Permaculture
Part I

by Andy Karpinski

This is Part I of a three part series on permaculture and native plants in the urban landscape. Part I covers the basic concepts of permaculture. Part II will focus on permaculture in a native plant landscape. Part III will cover permaculture and natives in a food-producing yard.

I decided over a decade ago to get rid of the turf grass in my yard. I wanted whatever replaced my grass to be useful so my yard would “earn its keep.” Examples of functions I consider useful are:

- Privacy
- Food production
- Windbreaks to help reduce energy use and for storm protection
- Shade, again to reduce energy use

I would also like to maximize environmental benefits, such as:

- No need for fertilizers or other chemicals
- Little or no supplemental watering once established
- Wildlife friendly

I would prefer that the yard requires minimal maintenance, but I would accept a little extra work if the plants were useful, particularly if they produce food.

When I started telling others what I was doing, many people said that it sounded like I was doing a “permaculture” yard. I had heard of permaculture before, but didn’t really know what it was. So I figured that I had better learn more about permaculture.

An Australian, Bill Mollison, came up with the concept in the late 1950s and 1960s. Mollison noticed how nature manages to take care of itself and provide for the needs of the plants and animals within its ecosystems for thousands of years with no help from man. He developed a set of principles and guidelines [1] to allow people to design useful systems which mimic these natural self-sustaining ecosystems.

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PRESIDENT’S MESSAGE

Share the Wealth!

One of the best things about taking part in Chapter activities is the opportunity to interact with other members and learn from them. It’s often hard to absorb and retain knowledge found in a book or on the internet, but when you see something in nature firsthand and hear an interesting tidbit about it from a friend, you are much more likely to hold on to the information. I constantly learn new things from Pinellas Chapter members... They are a valuable resource!

Recently Jane Williams and I were in Fort Myers at Six Mile Cypress Slough and were chatting with a “snowbird” visitor from Maine. She was an avid and well-traveled birder who seemed to know a fair amount about our natural history. But she had not always been impressed by Florida’s outdoors. At first, she said, she found it pretty boring, thought there was “nothing to see” when she went on a hike. But then she went on a few nature walks with Al Squires and Denny Girard, members of the Serenoa FNPS chapter who regularly lead hikes for Sarasota County as volunteers. She said that she learned a tremendous amount from them, and that the more she learned, the more interesting and enjoyable visiting Florida parks and preserves became.

During an interview for an oral history project [1], Myakka River State Park ranger Paula Benshoff told this story: “One time I had a group that I took out to the prairie, and the prairie is really quite desolate at times because it’s hot and it’s summer, you sweat, it’s flooded. You don’t ever see wildlife because it stays hidden during the day. So it has a special beauty that a lot of people don’t see. So we went and we talked about fire and we talked about wildflowers and this one person said to me, ‘You know when we went out, the prairie was ugly, and when we got back, it is one of the most beautiful things that I’ve ever seen. It is like I saw it through your eyes, and all of the sudden it was a completely different place.’”

There are a lot of people here who really don’t understand Florida’s natural history, even folks who have lived here for most of their lives. If they knew a bit more about it, perhaps they’d appreciate it more, find it more exciting and invigorating, be more protective of it. So I challenge all of you to share with your family, friends, and neighbors the knowledge that you have acquired about our beautiful, complicated and unique state. Perhaps, like the Maine birder and the Myakka Park visitor, they will come to love and enjoy Florida’s natural places more as their understanding of them grows. Invite them to a local park and tell them about the native plants and wildlife you see. Share your passion, and see what blossoms!

Jan

[1] Listen and watch the slideshow http://www.sarasota.wateratlas.usf.edu/history/oralhistory.aspx#paula-benshoff

Upcoming Programs

Most member meetings are held at 7 pm on the first Wednesday of the month at Pinellas County Extension, 12520 Ulmerton Road, Largo, Florida. These events are organized by the Pinellas Chapter of the Florida Native Plant Society -- free and open to the public. Complimentary refreshments.

3 April 2013 at 7 pm

Mark Deyrup on Scrub Ecology

Mark Deyrup, a senior researcher at Archbold Biological Station, will speak about some of the unique plants, the wildlife that depend on them, and about recent discoveries by the scientists at Archbold. The Lake Wales Ridge is an ancient sandy ridge in south-central Florida and is one of the state’s most fascinating places.

1 May 2013 at 7 pm

Orchids and Epiphytes

James Stevenson, a naturalist for UF/IFAS Pinellas County Extension, will speak about the orchids and epiphytes at Brooker Creek Preserve.

Spring Native Plant Festival
Saturday April 13

Wilcox Nursery and Landscape, 12501 Indian Rocks Road, Largo, Florida 33774

9:00 am - 4:00 pm Come browse the beautiful selection of Florida native plants and spring wildflowers. Members of the Florida Native Plant Society will be on hand to assist you in selecting the perfect plants for your landscape needs. Arts and crafts vendors, native orchids and pond demonstrations will also be available.

The following free seminars will be held:

• 9:00 am Natives for your shady yard
• 10:30 am Tips for maintaining your native landscape
• 12:00 pm Plants to attract bees, butterflies and other pollinators
• 1:30 pm Colorful natives for every season

Become a new member of FNPS at the Festival and receive a free native plant book in addition to a 10% discount off purchases at Wilcox for the next twelve months!

11 May 2013

Hammock Park, Dunedin

Invasive plant removal work day at Hammock Park, Dunedin, co-sponsored by Friends of the Hammock. Check our website calendar for an update: http://pinellas.fnpschapters.org/index.php?id=calendar
A Visit to Wolf Creek Trout Lily Preserve

by Nancy Bickner and Bunny Worth

It's a five hour drive to Cairo, Georgia, but the opportunity to see "the highest concentration of trout lilies known anywhere" couldn't be passed up. Since dimpled trout lilies (Erythronium umbilicatum) only bloom in February, and there was a botanist tour scheduled for Tuesday, February 5th at Wolf Creek Trout Lily Preserve, this was our chance. The drive up US 19 was beautiful with red maple, pink redbud, yellow Carolina jessamine, and white Walters viburnum.

The Wolf Creek Preserve website indicated the dimpled trout lilies bloom only in the afternoon of sunny days. We checked the weather reports every 10 minutes that evening in our motel. The forecast was for clouds and rain, and sure enough we woke to rain. While waiting for afternoon, we enjoyed the shops and antique stores of Thomasville, scanning the sky for a break in the clouds. Around 11 am the rain stopped and we headed for the preserve. The drive was all southern Georgia, with blooming chickasaw plum and giant old pecan trees.

The preserve is on Wolf Creek Road just off US Highway 84. Be alert for an opening in the brush, leading to a place where you can park. A mailbox contains a sign-in sheet and a sheet for volunteers to help remove invasive plants.

We waited for the botanist but when she didn't show we figured the tour must have been cancelled because of the weather. The sky was overcast but it wasn't raining so we headed into the woods. The trail led down the hill and, right away, we were kneeling to take photos of the deep maroon spotted trilliums. Heading on down the path, we saw bright yellow and green carpeting the ground under the trees. In spite of the earlier rain, in spite of the clouds still blocking the sun, there were millions of little yellow trout lilies blanketing the slope everywhere we looked. It was the most amazing sight!

Farther along, we walked through stands of bamboo and inch plant and began to understand why they need help with invasive plants. Up the far side of the slope more spotted trilliums popped up from the forest floor. Soon we were back in the midst of the spectacular trout lily field. At the top of the slope, we stood in awe of the yellow and green stretching out below us.

If you have a few days to spare next February, and an agreeable traveling partner or two, this trip is well worth the effort. There is a wonderful history of the preserve on the preserve website.

http://www.wolfcreektroutlilypreserve.org/wolfcreek/History.html
Permaculture Part I
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Permaculture started as a contraction of “permanent agriculture.” It quickly was expanded to stand for “permanent culture,” as many of its principles and practices can be applied to all aspects of culture, not just agriculture, to help make our lives more sustainable [2]. The goal of permaculture is to design ecologically sound and economically prosperous human communities.

Permaculture is not itself a discipline. It is more a design approach. It is not focused so much on things but more on the connections and relationships between things. Consequently, a proper permaculture-based design will draw from many different sciences, skills, and interests with much interaction between these disciplines and interests.

I had a number of goals in mind when I started to redo my yard. I suspect this is true for most of us, whether we realize it or not. These goals are achieved within permaculture by focusing on fourteen core principles [3]:

1. Take time to observe the site, its elements, and its environmental conditions before anything is done.
2. Place the elements in your design to emphasize useful relationships and time-saving connections between these elements. The elements, such as plants, should be selected and placed so that they mutually benefit each other. The relationship between elements is more important than the number of elements.
3. Notice what resources already exist within the system. Maximize the use of existing resources. Minimize the need for outside resources.
4. Choose elements and place them in the design to perform as many functions as possible.
5. Develop design so each function is supported by multiple elements.
6. Make the least change for the greatest effect.
7. Use the smallest system, such as a plant grouping, that will do the job. When you find something that works, grow by repeating it, with variations as needed.
8. Optimize the edge where two environments meet. For example, let your paths wind in your gardens. The edge is where materials and energy tend to concentrate. This will be the most diverse place in your garden.
9. Collaborate with and encourage succession. Living systems usually advance from immature to mature, with mature systems being the most diverse and productive.
10. Use biological and renewable resources. These resources build up over time and interact with other elements, maximizing yield.
11. Turn problems into solutions. Constraints can inspire creative designs, which often simultaneously solve other problems.
12. Design so that you get both immediate and long term returns. Set up positive feedback loops to build the system.
13. The biggest limit to abundance is creativity. The designer's skill and imagination usually limit results long before physical limits are reached.
14. Mistakes are tools for learning. Evaluating what is not working helps you understand the system better, leading to better solutions.

How do native plants fit into this permaculture picture? That is what we will consider in Part II of this discussion. In the meantime, check out these references.

Plant Family Quiz
Test your understanding of plant families of related native Florida plants.

<table>
<thead>
<tr>
<th>“Family Values” Quiz</th>
<th>Can you match each plant in the left column with one from the same plant family in the right column? Answers below. (Photos from Atlas of Florida Vascular Plants, florida.plantatlas.usf.edu)</th>
</tr>
</thead>
</table>
| A                    | Scarlet rosemallow, *Hibiscus coccineus*  
Family: __________________________  
1  
Wild coffee, *Psychotria nervosa*  
Family: __________________________ |
| B                    | Chickasaw plum, *Prunus angustifolia*  
Family: __________________________  
2  
Pineland lantana, *Lantana involucrata*  
Family: __________________________ |
| C                    | Firebush, *Hamelia patens*  
Family: __________________________  
3  
Wild cotton, *Gossypium hirsutum*  
Family: __________________________ |
| D                    | Christmasberry, *Lycium carolinianum*  
Family: __________________________  
4  
Virginia Creeper, *Parthenocissus quinquefolia*  
Family: __________________________ |
| E                    | Matchweed/fogfruit, *Phyla nodiflora*  
Family: __________________________  
5  
Sand blackberry *Rubus cuneifolius*  
Family: __________________________ |
| F                    | Muscadine *Vitis rotundifolia*  
Family: __________________________  
6  
American black nightshade, *Solanum americanum*  
Family: __________________________ |

A3 (Malvaceae), B5 (Rosaceae), C1 (Rubiaceae), D6 (Solanaceae), E2 (Verbenaceae), F4 (Vitaceae)
February Field Trip to Key Vista Nature Park

We arrived at the preserve early in the morning. It was chilly, but promising as osprey, woodpecker, and cardinals called out from their posts. The walk was pleasant and easy through wooded pine forest, down to mangrove-lined tidal channels, and back through coastal scrub. The conversation drifted from observations of erosion along the tidal channels to the confusing array of early and delayed blooms to the role of fire in native plant communities. There are many native trees, shrubs, grasses, and flowering plants at the preserve to enjoy and identify. A plant identification book would be useful on occasion.

If you go, notice the pine community on the sand hills with oaks and their understory companions. Along Rocky Creek and along the beach, notice the salt tolerant scrub, mangrove thickets, and a small patch of stunted cordgrass on the Gulf (Spartina alterniflora). If you walk on the little beach, you’ll see how the roots of the scrub oak are undercut by tidal action. From the observation tower, a vast swath of palmetto and pine is juxtaposed against the Gulf. South of the lookout tower in the open pine and palmetto, you can find an abundance of perennials, shrubs, and ferns.

The boardwalk meanders through a mix of brackish and freshwater wetlands, ending at Anclote Gulf Park. On the walk back, take the loop trail to the right where you’ll find more pine woods with an understory of grass and shrubs. The range of Gulf coast habitats, from upland to tidal wetland, provides a great opportunity to appreciate how wildlife thrives where a mosaic of habitats occur together. This is a lovely and accessible walk. Spring blooms, especially in the open scrub, can be expected to continue through April.

We stopped briefly to enjoy a mangrove grotto and white sand. Photo courtesy E. Raabe

Native Plant Silent Auction & Seed Swap

Each monthly meeting includes a native plant seed swap and a silent auction of native plant seedlings! Take home a tried and true native Florida plant for your home garden.

Members bring carefully potted native plant seedlings to each meeting. Anyone attending the meeting can make a silent bid. The winning bid takes the plant home. It is always a good deal for you, and the proceeds go to the FNPS Pinellas Chapter educational efforts and other projects.

Conference Scholarship Winners Announced

A random drawing was held from among the entries received for the Chapters' award of a partial scholarship for the 2013 Florida Native Plant Society Conference which will be held May 15-19 in Jacksonville. The Chapter will reimburse the recipients for up to $165, for registration for conference activities and field trips. Meals, lodging, transportation, and other expenses are the responsibility of the winners. The Chapter will promptly reimburse the winners for covered expenses, upon presentation of a completed conference registration receipt.

Winner #1: Andrea Andersen
Winner #2: Tonya Clayton
Alternate #1: Karen Wornicki
Alternate #2: Christina Evans

Welcome New Members

Teresita Long
Aidan C. Bowles
Cathy Rome
Zachary Pitchford
Community and volunteer support

“Those who dwell among the beauties and mysteries of the earth are never alone or weary of life.” -Rachel Carson

Committee Chairs and Coordinators

- Advocacy/Conservation: Candace Arnold
- Artist: Cathy Vogelsong
- Events/Displays: Andy Karpinski
- Hospitality: Andy Karpinski and Mary Ann Beekman
- Membership: Ellen Clayton
- Newsletter: Ellen Raabe
- Programs/Field Trips: Open - volunteers needed!
- Publicity: Cindy Smith
- Sales/Merchandise: Jane Williams and Jan Allyn
- Scholarships: Cindy Peacock
- Social Media: Jan Allyn
- Volunteer Coordinator: Mary Ann Beekman
- Web Master: Jan Allyn

Interim Committees:
- Budget Committee: Cindy Smith
- Plants Sales: Tiffany Custer and Bruce Turley
- Landscape Tour: Monica Pinnell and Jan Allyn

Volunteer Support

THANK YOU to the volunteers who helped plan field trips and the spring plant sale, coordinated speakers for the year, and conducted general behind-the-scenes efforts for the Pinellas Chapter of FNPS, including contributions to this newsletter!

Chapter Directory

Officers
- Jan Allyn, President jallyn@tampabay.rr.com
- Candace Arnold, Vice President candacearnold@tampabay.rr.com
- Monica Pinnell, Secretary, corsa65@msn.com
- Cindy Smith, Treasurer csmith55@tampabay.rr.com
- Debbie Chayet, Chapter Representative dchayet@verizon.net
- Alexa Wilcox-Huegel, Past President, alexa776@tampabay.rr.com

Board Members
- Mary Ann Beekman, mbeekman@tampabay.rr.com
- Andrew Karpinski, ak@stonemarmot.com
- John Pinnell, corsa65@msn.com
- Katy Roberts, kroberts@ij.net
The mission of the Florida Native Plant Society (FNPS) is to promote the preservation, conservation, and restoration of the native plants and native plant communities of Florida.

Join us at monthly meetings for inspirational speakers, on field trips to see natural habitats, at plant sales, or visit local plant nurseries specializing in native plants. Visit us online.

Pinellas Chapter web address: http://pinellas.fnpschapters.org/
FNPS Blog: http://fnpsblog.blogspot.org/
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