

## PLANT HISTORY

🌿 Where planted \_\_\_\_\_

🌿 When planted \_\_\_\_\_

🌿 Date shoots (new growth) appeared \_\_\_\_\_

🌿 Date(s) fertilized \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

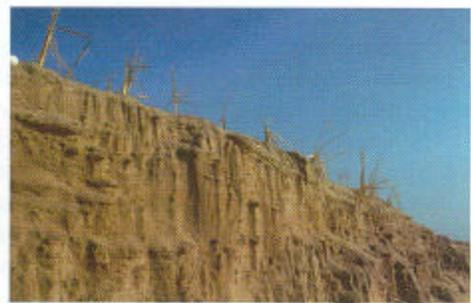
🌿 Remarks \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Seaside spurge**, *Euphorbia polygonifolia*  
(Annual) has small flowers needing magnification to fully see. The plant is small but stands out due to its assortment of pale light green leaves attached to light green and yellow stems that transform to light red in older growth. Its seed capsule is slightly more obvious than the flower, but needs magnification for clarity. Plants characteristically

have milky acrid juice just like their relative poinsettia. An annual, it provides little wind protection in the winter, although at times it is abundant and sufficiently covers the sand to stabilize it. It may be introduced in a seed mixture, but seed is not presently available. Management is to let nature take its course. Future seed mixtures may benefit from its inclusion.



American Beachgrass  
(*Ammophila breviligulata*)

## PLANT HISTORY

🌿 Where planted \_\_\_\_\_

🌿 When planted \_\_\_\_\_

🌿 Date shoots (new growth) appeared \_\_\_\_\_

🌿 Date(s) fertilized \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

🌿 Remarks \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**American beachgrass**, *Ammophila breviligulata* (Perennial) is a native grass that reaches 3' in height and is the foundation of 99% of all beach vegetative revitalization. It ranges from the St. Lawrence Seaway to Cape Hatteras, NC, and there is hardly a stretch of the beach where it cannot be found. The grass has the most extensive root and rhizome system on the dunes with roots sometimes exceeding 26' in length. The grass spreads extensively from lateral rhizomes since the seed is not generally viable and of no planting value. Some green leaf area may remain in the winter but most plants usually turn a yellow-brown. New shoots may appear in the fall, but in most cases start growth in early spring (March). The first leaf emergence is a sharp pointed shaft that unfolds as it matures. The grass grows best where sand is accumulating, although a buildup of sand

exceeding 8" in one storm event may negatively affect plants. Accumulations of 2 or more feet have a high probability of killing the plants. No wildlife use is documented except cover. Maintenance should include a fertilization program. There are problems with maintaining a pure American beachgrass community. It usually starts to deteriorate at 3 to 5 years of age, and has completely died off under the assault of insect and disease. We have witnessed good growth during the first season of establishment and a complete biological die off the following year. Managers should promote plant succession and introduce other long term vegetative types. Widely available commercially in dry root form, it should be planted during the last two weeks of February and the first two weeks of March.



Seaside Goldenrod  
(*Salidago sempervirens*)

## PLANT HISTORY

🌿 Where planted \_\_\_\_\_

🌿 When planted \_\_\_\_\_

🌿 Date shoots (new growth) appeared \_\_\_\_\_

🌿 Date(s) fertilized \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

🌿 Remarks \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Seaside goldenrod**, *Solidago sempervirens* (Perennial) has lush vegetation with rich, green leaves accented by bright yellow fall flowers. A perennial, its beauty lies in its contrast with the harsh environment. Managers have wrongly attacked this plant for inducing allergies, i.e., hay fever, asthma, etc., but it is ragweed that is usually the culprit. Goldenrod should be welcomed to any dune. Winter identification is usually made by the bleached skeleton of woody stalk and flower residue. Wildlife use is very low, and

mainly limited to Goldfinch, Junco and Pine Siskin. In February and March, red leaves that emerge from the sand soon become green. Presently the only method of propagation is by root stalk or breaking apart the multiple stalk into separate plants. Seeding has potential, but has not been widely used. Best maintenance is to let nature take its course. A good fertilization schedule also helps. Goldenrod is presently not available by seed or plant. Transplants should be made in late winter or early spring.



Seabeach Evening Primrose  
(*Oenothera humifusa*)

## PLANT HISTORY

🌱 Where planted \_\_\_\_\_

🌱 When planted \_\_\_\_\_

🌱 Date shoots (new growth) appeared \_\_\_\_\_

🌱 Date(s) fertilized \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

🌱 Remarks \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Seabeach evening primrose**, *Oenothera humifusa* (Annual) is a delicate yellow beauty which sometimes becomes reddish. Its flowers are considered nocturnal, but often bloom during daylight hours, especially in the evening. The plant usually occupies less than a square foot, but sometimes covers as much as 3 to 4 square feet. In the spring it germinates "early" and reaches maturity by May. It persists until frost when the foliage disappears except for the woody base stem, which by late winter is usually absent. The

seed is small and the only documented wildlife use is by the common Goldfinch. Management should be to include it in a seed mixture and fertilize it for diversity of stand. An overall fertilization program should increase its growth. It is not preferred for dune stabilization because of its size, limited root growth and annual growth habit. It is of advantage in early succession dune communities. Plants or seed are not known to be available commercially, and preferred planting depth is not documented.

Seabeach Evening Primrose



Yucca  
(*Yucca filamentosa*)

## PLANT HISTORY

🌱 Where planted \_\_\_\_\_

🌱 When planted \_\_\_\_\_

🌱 Date shoots (new growth) appeared \_\_\_\_\_

🌱 Date(s) fertilized \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

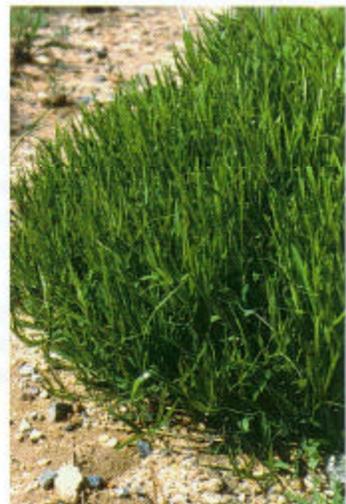
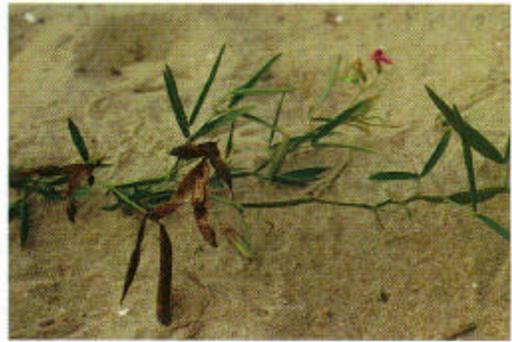
🌱 Remarks \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Yucca**, *Yucca filamentosa* (Perennial) is a beautiful, white, tall flower, at times overtopping the 4' sand fence. Yucca can easily draw attention from other plants on the beach. It usually blooms in June, but may delay bloom to a later date due to plant stress. Its dark green vegetation is visible all year long. The ends of the leaves may burn with salt spray, but its hardiness and ability to spread by seeds and roots have earned it a place on the beach. The plant does best in stabilized areas with reduced sand movement. Its vegetation structure offers diversity and contrast. Yucca is a plant that can divert foot traffic. Its seed is viable and easy to collect, and should be

considered for use in a seed mixture to diversify beach plantings. Wildlife use is diverse, including hummingbirds and woodpeckers. Many other species use the persistent seed, especially when snow covers up most other food sources. It can be propagated by breaking apart the tubers into pieces as small as 1/4". Generally, the bigger the root, the better and more vigorous the plant. Yucca responds well to fertilization. The plants and seeds are readily available commercially, and are planted as container, balled or root stock. Seeding for greatest success is estimated to be 1/2 to 1" depth.



Lathco Flatpea  
(*Lathyrus latifolius*)

## PLANT HISTORY

🌱 Where planted \_\_\_\_\_

🌱 When planted \_\_\_\_\_

🌱 Date shoots (new growth) appeared \_\_\_\_\_

🌱 Date(s) fertilized \_\_\_\_\_

🌱 Remarks \_\_\_\_\_

**Lathco flatpea**, *Lathyrus latifolius* (Perennial) is a pink beauty occasionally occurring as a light yellow flower. It graces the beach only where introduced and is a persistent dark green legume that originated in Central Europe. It spreads by underground rhizomes and produces viny growth up to 2' high. A nitrogen producer, it has an advantage in the nitrogen limiting growth environment of the dune. It has been established by direct seeding with bacterium inoculation, but transplants may be preferred. Transplants introduced in April or June should become established the first year and spread during the second year. A single plant has been

known to establish a community as large as 8' across in a 4-year period. In winter the vegetative cover declines into a dormancy, and the tops are lost to wind damage. It is drought tolerant and seldom shows stress from low water availability. Wildlife use includes birds and rodents. Rabbits sometimes graze clumps close to the ground limiting their use for beach protection. Monitored sites have not shown salt burn. The plant can grow in pure stands and out-compete other species. Our experience is limited but it has potential for management. Although plants and seed are available commercially, plant availability is limited.



Partridge Pea  
(*Cassia fasciculata*)

## PLANT HISTORY

🌱 Where planted \_\_\_\_\_

🌱 When planted \_\_\_\_\_

🌱 Date shoots (new growth) appeared \_\_\_\_\_

🌱 Date(s) fertilized \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

🌱 Remarks \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Partridge pea**, *Cassia fasciculata* (Annual) is a pleasing introduction to the dunes with a bright yellow flower with contrasting dark green foliage. It is vigorous in growth, occurs naturally and seems to take advantage of dunes with high organic residue leaf litter. The most common location is where American beachgrass is on the decline or has completely collapsed as a community. The pea usually occurs later in succession where it takes advantage or moisture conservation by plant residue left by the death of other species. Once established, it grows well. A legume, it fixes nitrogen and is of great advantage in an environment with few avail-

able nutrients. The winter foliage is limited to persistent woody stems without any real easy identification points after the pods are dislodged. The woody stems decline, break down, and usually disappear by spring when a new plant may appear. The seeds are very important to wildlife, providing a constant food source. Quail have been observed working the pods to shatter out the seeds. The plant has the potential for direct seeding, especially in a vegetatively declining dune. It also may be of great advantage in a diverse seed mixture. Plants could easily be made available.



Scarlet Pimpernel  
(*Anagallis arvensis*)

## PLANT HISTORY

🌱 Where planted \_\_\_\_\_

🌱 When planted \_\_\_\_\_

🌱 Date shoots (new growth) appeared \_\_\_\_\_

🌱 Date(s) fertilized \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

🌱 Remarks \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Scarlet pimpernel**, *Anagallis arvensis*  
(Annual) is a small, red flowered plant which is not abundant on the beach. It is not considered of great conservation value due to its small size and infrequent occurrence, but

adds plant diversity and seasonal color to the dunes. Little else is known about the use or management options. No known source of seed or plants is identified.

Scarlet Pimpernel  
Anagallis arvensis



Camphorweed  
(*Heterotheca subaxillaris*)

## PLANT HISTORY

🌱 Where planted \_\_\_\_\_

🌱 When planted \_\_\_\_\_

🌱 Date shoots (new growth) appeared \_\_\_\_\_

🌱 Date(s) fertilized \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

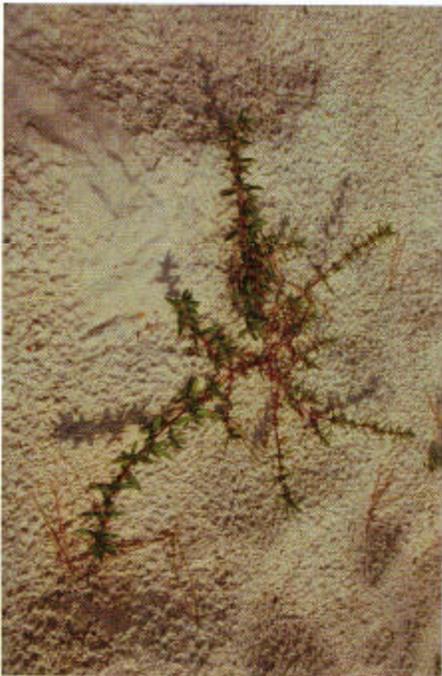
🌱 Remarks \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Camphorweed**, *Heterotheca subaxillaris* (Annual or Biennial) has a bright yellow flower which matures into a white fluffy seed head. The flower and seed head are similar to the dandelion in color and shape. The plant is an annual or biennial depending on the time of year it germinates and the availability of nutrients and water. Its leaves are strongly aromatic with the smell of camphor when crushed, and it appears to be more abundant under a fertilization program. Its winter

appearance varies greatly, from a dead disappearing residue to a live immature plant. The seed is viable and readily disseminated by the wind. It may be added to a seed mix or planted alone. The stabilization properties on the dune are not extremely important but again, anything that grows offers benefits. Wildlife use is not documented. Plants or seed are not known to be commercially available.



Saltwort  
(*Salsola kali*)

## PLANT HISTORY

🌱 Where planted \_\_\_\_\_

🌱 When planted \_\_\_\_\_

🌱 Date shoots (new growth) appeared \_\_\_\_\_

🌱 Date(s) fertilized \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

🌱 Remarks \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Saltwort**, *Salsola kali* (Annual) has small flowers needing magnification for detail. It is armed with thorn tipped leaves and fruits that are formidable deterrents to trespassers on the dunes. The plant is typically 2' tall, and may take on an open or dense vegetative form. Plants grow 4' to 5' across and 4' tall where water and nutrients are available. Plants of this size are not usually found on the elevated dune. The leaves and stems range in color from a light pale green to a dark red, depending on site, time of year and growth response to the environment. The

fruit has yellowish to lead-colored wings. The fruit and seeds have potential value, with direct seeding, to form a living fence. Broken by wind and decomposition, its winter existence is very limited, and it disappears from the beach after November. Wildlife use is not well documented other than an occasional grazing by rabbits when the plant is young. It can be used in seed mixes and responds well to fertilization and water. Its overall capability to capture and stabilize sand on the beach is considered low due to its limited physical presence during the winter.



Coastal Bluestem  
(*Andropogon littoralis*)

## PLANT HISTORY

🌿 Where planted \_\_\_\_\_

🌿 When planted \_\_\_\_\_

🌿 Date shoots (new growth) appeared \_\_\_\_\_

🌿 Date(s) fertilized \_\_\_\_\_

🌿 Remarks \_\_\_\_\_

**Coastal bluestem**, *Andropogon littoralis* (Perennial) is a clump grass that emerges in the spring through a brown residue, and is usually reduced in height by wind breakage on exposed areas. The small green leaves contrast with the brown in the spring but soon dominate the clump. As it grows the stems take on a chalky-blue color, hence its descriptive name, bluestem. The grass, which naturally occurs in clumps isolated from continuous stands or total vegetation coverage, is spread by long rhizomes. Although the seed can be planted in denser stands and fertilized, creating a total area coverage, it should not be mowed. It can be planted by

transplanting the plants, or by collecting seed-bearing parts of plants and cutting them into the sand with a spade or similar device. Its seed is viable but easily wind-blown; a plus in establishing new plantings in the wild but a management headache unless they are immediately secured in place in the sand. The seed moves much like feathers on the beach, and wildlife use is limited to cover. Some success has been achieved by cutting the top of the plant into the sand to retain the seeds. Plants may become available, but there is no documented source of seed.



Trailing Wild Bean  
(*Strophostyles helvola*)

## PLANT HISTORY

☘ Where planted \_\_\_\_\_

☘ When planted \_\_\_\_\_

☘ Date shoots (new growth) appeared \_\_\_\_\_

☘ Date(s) fertilized \_\_\_\_\_

☘ Remarks \_\_\_\_\_

**Trailing wild bean, *Strophostyles helvola*** (Annual) has variably colored flowers ranging from pink to beige to white with one to four beans per flower cluster. An annual, it decomposes after the November frost leaving only the bean seed. The bean is used by wildlife and especially hoarded by mice for winter use. In the spring the seeds germinate and grow, forming a three leaf dominated vine that runs across the dune and at times exceeds 20' in length. Its growth readily

adopts the protective fencing for support, but it can also completely cover a dune. This legume has lush growth and takes full advantage of its nitrogen fixating capability in soils with little available nutrients. Establishment of the beans can be by seed planted 1 to 2 inches deep. Use bacterial inoculation on the seed source since it may not be available in the soil. Seeds and inoculation are presently available commercially.