ripe berries in mere minutes.

**Common Milkweed**  
*Asclepias syriaca*



Jill Ocone

Common Milkweed plants have large and thick light green leaves with red veins and grow to be four to five feet tall. Round clusters of aromatic

pink and white flowers bloom in late spring, and then transform into horned-shaped seed pods filled with silky seeds that naturally become dispersed by the wind. The perennial plant grows well in poor, dry, sandy soil and spreads by self-seeding and spreading their underground stems, or rhizomes, to form colonies. Common Milkweed is extremely valuable. It is a host plant for monarch butterfly larvae, or caterpillars, and the flowers’ nectar attracts bumblebees, native bees, honeybees, hummingbirds, and butterflies. The seed pods also attract red and black milkweed bugs that are more of a nuisance than a threat and transform through five different stages of life. Milkweed plants are one of the first to show that summer is ending as its green leaves and stems change to yellow then brown around the end of August.

**Eastern Red Cedar**  
*Juniperus virginiana*



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Eastern Red Cedar is a member of the evergreen family and native to New Jersey. It is considered a dioecious species because male and female trees are separate. Female trees produce small, round, gray to light-blue, berry-like cones, which serve as a food source for small mammals and birds, especially cedar waxwing birds. Because Native Americans found so many medicinal uses for Eastern Red Cedar, they called it the “medicine tree” or the “tree of life.” The abundance of trees along the Jersey coast provided

early settlers with thriving milling and lumber industries. Wood from Eastern Red Cedar trees has a distinct and pleasing aroma and is used as building material for fences, furniture, cabinets, carvings, and cedar chests. The trees, which are resistant to drought and extreme cold and heat, are uniquely shaped by wind-blown salt spray and grow in sandy and clay soils.

**Northern Bayberry**  
*Morella pensylvanica*



Jill Ocone

Northern Bayberry is another member of the evergreen family and makes its home among the beach dunes along the Jersey Shore. Like Eastern Red Cedar, the dense shrub has male and female catkins on separate plants. Female fertilized flowers transform into tiny, round, waxy gray fruits that endure through winter. These berries, which are not meant for human consumption, are sometimes referred to as candleberries because their waxy coating is used to make candles. In fact, it takes about five gallons of bayberries to make one candle. Bayberries are a food source for birds, especially swallows and warblers, and the plant is a host plant for Columbia Silkmoth caterpillars. Northern Bayberry shrubs prefer dry and sandy soil and grow between five and twelve feet tall.

### Poison Ivy

*Toxicodendron radicans*



Jill Ocone

While native to New Jersey and commonly found among the dunes, Poison Ivy is one plant to avoid because it causes an allergic reaction to humans. It can grow as a shrub or as creeping vines that appear hair-like, and the ivy's almond-shaped leaves grow in threes. Mature leaves appear shiny with smooth surfaces, and come autumn, their greens transform into striking reds and oranges. The plant's grayish-white berries are a food-source for migrating birds and white-tailed deer. Poison Ivy contains an urushiol compound that causes severe itching and blistering when it touches human skin. Not only should those who encounter Poison Ivy immediately wash the area where the plant's oils contacted their skin with soap and water, but they should also wash shoes, clothes, and anything else that might have come into contact with the plant because oils can linger and continue to irritate long after exposure.

### Prickly Pear

*Opuntia humifusa*



Jill Ocone

Prickly Pear, also known as Devil's-tongue, is New Jersey's only native

cactus and a common sight in and around dunes. The flat, oval, fleshy pads of the plant grow horizontally on the ground or stand erect with tiny reddish spikes protruding from the pads. Be careful around Prickly Pear—their spikes can easily detach and penetrate the skin. If left untreated, the spikes can cause dermatitis, and when blown into human eyes, they can cause conjunctivitis and keratitis. Prickly Pears bloom yellow, ornate flowers that last for only one day, and after fertilization, a red, edible fruit will grow. The plant, blooms, and fruit all serve as a food source for wildlife.

### Seaside Goldenrod

*Solidago sempervirens*



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New Jersey is home to over twenty-five types of Goldenrod, but Seaside Goldenrod is most commonly found along the shore. Seaside Goldenrod plants have thick, waxy leaves and dense deep-yellow flowers that bloom from August through October. Migrating Monarch Butterflies feed upon Seaside Goldenrod during their fall migration. Native bees, honeybees, and other butterflies also thrive on Seaside Goldenrod's nectar, and the plant's dried seeds provides birds with food.

### Smooth Sumac

*Rhus glabra*



Jill Ocone

Smooth Sumac is a shrub with yellowish-green flowers that typically bloom in June and July. Both male and female flowers on separate plants are needed to produce fruit. Female flowers lead to large clusters of red berries which ripen in August and are a food source for birds. Smooth Sumac is a host plant for butterfly and moth larvae, including Hairstreaks, and their nectar attracts butterflies, birds, bees, and other pollinators.

### Yucca

*Yucca filamentosa*



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Yucca, also known as Adam's Needle, is a shrub with a unique form. Yucca leaves are thick blades that extend both horizontally and vertically from the center of its basal stem in a sunburst-style shape with a sharp point, like a needle, on the ends. Yellowish-white flowers bloom in clusters on top of panicles that sprout from the center of the plant and can reach three to six feet above the foliage. The flowers attract a host of bees, hummingbirds, and butterflies, and the plant is also a host for many types of butterfly and moth larvae, including Yucca Giant-Skippers and Cofaqui Giant-Skippers. Because Yucca plants tolerate droughts and prefer dry, sandy soil, they easily find a home among the dunes of the Jersey Shore. ♦