

Prohibited Species: What NOT to Plant

The new NJDEP Coastal Management Zone Regulations specify that dunes in New Jersey will be planted with native species only. What follows is a list of non-indigenous and/or non-native plant species that should **NOT** be planted on dunes.

European beachgrass (*Ammophila arenaria*) –

While this is not available locally, it is available online and from catalogs for import from California and Oregon but would be devastating to the local ecology if planted here.

Dunegrass (*Leymus mollis*) –

This is a native species to North America but is not indigenous as far south as New Jersey. It occurs from Massachusetts through the Canadian Maritimes and in the Pacific Northwest. This plant would not be adapted to our hot, dry summers and would not thrive locally.

Blue lyme grass (*Leymus arenaria*) –

This is a non-native, ornamental, coastal landscaping grass that is not an appropriate plant species for dune stabilization. It has blue-green leaves and is grows horizontally. It appears similar to bitter panicgrass, a native coastal stabilization grass.

Northern sea oats (*Chasmanthium latifolium*) –

This species is also known as wood oats. Although the common name implies that it grows on the dune, this species is actually a forested, floodplain species that needs some shade and moisture to survive. It gets its name from the likeness of its seedhead to sea oats. Once a genetically adapted species is made available for New Jersey, sea oats (*Uniola paniculata*) would be an appropriate species. Currently, sea oats is not permitted due to the lack of commercial availability of a cold-tolerant variety of this species that could survive New Jersey winters.

Rugosa rose (*Rosa rugosa*) – While many people love this species for its pretty pink and magenta

blooms and large red rose hips, this is a non-native plant and should be avoided when restoring native dunes. Beach plum and bayberry are native plants with high habitat value that would be better choices for planting in areas in where rugosa rose is being considered. An alternative rose would be Virginia rose (*Rosa virginiana*).

Salt cedar (*Tamarisk sp.*) –

Its extreme salt tolerance makes it a common choice for shore gardeners. While this plant is not too invasive in dry areas, it is a real threat in riparian areas and planting it should be avoided.

Shore juniper (*Juniperus conferta*) –

This species is a non-native, creeping evergreen groundcover and is used primarily as an ornamental landscaping foundation plant.

Japanese Black Pine (*Pinus thunbergii*) –

Japanese black pine is highly used by landscapers in coastal communities due to its tolerance to salt and poor soil. Unfortunately, it creates a monoculture of one species and low genetic diversity. Monocultures in general – and this species in particular – are susceptible to predators and diseases and are short-lived. An alternative in a sheltered coastal site would be the native pitch pine (*Pinus rigida*).

Asiatic and large headed sedges (*Carex*

kobomugi and *C. macrocephala*) – Neither of these is available at nurseries locally, but again they are available via the internet and mail order. Both of these species are non-native and *C. kobomugi* is highly invasive in New Jersey. Both are low-growing sedges that do not catch sand as well as native beach grass, resulting in long, low dunes that are less able to protect the communities behind them from flooding. It also decimates plant diversity on the dunes and reduces habitat value for many shore animals.