

Seaside Plants For Problem Landscapes

By Joyce Gann

Seaside plants need not be limited to the shore. The same physiological characteristics that enable them to survive strong sandblasts, cold winds, poor soil, and heat make them drought tolerant and attractive for low-maintenance landscapes.

Other reasons for using salt-tolerant, drought-resistant plants are: distance from water sources; desire to minimize care requirements; poor, rapidly draining, sandy or rocky soils and those with high salt content; areas of rapid runoff; arid or semi-arid conditions; and hot areas.

Proper choice of plants and planting seasons can lead to reduction or elimination of irrigation.

How Plants Survive

Plant tolerances of poor conditions are enhanced through their physiological features. The succulent, fleshy leaves, stems and roots of *Opuntia* store water. Waxy, thick, resinous leaf surfaces of balsam apple, *Clusia rosea*, resist sandblasts and moisture loss through transpiration. Sea lavender's, *Tournefortia gnaphalodes*, leaf hairs catch and hold humidity and wind-blown spray.

Christmas berry, *Lycium carolinianum*, a shrub or small tree, has few succulent gray-green leaves, so less water is transpired. This year-round bloomer has dainty lavender flowers that turn into bright red berries. It can be propagated by seed.

Other survival features of plants in arid areas include rapid leaf loss, resulting in semi-dormancy during dry periods and rapid reflusing of new leaves in moist conditions. This is true for West Indian mahogany *Swietenia mahagoni* and gumbolimo *Bursera simaruba*.

In plants whose leaves have less storage capacity or surface protection, long taproots that rapidly

elongate at the seedling stage enable the plant to reach for deep-water.

A fast-developing matting root system allows plants to cope with drying out. Cat's-claw, *Pithecellobium unguis-cati*, so-called because of its many spines, has such a root system. This small tree grows to about 50 feet tall and has pink or yellow puffy aromatic flowers. Its pods twist as they open, exposing ebony seeds and scarlet arils. It can be propagated by seed.

Sea ox-eye daisy, *Borrchia frutescens*, also has an extensive root system. This yellow-flowered plant is easily propagated by cuttings. Some of the most successful beach restoration projects have been done with rooted cuttings. It occurs naturally on dunes, beaches, salt marshes, and low hammocks from south Florida to Texas and Virginia.

Other plants that have matting root systems are some shrubs and trees including wild tamarind, *Lysiloma latisiliquum*, Spanish stopper, *Eugenia foetida* and *Pisonia discolor*; herbs, such as gaillardia, *Gaillardia pulchella*; and grasses, such as sea oats, *Uniola paniculata*.

Many seaside plants are also part of the natural community of the hot, dry pinelands, where survival depends on the same protective devices as are necessary on the shore. Such plants include wax myrtle, *Myrica cerifera*, beach verbena, *Verbena maritima*, Cherokee bean, *Erythrina herbacea*, saw palmetto, *Serenoa repens*, and cabbage palmetto, *Sabal palmetto*.

Tolerance Variations

A species that is lush and large on the mainland of south Florida may live successfully in a reduced, even bonsai form on the Florida Keys, where the soil is poor to nonexistent and salts are high. But tolerance of adverse conditions does not necessarily mean a preference for them.

Occasionally, a feature that is advantageous on the shore may

present problems inland. The extremely succulent leaves and stems of beach inkberry, *Scaevola plumieri*, and sea purslane, *Sesuvium portulacastrum*, and the woolly-leaved sea lavender, *Tournefortia gnaphalodes*, may succumb to fungus when removed from the protection of salt spray and subjected to overhead irrigation. Some, such as sea lavender, may do poorly inland, because coastal areas are a few degrees warmer during winter.

Soil Conditions

Soil conditions may also determine whether or not a plant flourishes away from the coast. Plants accustomed to sandy or rocky shorelines may not do so well in heavy soil. But others, such as sea ox-eye and Christmas berry, flourish in salt marshes and tolerate most soils.

Some herbaceous plants like gaillardia have adapted to these harsh conditions. They often produce seeds that lie dormant for long periods and sprout readily when conditions are right. Gaillardia is aggressive and prolific. It is difficult to keep out of nearby lawns. But it is a beautiful, colorful ground cover that can be mowed and is well worth cultivating if its self-seeding habit is acceptable.

Seaside plants are accustomed to harsh winds and can be successfully used where wind tunnels occur between tall buildings and on balconies.

Clumping plants with strong soil-holding root systems, such as sea oats and other beach grasses, need not be limited to shorelines. They could be used along interstate highways and on berms and slopes.

Ground Covers and Small Shrubs

The following plants can withstand extreme conditions—sandblasts, salt spray, and highly saline soil.

Sea purslane, *Sesuvium portulacastrum*, is a perennial with sand-holding features, as it forms clumps or mats of succulent leaves and small pink flowers. It can be grown from cuttings. It blooms year-round.

Inkberry *Scaevola plumieri*, is a low, sprawling shrub with highly succulent, glossy green leaves. It can be grown from cuttings or seed. Its roots need to be kept very dry, as damping off occurs in large plants. The species found in the trade is not native and is much larger than the native, which only grows to five feet. It occurs naturally along coastal areas of Florida.

One of the best dune stabilizers is beach morning-glory, *Ipomoea pes-caprae*. This trailing vine has thick leaves and large, attractive lavender flowers, which bloom all year. It grows rapidly from single node cuttings or from seed but is most successful as rooted cuttings in small containers.

Beach sunflower, *Helianthus debilis*, is a good ground cover for the beach front, forming dense mounds with small, showy sunflowers in spring and fall. It may need to be trimmed occasionally when planted away from the ocean's buffeting winds and sand. It can be propagated from cuttings.

Wild allamanda, *Urechites lutea*, is commonly found growing in mangrove habitats. It tolerates salt well. This scrambling vine or shrub has bright green leaves and yellow flowers. It can be grown from seed or cuttings and is suitable for selection.

An especially drought-tolerant plant is golden creeper, *Ernodea littoralis littoralis*. It grows prostrate, as does asparagus fern. It has small reddish, pink or white flowers all year. It was given its name for its small golden fruit. It occurs in coastal areas, sandy or rocky soils in Florida. The pineland variety is *E. littoralis angusta*. It has pink or reddish flowers.

Medium Shrubs and Small Trees

Seven-year apple, *Casasia clusiifolia* grows to 10 feet and has many branches. It needs full sun for compact growth. Its glossy green leaves and fragrant, showy white flowers provide interest all year. Although it is slow growing, several nurseries are doing well producing it from seed. The fruit is edible and looks and tastes somewhat like prunes.

Spanish stopper, *Eugenia foetida*, is a small, columnar evergreen tree that grows to 40 feet. Its trunk is only a few inches in caliper, so it can be maintained as a shrub. Redberry stopper, *Eugenia confusa*, is half as tall with glossy leaves. It is a slow grower.

White indigo berry, *Randia aculeata*, grows to 10 feet and has small white flowers, glossy green leaves, and white berries with purple pulp. It can be trimmed and used as a

border plant or hedge. However, its diversity in form and leaf size require selection if used this way. It grows naturally on moist or dry sites in south Florida.

Pigeon plum, *Coccoloba diversifolia*, has a columnar growth habit. Its trunks may be straight or have character and may be single or multiple. It may be planted alone or in groups. It has glossy green leaves and interesting orange bark that peels. It makes a good container tree to 15 feet.

Plant Sources

Most shoreline plants cannot legally be taken from the wild, because they are protecting the coastlines from erosion as well as serving as fish hatcheries. Resist the temptation to remove plants unless that area is slated for immediate development. In this case, material may be stockpiled for replacement after construction or sold for relocation.

Many agencies are developing codes that will mandate using certain percentages of drought-resistant plants in an effort to conserve water. The time is ripe for considering salt- and drought-tolerant plants.