The pleasures.

The Florida Native Plant Society promotes the advantages of landscaping with native plants. We stress water economy of native species. We talk about the cold hardiness of certain species and other factors that make using endemic plants desirable in Florida.

Certainly these are valid reasons, but I find myself appreciating what I call the “pleasure factor” of living among an integrated community of natives of the tropical hammock type.

I live in south Florida on a relatively small lot in a somewhat crowded development. For the last twelve years I've been experimenting with native plants. The result has evolved into a dense tropical hammock surrounding a contoured fish pond. A small clearing of open ground extends from my back porch. My back yard now represents the extreme in a native plant infatuation spectrum. On any lazy Saturday afternoon you might find me sitting or working in my clearing, insulated from my neighbors and the rest of the outside world by a wall of vegetation.

The drowsy buzz of bees and cicadas help to cover the already muted street noises. Zebra and yellow sulphur butterflies gently flit from firebush to wild coffee. In the dappled hammock shade, small song birds chirrup and fly about. An old friend of mine, a little Green-backed Heron, quietly wades along the margin of my pool trying to catch the minnows while keeping a wary eye on my cats. Several large slider turtles sun themselves on a log in the pond. The cypress tree behind the log has a bromeliad growing on one of the lower branches, and this air plant has produced a brilliant red spike in preparation for blooming. An afternoon breeze sloughs through the top of a tall slash pine, through jamaica dogwoods and gumbo-limbos, bringing forth the sweet pungent scent of a flowering tropical native plant. Vivid purple morning glory flowers intertwine amidst vines climbing the slats overhanging the porch. A blue sky with shoals of fluffy white clouds glimpsed through swaying branches completes the scene.

Rather than single entities complete unto themselves, my plants cluster together and create a complementary whole, attracting animals who are used to associating with them. A re-created system such as mine, which has evolved through conscious planning and unconscious circumstance creates at any time — day or night — an integrated and pleasurable ambience.

How to begin.

There are no firm and fixed rules in natural landscaping. Like any other activity, the use of native plants operates in the realm of the possible — some things being more possible than others. The successful raising of plants — any plants — is highly individual. If some notion on how to grow or arrange plants motivates you with sufficient force, don't be talked out of it. You may prove the “experts” wrong.

Any landscaping strategy can be divided into three basic stages:

1. Taking stock of your situation (i.e., learning and planning).
2. Getting to work (planting and arranging).
3. Maintaining and enhancing.

Even if you are well into the second or third stage, you would do well to pause and take stock. Ask yourself a series of questions. The first should concern goals: what do you want to achieve? The ultimate goal of your labors may range from a complete natural system to a series of areas wholly or partially native, or certain small design elements incorporating native plants. Specific goals may include attracting animals, birds, and butterflies, enhancing a view, creating a wind-break, or merely planting something that won't dry up or get cold-burnt. A good method of clarifying these goals and ideas is to formally list them and to discuss them with a spouse or other interested party.

The next step in taking stock involves inventorying the resources with which you are starting. This encompasses not only the property you own, its size, and what is presently growing there, but also geographical location, topography, soil type, and...
relationships to surrounding structures and formations.

Of equal importance is the condition of the land: is it an uncleared area with many surrounding natives, an altered area with a few surviving plants, or a cleared or filled location with little or nothing left? Pre-existent vegetation can provide desirable nuclei for subsequent landscaping. In my own situation, I had a totally cleared and filled lot with one rather sick-looking slash pine that had been run into several times by heavy equip-
I. Getting to work.

Now we move from planning to doing. We have taken a circuitous journey preparing for the turning of the first shovelful of dirt and the planting of the first native plant.

If you are dealing with an area that has existing native plants, you have by now made the decision on which to save and which to eliminate. It is important to take special care with these plants you plan to save. You must avoid damaging their root systems and trunks, particularly in the case of pines. If your house is being constructed, you must protect your "keepers" from over-enthusiastic contractors and their workers. Erect a substantial fence or barricade around discrete plants or areas you plan to save, and don't remove any plants from thickets until the work force has packed up and left. When you do begin removing or adding plants to a natural area, be careful of overwatering, particularly if the area is relict pineland or xeric scrub vegetation.

One effect I find pleasant is the creative curving of driveways on a large lot. The best plant features can probably be saved with a little forethought, retaining privacy and tranquility. Compatibility and harmony should be the two indispensable concepts, whether an area is being altered or an entirely new grouping is being created.

Keep in mind, too, the law of natural succession. Simply stated, this law postulates a dynamic evolution in native plant communities through time. The nature and composition of these plant communities, subject to the interplay of certain forces, change. To some extent this change can be described and predicted.

Contouring the land.

However, before anything is actually planted, thought should be given to topography. Relief, whether it be high or low, gives variety and interest. The lack of natural relief in most of Florida does not mean it is wrong to create some. Many hammock plants require a little elevation to get them out of the water during the wet season. Conversely, low areas are necessary to get such plants as cypress, swamp maples, red bay, sweet bay, etc., to flourish. In fact, it might be possible to dig out a place to create a low area, and use the spoil to create a high area.

Another somewhat easier method is to purchase fill by the dump truck load. I purchased ten cubic yards of fill to create a ridge and a knoll in my back yard. The knoll is three feet high and is connected to the ridge which forms a backdrop for my pond (which also produced fill). On this high ground, I have planted stoppers, mastic, pigeon plum, lancewood, Florida privet, snowberry, gumbo-limbo, wild lime, and a particularly fine lignum vitae of which I am quite proud.

Other landscape features to consider are limestone boulders. Many of these will invariably arrive in sand fill or be formed in heaps around the neighborhood where they were piled during clearing operations. These "stones" can range from breadbasket size to monoliths large enough to warm the heart of a druid building Stonehenge. Many of these stones will contain circular solution holes, and several people have set up large slabs of rock on edge in their yards displaying these holes. I was fortunate in owning a forklift for my business, which I used one afternoon to move five large rocks, ranging in weight from 1/4 to 3/4 of a ton, to various parts of my house lot. These stones became the centerpieces of landscaped "islands" of plants. Most, after 11 years, have been obscured in part by encompassing vegetation.

Other uses for boulders can be escarpments formed by placing the stones in an irregular row side by side and filling up to them in a slope. Ferns and bryophytic mosses can be established on the faces and in the cracks.

One can also use flattened slabs of limestone to create paving for a walkway, something I have done for 40 to 50 feet in my back yard. A shallow trench should be dug 8 to 10 inches deep in the shape of the walk. The stones should be carefully arranged and fitted to form a tight, pleasing pattern — flat side up, of course. Then sand should be carefully sprinkled over the stones and gently washed into the cracks with a garden hose. Walls, steps, and other creations can be done in native limestone. Limits are imposed only by your imagination and ability to move the stones into place.

The proportion of a contoured area to the rest of the total property are crucial to successful landscaping. When you are building an elevation, increase your estimates by at least a quarter to a third to allow for subsidence, sluffing, and stabilization.

Our soil is mostly sand mixed with varying percentages of organic matter. Subsidence occurs when the organic matter decomposes and various elements become gaseous and disperse. Peats and mucks that are allowed to dry out exhibit this tendency to lessen in volume through subsidence.

Sluffing is a sort of leveling-out. Sand is a "laid back" substance which lacks the rigidity of clays and therefore "goes with the flow," seeking the most absolute state of rest. All elevations done in sand, unless terracing in stone is used, will have gentle slopes in time.

Stabilization means compaction, and the more compact a substance becomes the smaller the area it takes up. It's not uncommon to see various attempts at creating an elevation such as a rock garden become a pimple-like protrubrence, sadly out of size and sync with the rest of the landscaping.

Shape is another important consideration in relief. Nature abhors a straight line, and this truism is central in landscaping with native plants. Symmetry and the use of curves is recommended. When you are creating features, both topographic and vegetative, stop frequently, walk a distance away, and view your efforts from different vantages and perspectives. This detachment will aid in the creation of harmony.

Trees — the canopy.

The next step after achieving the proper topographic setting should probably be the planting of several strategic canopy trees. These trees
are the crown of any effort and will directly influence any subsequent understory vegetation. Therefore, choose and position these with care.

Certain plants are the pioneers or harbingers of evolving plant associations. Canopy (upper story) plants, due to their size and height, seem to play the greatest role in plant succession. I would suggest, particularly to those people who are starting from scratch, that certain trees of six feet or better in height be planted, at least those in the vanguard.

The reasons for this are: larger plants tend to be more cold tolerant than smaller specimens; certain species show accelerated growth when five feet or larger and develop faster; larger plants give a better idea of how a landscaped area will ultimately appear; larger trees give better protection to mid and understory plants and will not be overwhelmed by them.

Your preliminary research has probably given you some idea of what trees you would like. Two of my favorites are oaks (laurel and live) and the gumbo-limbo.

Oaks are an excellent choice for a number of reasons. They are cold tolerant and quick growing (contrary to popular belief) if watered and fertilized. They provide shade and a good habitat for birds. The live oak is an excellent host for orchids, bromeliads, and other epiphytes. Oaks are strong, endure storms, have muscular roots that can crack concrete slabs or clog drainfields. The mastic can be cold sensitive and has a blooming period of several weeks during with it releases a powerful penetrating smell — and so on.

Cold sensitivity is the most frequent problem, and those people in the hinterland might do well to investigate the stock of central and northern Florida native plant nurseries.

Assuming the choices for canopy trees have been made, positioning is of next importance. Allowance must be made for future growth and for ultimate appearance. In the wild, most canopy trees are found growing together in groups or associations. Frequently, these associations are of many individuals tightly packed together, all fighting for the same space and struggling toward the light.

In landscaping, a modified version of groupings can be used to lessen competition and provide a more harmonious effect. This concept, taking into consideration any additional understory vegetation, I call the "island effect". I have employed it in

Imagine a driveway lined with oak trees. Imagine your children or your children’s children looking with awe on an oak great-grandaddy or mom planted.

The gumbo-limbo is another of my favorites. It is a striking, tropical-looking tree renowned in lore and story. It is a hallmark tree of tropical hammocks and ancient Indian sites. The name may derive from “gum-elemi”, presumably Ashanti from West Indian dialects. Its uses range from a living fence post to glue, headache remedy, blood pressure medicine, a source for a type of copal (balsa-like wood for net floats), and many others.

One of the good things about this tree is that you can select the size and shape of it very easily, since a branch can be broken off and 18 to 24 inches of it planted with an almost 100% chance of its living and rapidly growing.

There are two factors affecting success with gumbo-limbo — cold, and water. Gumbo-limbs are cold sensitive. If you live away from the coast, you may overcome this by planting a large branch in a sheltered location in late spring or early summer. Gumbo-limbs also have to be planted in a moderately elevated and drained situation. Low wet areas cause them to rot and die.

If you feel you stand a good chance of overcoming the above limitations, then select a 6 to 8 foot branch, removing all lateral limbs 4 to 5 feet up from the base. Prune and shape the remaining limbs to match the configuration you have in mind for the planted tree. Plant the basal end 18 to 24 inches deep and at an angle to improve appearance. Water occasionally (not too much!) use plenty of fertilizer 12 inches out from the trunk to speed growth. I have a specimen that started its career as a 4-inch diameter, 6-foot long branch section. In 11 years it has become a 16-inch diameter, 35-foot high tree.

For a dramatic effect plant a “grove” of 4 to 6 branches together. Properly spaced, they are a pleasing complement to most anything else.

Besides my two favorites, there are a score of other possibilities, among which are lysisloma, mastic, Jamaica dogwood, mulberry, soapberry, short-leafed fig etc.

Many of these trees have certain drawbacks. Any fig can send out muscular roots that can crack concrete slabs or clog drainfields. Cold sensitive and has a blooming period of several weeks during with it releases a powerful penetrating smell — and so on.

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my front yard in two locales. The larger of the two islands has developed over the years into a micro-environment consisting of four species of canopy trees, three mid-story bushes, three or four lower to mid-story plants, and 20 or more species of understory plants, some native, some exotic. (Even the purists among us acknowledge a sneaking appreciation of certain non-natives. How much or how little depends on the esthetic sensibilities of the individual user. It’s not “wrong” to grow non-natives, but it’s certainly very “right” to use native species.)

Trees planted in groups frequently will be taller, straighter, and more slender, with a more restricted or constrained foliage. In growing these island or coppice features you will be in essence creating small hammocks whose patches of shade provide a restful change from intense sunlit areas.

Shrubs and small plants.

Now your attention might focus on mid-story plants.

Often, the difference between a “mid-story” and “canopy” plant is merely the difference in favorable conditions such as space and nutrition. Pigeon plum and sea grape, for example, can be maintained as fairly small and restrained bushes through judicious pruning, or allowed to grow into 20 foot tall trees. Other tropical hardwoods are either slow growing or slightly stunted here at the northern interface of the tropics.

Some of the mid-story plants I recommend are the Eugenias (or stoppers), Ilex (or hollies), myrsine, red mulberry, black ironwood, lancewood, maidenbush, coral bean, cocoplum, crab wood, lignum vitae, wild indigo, and the various native palms (not the least of which is the saw palmetto, including the silver variety from the east coast). There are innumerable other mid-story plants of equal worth.

Watering (or its lack), fertilizing (or its lack), the presence or absence of much sunlight, position in relation to other plants, and exposure to cold all determine how robust mid-story plants can be. One often overlooked factor is soil condition — acid or alkaline.

Mid-story plants provide a “layered” look to landscaping, adding interest and complexity. Perhaps the best effect to strive for is pleasing contrast rather than a jumble. Whereas it behooves someone to plant the canopy trees initially as big as possible, the mid-story plants should perhaps be planted small and allowed to grow into their situation.

Mid-story and smaller plants, native and otherwise, are of a size where grass can affect, in a negative way, their growth and survival. Most (although not all) natives of small size cannot tolerate grass growing in lawn-like profusion around their roots and up to the base of their stems or trunks. Grass growing too close can stifle them and rob nutrients. Their frequent reaction is to do poorly and eventually die.

Mulched areas or beds should be provided and maintained, as in their natural situation on the floors of forests and hammocks where shade, leaf litter, and soil conditions discourage grass. An exception to this rule are certain shrubs (frequently from marshy or low environments) such as wax myrtle, which have adjusted to a weedy grassland environment.

The same consideration as to cold-sensitivity and wet or dry conditions should be given to the choice of mid-story plants. They can survive cold better than the canopy trees because they are sheltered by the trees from frost settling down. I used to run around and cover bushes and small

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plants on cold nights, but I found I was better off bringing in the few things I valued that were in containers and leaving the rest outside to take their chances. My loss rate was about the same. However, I maintain a dense canopy growth, and would urge you to plant frost-resistant, dense canopy trees for at least part of your projects.

A few understory plants prefer intense shade and high humidity. Ferns are a good example, although there are exceptions, such as leather fern which enjoys direct light. However, all ferns seem to require dampness, either constant or intermittent. Resurrection fern is an extreme example of a fern able to get by on intermittent dampness. It is an epiphyte that spends much of its time looking dead and shriveled, becoming intensely green and luxuriant during periods of rain and high humidity.

Most understory plants require less shade and more direct sunlight for a least part of a day. Certain succulent marsh plants have to grow nearly year-long in bog-like surroundings. These would require a pond border or even a non-porous container.

Growing plants in containers with varying drainage and dampness is an interesting undertaking itself — one where a person could create a highly specialized micro-environment to grow a plant whose needs are fairly demanding such as rosemary, grown in well-drained "sugar" sand.

Certain plants such as cactus require well-drained, almost arid soil with direct sunlight. Our native cacti have adapted to greater degrees of shade and water than their western desert relatives. However, during the summer months, these will rot and die without high, well-drained areas.

Perhaps the best way to determine the specific requirements of a certain native understory is to visit specimens of it in the wild. Note the situation it prefers: high ground/low ground; well-drained/marshy; shady/sunny; soil type; shelter, etc. It is important to note the plant association it is found in and how the plant in question interacts with neighboring plants.

[John is not yet finished. The next issue of The Palmetto will continue his articles, originally published as a series in "Zamia", the newsletter of the Naples Chapter of FNPS, along with Elizabeth Smith's drawings.]