

1417 Sadler Road, #187, Fernandina Beach, FL 32034

Fundamental Input on Tree Planting Program

In an era when we face hazards of sea level rise, flooding and climate change, sufficient expert tree planting is critical to the future of both Amelia Island and the rest of Nassau County.

Planting plans should be based on the following:

- **Periodic inventories of our trees and understories.** It is important to have accurate data to serve as a basis for planting. (Despite this, we do not recommend that the initiation of planting be deferred until formal inventories can be contracted and completed, as there are many places where the need for planting is quite obvious.)
- Regular periodic assessment of our trees and understory. Succession planning needs to be
 integrated into this process and should constitute part of the data planting decisions are based
 on.
- Analysis of the specific ecological niche under consideration to serve as a basis for choices of trees and understory. Amelia Island has a range of ecological niches, all of which have a range of associated native species of trees and understory. Look around the area to see what native plants perform well in that area, but make sure we are not losing species that have been less popular in recent years, e.g. Bumelia (Buckthorn) and Beautyberry. It is important that we match the plant with an appropriate context.
- Analysis of the needs of our flora and fauna in consideration of changes induced by sea level rise, flooding and climate change.
- Analysis of human needs in relation to the services provided by trees and understory in consideration of changes induced by sea level rise, flooding and climate change.

Fundamental principles:

- New plantings should include **native species only**.
- Trees should be planted in groups wherever possible because they are naturally mutually dependent and supportive and need that mutual support to survive storms.
- Shrubs and other understory plants that typically thrive in this type of ecosystem with the trees under consideration should be planted and mulched together with the trees, as a mutually supportive community. Understory plants provide trees with essential moisture and soil nutrients.
- Native shade trees should be planted wherever possible because of their strong benefits in temperature moderation, stormwater processing, etc.
- Sabal palms are native species and can be utilized, particularly in areas not appropriate for shade trees. It is important, however, to remember that palms do not provide the temperature moderation, stormwater processing, etc. that shade trees provide.
- Wax Myrtle and other nitrogen fixers (or nutrient packets developed by experts) can be utilized to gradually adapt soil so that it will support a broader array of trees.



• Tree replacement must be in the general area where tree removal occurred. Therefore, tree replacement on Amelia Island must stay on Amelia Island.

Associated Chronic Problems:

In addition to tree planting, two chronic and severe problems need to be addressed, either in association with this program or as separate areas of responsibility of the NC-AI Tree Protection Commission:

- 1. Extensive swaths of our trees are being killed by vines, some invasive and some native. We must have vine management. Vines have taken control because we have removed the natural structure of what was previously a forested area, introducing the level of light the vines thrive on. On a built-out barrier island, this must be a manual process and must be repeated every year or two. (Prescribed burns cannot be used.) Furthermore, vine management must not mean spraying or extensive painting with herbicides. According to Danny Lippi, Master Arborist, some of the new herbicides have not been adequately tested and have been documented to kill trees and shrubs (this has happened multiple times in the Plantation Point subdivision). We also do not want to put more herbicides, pesticides, etc. into our groundwater, our creeks and rivers or the aquifer.
- 2. The utility companies have destroyed the trees along A1A and in many parts of Fernandina Beach. These areas are now horribly ugly, which is detrimental to the "sense of place" of the island, to the tourist industry the County depends on and to our quality of life. We suspect that thorough research would demonstrate that this damage actually creates greater expenditures than it saves and causes greater tree damage than storms. The County MUST negotiate with FDOT and with relevant utility companies. Then, these areas should be targeted for succession planning and planting.

Initial locations:

- ROWs along canopy roads, all state and county roads (major roads to smaller, less obvious ones):
 - Vine removal (not using herbicide!!)
 - o removal of dead trees
 - conduct succession planning
 - o plant native shade trees appropriate to the ecological niche
- Dee Dee Bartels boat ramp
- The curve on Simmons Rd., to be landscaped to integrate with the pollinator garden and maritime hammock context.
- American Beach Community Center
- Solicit recommendations from public.
- Plant on private property if property owners commit to care for trees. Amelia Island has seen rapid and extensive tree loss on private property from one end of the island to the other as a result of: 1) construction of large homes on our small lots, leaving little or no room for trees, and 2) the recent push toward denser development like townhomes in response to the fact that most of the island is built out.
- Maintain accessible records on the County Appraiser's site (or other appropriate software) for the arborist/urban forester, consultants, planners and the public.

