Villa Maria consists of almost an acre of land on Florida Bay, in Tavernier, Florida. I purchased the property in early 1997. The house, built in 1954, had not been inhabited in some time and had fallen into great disrepair. Roots of many surrounding trees were growing up in the toilet bowl and out of each faucet. The grounds were in no better condition, with no design, simply grass and some mature trees, including several diseased coconut trees.

I hired Brown & Crebbin Design Studio, Inc., to help prepare a plan for the property. My idea was to have absolutely no grass on this beachside property and to landscape it with Florida and Caribbean native coastal plants. Also, I wanted a sand dune. Brown & Crebbin came up with a plan to incorporate a beach berm, which has been a great joy. Brown & Crebbin were a great help in initially giving me some terrific ideas with which to get started. Unfortunately, I’ve had to modify much of the plan to accommodate the very harsh bay environment.

From November until mid-April, the wind comes whipping across the property. Sometimes it blows for days on end, with waves pounding against the seawalls and splashing up and over the walls and boulders. From mid-April until November, we have to contend with hurricanes and tropical storms. Twice the water level has risen and has come up 20 feet on the southwestern corner of the property, flooding the area for up to four days at a time. The wind and wave action has been so harsh at times that large boulders (three foot high and wide) have been moved four feet inland.

Overview of the Landscape
The property naturally slopes gently down from the house to the bay and commands a breathtaking 180-degree view of Florida Bay. Tiny mangrove islands are scattered around the bay. The sunset is never lost during the year. The property ends on one side with a cut-in boat basin and on the other end with a built-up seawall. The property sits on a foundation of coral cap rock and therefore many of the plant beds have been built up using either landscape timbers or small coral rock boulders that have been cemented together with white cement. Coral boulders were used to create the beach berm and also garden islands which add points of interest. Loose “blue bitch” granite stones were chosen as the foundation for the driveway and parking areas, as this provides a soft natural look. The rest of the “free” areas of the property are all sand and this has worked beautifully.

The landscape has become extremely efficient. A drip irrigation system with twelve zones has been installed throughout the property. Watering can be controlled and delivered precisely at optimum times and entirely turned off in established areas. Watering is hardly needed; weeds and unwanted grasses seem to have finally been subdued, and the landscape looks great all year.

The Plants
Plants have come from various nurseries located in the Keys and Homestead, Florida, as well as friends and plant hunts around the Keys. Whenever possible, seeds are planted, and now that the garden is established, plants in small container sizes are preferred as these are easier to plant in the cap rock environment. Nick Lawrence, from Keys Bobcat Inc. and CDJ Tropical Landscape Nursery, has helped me immensely over the years to find native plants and bring in the heavy equipment needed to install palms and dig through the limestone ground.

Plantings on the Seawall
I don’t think any of us were prepared for this harsh environment. We all underestimated it. When I first purchased the property, there was a lone bay cedar (Suriana maritima) on the seawall. It looked as though it had been there forever. There was literally nothing else, not even sea purslane (Sesuvium sp.) on any part of the seawall. This should have told me something!

Successful native plantings on the seawall to date include bay cedar (Suriana maritima), seaside heliotrope (Heliotropium curassavicum), sea oats (Uniola paniculata), and sea purslane (Sesuvium portulacaeastrum). Currently there are some remaining non-native scaveola on the seawall which have not been removed only because they are acting as a windbreak for some necklace pods (Sophora tomentosa) which show encouraging signs of adapting to the environment. Sand cordgrass (Spartina bakeri) also has been planted as an experiment and shows encouraging signs that it may adapt. A blue agave (Agave sp.) has been planted at the north end of the seawall to see if it adapts.

Unsuccessful native plantings on the seawall have included beach sunflower (Helianthus debilis), green cocoplum (Chryhopalumus icaco), maiden bush (Savia bahamensis), railroad vine (Ipomoea pes-caprae), seagrape (Coccoloba uvifera), and silver sea oxeay daisy (Borrichia arborescens). They have all been destroyed. Two hurricanes during the past three years and a tropical storm have taken seagrapes and other natives (including a planting of mangroves) that were originally on the outside seawall surrounding the boat basin and deposited them in the boat basin!

Plants in the Boat Basin Area
The inside of the boat basin is surrounded by magnificent mature red and white mangroves (Rhizophora mangle and Laguncularia racemosa), which form a delightful canopy around the basin. Immediately on the outside of the mangrove trees on the south end of the property are Key spider lilies (Hymenocalis latifolia), limber caper (Capparis flexuosa), seagarpe (Coccoloba uvifera), silverbuttonwood (Conocarpus erectus var. serratus), and silver sea oxeay daisy (Borrichia arborescens). On the north point facing the bay, sea oxeay daisy (Borrichia frutescens), sea purslane (Sesuvium portulacaeastrum), and seaside heliotrope (Heliotropium curassavicum) are slowly establishing themselves, but other than some Key spider lilies (Hymenocalis latifolia), the harsh environment takes its toll on that spit of land, in spite of the additional boulders that have been brought in to act as barriers.
Plants on Beach Berm & Surrounding Garden Islands

Fifteen feet in from the bay and the frustration begins to lessen. Plants start to do well and more variety can be added. Surrounding garden islands generally consist of plantings of cocoplum, Key spider lilies, sea grapes, sand cordgrass, and saw palmetto.

The beach berm was built up using coral rock boulders and fill from the new septic tank area, with sand on top of this. The berm is divided into two parts separated by a walkway which takes you from the house to the beach. On the south berm there are six small joewood trees (Jacquinia keyensis) surrounded by blanketflower (Guillardia pulchella), tickseed (Coreopsis leavenworthii), yellowtop (Flaveria linearis), and other native Florida wildflowers. There are also large plantings of golden creeper (Eremodora litoralis). Key spider lilies (Hymenocallis latifolia), saw palmetto (Serenoa repens), sea grapes (Coccoloba uvifera), and sea oats (Uniola paniculata). There are a total of ten Key silver thatch palms (Thrinax morrisii) and a buccaneer palm (Pseudophoenix sargentii) on the south and north berm. On the north berm, the plantings include saw palmetto, golden creeper, Key spider lily, sea oats, and three sea lavenders (Argrostis gnaphalodes). Outside the berm, there are bay cedars, beach sunflower, sand cordgrass, and more sea oats.

Plants on the North Side

Immediately in front of the house on one side is a planting of a buccaneer palm (Pseudophoenix sargentii), Jamaica caper (Capparis cynophallophora), and maiden bush (Savia bahamensis). On the other side is a planting of strongbark (Bourreria ovata).

There are two wild tamarind (Lysiloma latifolia) trees on the north end of the property. Under one, a delightful barbeque area has been established. The roots of the wild tamarind do not allow too many plants to prosper, however, cocoplum (Chrysobalanmus icaco), coontie (Zamia pumila), silver thatch palm (Thrinax morrisii), white indigo berry (Randia aculeata), and wild coffee (Psychotria nervosa), have done well.

Other plants on the north end include Bahama senna (Senna mexicana), bloodberry (Cordia globosa), crabwood (Gymnanthes lucida), inkwood (Exothea paniculata), lancewood (Ocotoe coriacea), locustberry (Byronima lucida), red stopper (Eugenia rhombea), saw palmetto (Serenoa repens), silver thatch palm, Spanish stopper (Eugenia foetida), torchwood (Amyris elemifera), and white lantana (Lantana involucrata). Sabal palms (sabal palmetto) were brought in and surrounded by bay cedars (Suriana marittima), red tip cocoplum (Chrysobalanmus icaco "Red Tip"), and silver sea oxeeye daisy (Borrichia arborescens). Thatch palms have been used as a windbreak for the orchard house.

Plants on the East Side

This area is partly sheltered from the environment by the house and can accommodate those natives which are less salt and wind tolerant. There are several established gumbo limbo (Bursera simaruba) trees along the property line as well as a wild tamarind (Lysiloma latifolia). A hammock has been established on about 1/3 of the area. Other plants include Bahama senna (Senna mexicana), beautyberry (Callicarpa americana), cinnamon barba (Canella winterana), cocoplum (Chrysobalanmus icaco), crabwood (Gymnanthes lucida), inkwood (Exothea paniculata), lancewood (Ocotoe coriacea), locustberry (Byronima lucida), myrsine (Ardisia escallonioiides), pigeon plum (Coccoloba diversifolia), pitch apple (Clusia rosea), red stopper (Eugenia rhombea), saffron plum (Sideroxylon celastrinum), sati leaf (Chrysohyllum oliviforme), Simpson stopper (Myrcianthes fragrans—not too successful here), snowberry (Chicooaca alba), strongbark (Bourreria ovata), torchwood (Amyris elemifera), wax myrtle (Myrica cerifera), white indigo berry (Randia aculeata), and wild coffee (Psychotria nervosa). Dotted horsemint (Monarda punctata) has recently been introduced.

Plants on the South Side

The range of plants here is very interesting because this garden stretches from the bay right up to the front gate! At the bay end we start with Christmas berry, saltbush, seagrapes, sea oxeeye daisy, seven year apple, and white mangroves. As we travel further east and upland, we have Bahama senna (Senna mexicana), beautyberry (Callicarpa americana), bloolly (Guapina discolor), Jamaica caper (Capparis cynophallophora), and Jamaica Dogwood (Piscida piscipula). We continue with cinnamon bark (Canella winterana), cinnertoc (Acacia chiromphyla), coffee cubliruna (Colubrina arborescens), darling plum (Reynosia septentrionalis), fiddlewood (Citharexylum fruticosum), firebush (Hamelia patens), gumbo limbo (Bursera simaruba), locustberry (Byronima lucida), mastic (Sideroxylon foetidissimum), milkbark (Drypetes diversifolia), pearlberry (Vallesia antillana), pigeon plum (Coccoloba diversifolia), pitch apple (Clusia rosea), red stopper (Eugenia rhombea), rougeberry (Rivina humilis), sati leaf (Chrysohyllum oliviforme), silver buttonwood (Conocarpus erectus var. sericera), silver thatch palm (Thrinax morrisii), Simpson stopper (Myrcianthes fragrans), soldierwood (Colubrina elliptica), Spanish stopper (Eugenia foetida), torchwood (Amyris elemifera), varnish leaf (Dodonaea viscosa), wax myrtle (Myrica cerifera), yellow root (Morinda royoc), white lantana (Lantana involucrata). Yellow root has a mind of its own and has to be kept in check constantly. A separately defined hammock area is part of the south side landscape.

Exotic Plants

There are still some exotics on the property, but plants are to remove many of these as natives are found to replace them. Bougainvillea and many of the non-natives are used for color but kept in pots and not allowed to grow directly on the property. Blue daze, crown of thorns, and plumbago have taken the harsh environment very well, are easily maintained, and add color. Pineapple tops from our local grocery store have been planted here and there for the fun of it. The upper Keys used to have many pineapple plantations. Our pineapples are doing well. Coconuts along the seawall struggle. There seems to be an imaginary line that runs along Villa Maria and the adjacent properties. West of this line the coconuts struggle or die. East of the line they do very well. At Villa Maria, there is only a 15 foot difference from this line to the seawall, but it makes a huge difference.

Plants that Haven’t Behaved

It may come as a surprise that some natives have proved problematic. Bay bean (Canavalia rosea) and railroad vine (Ipomoea pes-caprae) were introduced but proved to be far too aggressive and were eventually culled. Railroad vine still pops up all over the place. Necklace (Sophora tomentosa) in large plantings attracted quantities of white flies. We have moved these plants closer to the sea wall to see if that will help. Sea oats (Uniola paniculata) have to be tamed each year as they have a tendency to run over everything in their path, as does the silver sea oxeeye daisy (Borrichia arborescens). The green sea oxeeye daisy (Borrichia frutescens) is much tamer. Yellowroot (Morinda royoc) grows everywhere!
Look, mom, no grass! A splendid mix of indigenous elements—sand, coral rock, and native plants—makes for a landscape that is both beautiful and sustainable. Mature trees on the property include coconut palms (not native), wild tamarind, and mangroves (below, center) that are 30 feet high. Since buying the property in 1997, Patricia Mull has planted over 100 native species.

A Very Special Native

After years of searching, I finally found two specimens of the endangered sea lavender (Argusia gnaphalodes) at our local native nursery, Florida Keys Native Nursery. As precious stock for the future, it took me forever to talk Mike Pravata, the owner, into giving me one plant. I really had to bribe him with two truckloads of inkberry (Scaevola plumieri) cuttings. I planted the sea lavender on the beach berm and after six short months, the plant had grown to be about three feet wide by three feet high, and was rapidly gaining while the sister plant at the nursery was still one foot and struggling. Mike gave up and gave me the second plant. This one has also jumped out of its pot and taken off for the bay as fast as it can. Since then, I have managed to acquire one more sea lavender and it too has gone crazy. These plants definitely need the salt spray and love it here.

ABOUT THE AUTHOR: Patricia Mull was born with a green thumb in Barbados, where her childhood home is now a botanical garden. Patricia’s love of plants is deep-rooted—her mother “won every gold medal there was in the Chelsea Flower Show.” Patricia is happy to report that Villa Maria is serving as inspiration throughout the Keys, with garden clubs and other groups asking for talks and tours. In addition to Villa Maria, Patricia owns Mull & Associates, conchcpa.com, certified public accountants and financial planners, in Tavernier.

EDITOR’S NOTE: Know of a show-stopper native landscape we should feature? Please contact the editor, Cameron Donaldson. See page 3 for contact info.