



## 'Naturalizing' Means Restoring Ecosystems, Not Going Native

BY TOM STONE

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The Audubon Cooperative Sanctuary Program, GCSAA, and the USGA have ignited an interest in naturalizing non-play areas on golf courses. The reasons vary greatly from environmental stewardship to cost reductions and everything in between.

But what might be right for the front nine may be entirely wrong for the back. Ensuring success in this process may be as simple as letting nature tell you what to do.

In naturalizing areas of the golf course, the long-term goal should be to develop a self-sustaining habitat which will survive with minimal outside assistance after it is established. Planting the wrong plant in the wrong area will probably lead to less than favorable results, requiring additional water, fertilizer, chemicals and labor. A little research before you plant will pay off greatly.

Most golf courses cannot be totally restored to their original native environment, but they can be naturalized to what they have become! The construction process moves soils around, changes elevations affecting water flow and drainage, and generally alters the original ecosystem. For instance, a wetland forest which has been drained, probably will not survive as it had naturally, and should be naturalized according to its new environmental features.

There are 17 different and distinct natural ecosystems throughout Florida. Some of the more familiar ones are coastal uplands, fresh water marshes, pine flatwoods, wetland forests and mesic-hardwood forests. Each ecosystem has natural plant communities affected by site conditions like soil type, water availability and climate. These plant communities are made up of trees, understory trees, shrubs, vines



*Naturalizing out-of-play areas like this tee slope can save you labor hours. It is important to choose the right plant material that will adapt and thrive in the new conditions. Photo by Tom Stone.*

and groundcovers, wildflowers, and aquatics.

Naturalizing the golf course is more than just planting some native plants. The following steps will allow this to be more successful:

1. Identify wildlife species whose habitat you are trying to enhance. What specific features are required for them: nesting areas, food sources, shelter, cavities, etc. Encompass their needs into your overall plan.

2. Identify the areas to be naturalized. Use a map of the individual hole or the whole golf course to mark out the areas to be considered. Consider corridors for wildlife to move within the course.

3. Determine how naturalizing an area will affect playability of the golf course. Will it slow down play or make the hole too difficult? Trees may be unacceptable because they close off a dogleg across water but native grasses may have a place in these areas.

4. Classify the areas being considered. Determine what type of ecosystem would occur in these areas naturally. Do water levels fluctuate, does this area stay flooded for months at a time, is this area well drained after a 4-inch rain?

5. Determine what types of inva-

sive plants or trees are already located in these areas. Implement a plan to eradicate or remove these species prior to naturalization.

6. Develop a plant palette of species which will survive naturally in these specific areas. You wouldn't expect a bald cypress to live on top of a sand hill or a pine tree to survive submerged for three to five months, so put the right plant in the right place.

7. Plant, fertilize, irrigate and use pre-emergent herbicides for the first year or two to allow for a successful establishment, then turn off the water, eliminate the fertilizer, and let nature do the rest.

The end result will be the successful restoration of ecosystems and habitat within the golf course.

The golfing experience will be greatly enhanced, allowing golfers to experience a more natural environment and see wildlife which they may not see anywhere else

Besides improving habitat for wildlife, naturalizing non-play areas of the golf course will reduce expenses for irrigation, fertilizer, herbicides/pesticides, and labor to maintain these areas.