### The Florida-Friendly Landscaping™ Landscape Advisor's Manual



Dear Landscape Advisor,

Thank you for donating your time, expertise, and passion for gardening to the Florida-Friendly Landscaping<sup>™</sup> (FFL) Program, which protects water quality by using low-maintenance plants and environmentally sustainable practices. The FFL Team relies on you to carry the principles of Florida-Friendly Landscaping<sup>™</sup> to stakeholders in the field.

As a Florida Landscape Advisor, your role is critical to the success of the Landscape Recognition program. The FFL checklist, based on the *Florida Yards & Neighborhoods Handbook*, can serve as the springboard for discussions with stakeholders about successes in their landscape and aspects that could use improvement.

In addition, this *FFL/Florida Yards & Neighborhoods Landscape Advisor's Manual* provides information to help you prepare for your visit, conduct the evaluation process, and follow-up with homeowners. If you have any questions or concerns, our county Extension agents are available to help throughout the process.

Thank you so much for assuming this role in evaluating landscapes and educating our clients about practices that conserve water and enhance and protect the environment. Your knowledge, education, dedication, and experience make you uniquely suited for this responsibility.

We are all working together to improve this program and welcome your feedback on the Landscape Recognition process, *FFL Home Landscape Recognition Checklist*, and this document.

Sincerely,

The Florida-Friendly Landscaping™ Team, Gainesville, FL

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### THE LANDSCAPE ADVISOR'S ROLE: EDUCATING & LEARNING IN THE LANDSCAPE

Florida Landscape Advisors are trained to fulfill special responsibilities with regard to applying the concepts of the FFL/Florida Yards & Neighborhoods (FYN) program in the field. Landscape Advisors educate clients in their own landscapes where the lessons are specific and relevant.

Like all Master Gardeners and county Extension agents, Landscape Advisors extend science-based research to the general public. The *Florida Yards & Neighborhoods Handbook* (2015) is our main tool for Florida-Friendly Landscape advice.

This manual, FFL/Florida Yards & Neighborhoods Landscape Advisor's Manual, will help you be a more effective landscape educator. Each landscape evaluation should be a learning experience for the client and for you.

Florida Friendly Landscape

### SENATE BILL 2080 Florida Statute 373.185

On July 1, 2009, Senate Bill 2080 became law. The bill modified several statutes affecting Florida-Friendly Landscaping™, including defining FFL in 373.185 and modifying a host of other laws, including chapter 720, which addresses the powers of homeowner associations. The amendments to Florida Statutes section 373.185, et seq., have not changed the review approval process for HOAs. If deed restrictions or covenants require HOA approval for landscape modifications, then homeowners still need approval from HOAs.



Porous walkway

#### THE LANDSCAPE RECOGNITION PROCESS

#### **Before Your Visit**

#### 1. Be familiar with the materials.

Whether the topic is invasive plants in your area, landscaping laws, or fertilizer application, questions will arise during the Landscape Recognition process. A thorough knowledge of your checklist and FYN Handbook, The Florida-Friendly Landscaping™ Guide to Plant Selection & Landscape Design, as well as local legal codes and ordinances, will give you greater confidence in the field. Never worry if you don't have the answer. Landscape Advisors receive a wide variety of questions, and there is plenty of support available. You can always refer homeowners or HOAs to UF/IFAS Extension resources, whenever necessary.

### 2. Provide the client with the checklist and FFL reference materials.

Clients may have learned about the FFL Landscape Recognition program from friends, a local paper, or the Web. Be sure to ask how they heard about the program. This information will help us identify the appropriate channel to use to promote our program or communicate information.

Once clients have contacted the county Extension agent about getting their landscape recognized, you can provide them with the checklist and other FFL materials. You can send them hard copies, or they can download these items from the website.

### 3. Before you schedule the visit, prescreen by phone or e-mail.

Before you plan a site visit, prescreen your clients by phone or e-mail. Their score on the checklist and specific responses may help you determine whether they are eligible for Gold, Silver, or no recognition at all. Your prescreening questions should address some or all of the required practices on the checklist.



Prescreen homeowner before the site visit.

### 4. Review Clients' completed checklist.

Have clients return their completed checklist to you by fax, mail, e-mail, or in person. Review it, along with the questions you asked in the prescreening, to identify the clients' specific concerns and interests. This is an opportunity for you to provide more information and determine which publications to bring for your visit.

#### 5. Assemble your tool box.

This list includes items you will need for your landscape advisor visit. Keep in mind that this is not an inclusive list, but rather a starting point for your tool box.

#### Landscape Advisor's Tool Box:

- 12-inch ruler
- Clipboard
- Pencil
- Permanent marker
- Florida-Friendly Landscape Recognition
   Sign
- Stickers for Silver and Gold level recognition
- Magnifying hand lens
- Two checklists
- Digital camera
- Sunscreen, hat & water bottle
- Reference books
- Tape Measure
- Anything else you feel is important



Landscape Advisor's Tool Box.

### Quick Tip

Trust your intuition.

If you feel uncomfortable about a situation, leave

immediately. If appropriate, apologies can be made later.

### Quick Tip

Never go alone.

For safety, always work in groups of two or more people.



A team approach also facilitates communication by providing diverse perspectives.

#### **During Your Visit**

The role of Florida-Friendly Landscaping<sup>™</sup>/Florida Yards & Neighborhoods is to educate stakeholders about science-based landscape management practices that protect water quality and the environment. This program is strictly educational, and no government agency enforces Florida-Friendly Landscaping<sup>™</sup>.

# FFL recommends the following steps be taken during your visit:

#### 1. Introduce your team.

When you arrive at the property, have your materials ready and introduce yourself and team members to the client. Ask about pets and any other concerns you might have at this point. This may be a good time to ask client if there are any "trouble spots" they want you to look at and discuss during the visit.

# 2. Ask clients for permission to walk around the landscape, take photos & review the checklist.

You and your team will need about 20-45 minutes to evaluate the landscape. Review and complete most of the checklist before you return to meet with the clients. Always ask if you can take photos.

### Quick Tip

### Focus on education.

When a landscape does not receive recognition as a Florida-Friendly



Landscape, focus on communicating and educating the client. Encourage them to make the required changes and schedule a new visit.



Landscape Advisor team.

### 3. Ask clients to join you for a review of the landscape and checklist.

Next, on a tour of the property with the client complete the checklist. Ask about irrigation practices (including calibration and rain shut-off devices), grass clippings, pesticide applications, fertilization practices, soil testing, and whether a maintenance company or the client does the yard work. Once you've completed the checklist, review it with the client and explain how each point of the checklist relates to their landscape. Compliment their work, and offer suggestions on ways to become more Florida-Friendly. Share your enjoyment of the landscape and gardening with the clients at every opportunity.

### 4. Florida-Friendly Landscape Recognition

If the landscape is eligible for recognition, praise the clients and thank them on behalf of the community for their environmentally friendly landscape management. If appropriate, review your suggestions for improvement. Let clients know when and how they will receive their landscape sign from the Extension office and whether you will send a follow-up letter with feedback. In addition, suggest that the clients contact the Extension office every three years for a follow-up visit so that they can renew their recognition.

#### 5. Landscape sign placement

Before you leave, ask where the clients would like the Florida-Friendly Landscape sign displayed. In most cases, you should have the sign with you for installation that day. Whenever you install the sign, be sure to attach the appropriate sticker designating the year and the level of recognition that the landscape received. Many Landscape Advisors like to write the address on the back of the sign with a permanent marker. This helps to keep the sign from being relocated.

### Quick Tip

Be Positive.
Homeowners may
be sensitive about
their landscapes
and yard care. Be
positive! Discuss new opportunities,
sensible solutions, and cost-saving
alternatives.

# 6. When a landscape does <u>not</u> meet Florida-Friendly Landscape requirements:

If you decide that the landscape is not ready to be recognized as Florida-Friendly, thank the client for their interest in the health of our environment and explain that many landscapes do not meet Florida-Friendly requirements on the first visit. Give suggestions on ways to achieve Florida-Friendly Landscape recognition. Always remember, our purpose is to help stakeholders understand and implement appropriate landscape management practices.

#### Landscape recognition is secondary:

Use this opportunity to list several practices clients can incorporate with little difficulty that would help qualify their landscape as Florida-Friendly. Ensure that you have communicated the information effectively by providing examples and suggestions. Encourage clients to call the Extension office when they have made the necessary changes so the FFL team can schedule a return visit.



Landscape Advisor presenting a sign.

#### After Your Visit

### 1. After the visit, complete the landscape file.

Document the team's conclusion and recommendations made to the client. This documentation will be the basis of any follow-up letter.

It is recommended that you send a follow-up letter (Appendix C & D) that highlights positive actions the client has taken and provides suggestions to improve the landscape. A follow-up letter reinforces the clients' accomplishments, provides a reminder of changes, and serves as a record of landscape visits, together with the completed checklist.

Also document any commitments made to the client such as publications that need to be sent, and note any further action that needs to be taken.

### 2. Enter recognition in statewide database.

Return the landscape file to the Extension office, and ask your Extension agent to record the visit in the online database available on the FFL website ffl.ifas. ufl.edu/educators/index.htm. Renewal recongitions must also be added to the database (see Appendix D for instructions). \*Recognition signs will not be issused uf the recognition is not entered in the database.

### 3. Complete a landscape evaluation report.

After a landscape evaluation, include in your documentation any observations, lessons, etc., that may be helpful for future evaluations and for the Landscape Recognition program in general.

A landscape evaluation report completed for each landscape and submitted to clients is a significant

step in communicating the validity of the FFL program. Additionally, it gives clients an official assessment to review and share with friends as well as homeowner associations. This type of communication helps us spread the word about the FFL program.

A sample landscape evaluation report is included in Appendix C. Boiler plate language that can be modified is included in Appendix D.

# 4. Finally, use every evaluation visit as an opportunity to learn from clients and the landscape.

Use the survey on the Educator Login page of the state Florida-Friendly Landscaping<sup>™</sup> website: http:// fyn.ifas.ufl.edu/.The results of the survey will enable the Florida-Friendly Landscaping<sup>™</sup> Program to identify the needs of stakeholders and develop more effective education programs.

#### 5. Congratulations!

You have completed a landscape evaluation!
You can take pride in knowing you are helping
stakeholders design and maintain Florida-Friendly
Landscapes that conserve water and help protect
the environment. Thanks again for your time and
commitment!

### Quick Tip

Keep your client in mind when you communicate.



Tailor your presentation according to interests and needs of the client, such as environmental concern, cost-savings, reduction in labor, and peer recognition.

### THE FLORIDA-FRIENDLY™ LANDSCAPE RECOGNITION CHECKLIST

#### Landscape recognition levels

In the spring of 2017, a revised checklist was released to match the *Florida Yards & Neighborhoods Handbook*, 5th ed. (2015). The new checklist, revised with the help of a committee of FFL agents and feedback from state Landscape Advisors, clarifies problematic items, such as issues with invasive plants, and addresses new concerns for Florida-Friendly Landscaping™, such as the aesthetics of yards.

The revised (2017) checklist asks Landscape Advisors to choose from only two recognition levels: **Silver** and **Gold.** Stickers for both levels are available with landscape signs from your county Extension office. The appropriate sticker can be placed in a designated area of the sign.

# The remainder of the booklet reviews the FFL Landscape Recognition Checklist.

In addition to required practices, the landscape must meet the identified number of requirements within each of the five tiers.

For silver level recognition, a landscape must meet all required practices and achieve (2) First Tier, (3) Second Tier and (3) Third Tier practices. If the landscape has an in-ground irrigation system, (2) Irrigation practices must also be met. If the site is on a waterfront, (1) practice must be met.

For gold level recognition, a landscape must meet



Landscape recognition sign placed in the landscape

all required practices plus the additional gold level practices. The landscape must achieve (3) First Tier, (5) Second Tier and (5) Third Tier practices. If the landscape has an in-ground irrigation system, (3) Irrigation practices must also be met. If the site is on a waterfront, (2) practices must be met.

#### To be designated as a Florida-Friendly Landscape, the site MUST:

- 1. Comply with all existing codes, laws, ordinances, and HOA rules (if applicable).
- 2. Follow all required practices (listed at the beginning of the checklist).
- 3. Contain landscape plants. Landscapes made up of entirely rock, mulch, shell, artificial turf, or similar materials are not eligible for recognition.

The required landscape practices that differentiate the two levels are listed below:

#### REQUIRED PRACTICES FOR SILVER LEVEL RECOGNITION

☐ Clients certify that landscape complies with all codes, laws, ordinances, and HOA rules (if applicable). ☐ Landscape does not contain any plants found on the current UF/IFAS Assessment "**Prohibited**" List (https://assessment.ifas.ufl.edu/?types=24208) (p.9) ☐ Most plants are placed in landscape locations that match their requirements for water, light, soil condition, wind tolerance, salt tolerance, mature size, etc. ☐ Landscape contains at least 10 plant species. ☐ At least 25% of the landscape must contain planted (in ground) beds. ☐ Spilled fertilizer is collected and disposed of properly. ☐ If fertilizer is used, it is not applied when heavy rain is forecast in the next 24 hours. (p. 24) ☐ If fertilizer is used, it is applied to turfgrass and landscape beds at less than or equal to the UF/IFASrecommended rate. (p. 26-28) ☐ A 2"-3" layer of one of the mulches recommended in the FYN Handbook, is maintained in plant beds as appropriate. (p.30) □ Volcano mulching is not practiced on site. (p. 30) ☐ If the property is located on a waterfront: a low-maintenance zone of at least 10 ft. has been established around the water body. No grass clippings, pesticides, fertilizer, or irrigation water is applied in this zone. (p. 46) ☐ If pesticides are used: Only affected plants and turf areas are treated with pesticide applications (spot treatments). (p. 34)



#### If an irrigation system is present:

- ☐ Irrigation system is calibrated to apply 1/2" to 3/4" of water per application. (p. 18)
- ☐ A functioning automatic rainfall shutoff device is maintained on in-ground irrigation systems. (p. 20)

#### If turfgrass is present:

- ☐ Turf is mowed at the UF/IFAS-recommended height for the grass species. (p. 13)
- ☐ Grass clippings are left on the lawn after mowing. (p. 24 & 39)
- ☐ Fertilizer is only applied when grass is actively growing. (p. 24)
- □ "Weed and Feed" products containing herbicide and fertilizer together are not used. (p. 24)

#### **Aesthetics:**

- ☐ Appropriate pruning practices are utilized.
- ☐ There are defined and maintained (routinely weeded) landscape beds.
- ☐ Landscape and household debris are properly disposed of or recycled.







Client certifies that landscape complies with all codes, laws, ordinances, and HOA rules (if applicable).



Have the homeowner check with their homeowner association (HOA) before making changes to the landscape. HOAs, usually have a landscape review board and can regulate the appearance and types of plantings in your yard, as long as they do not prohibit you from installing and maintaining Florida-Friendly Landscapes. If the homeowner(s) live in a community with codes, covenants and restrictions that could be more Florida-Friendly, inform them of the model Florida-Friendly Landscaping™ restrictions, found at http://ffl.ifas.ufl. edu/

Landscape does not contain any plants found on the current UF/ IFAS Assessment "Prohibited" list. (http://assessment.ifas.ufl.edu/ assessments/?types=24208) (p. 9)

Nonnative invasive plant species pose a significant threat to Florida's natural areas. The UF/IFAS Assessment uses literature-based risk assessment tools to predict the invasion risk of both nonnative species that occur in the state as well as species proposed for introduction. http://assessment.ifas.ufl.edu/ See instructions Appendix F.



Australian pine (Casuarina species)



Elephant Ear (Xanthosoma sagittifolium)

Most plants are placed in landscape locations that match their requirements for water, light, soil condition, wind tolerance, salt tolerance, mature size, etc.



Plants well-suited to their site need less irrigation and fertilizer and are more resistant to pest infestation. Florida-Friendly Landscaping™ principles encourage the selection of the right plant for the right place, helping create a healthy, attractive landscape that works with the natural ecosystem rather than against it. Match plants with site conditions based on USDA zone, water and light requirements, soil conditions, salt and wind tolerance, and other factors. The FFL Plant List can help you make the right plant selections for your landscape.

Landscape contains at least 10 plant species.



Aim for a diversity of trees, shrubs, groundcovers, and flowers. Using a variety of plants in the landscape design will attract a diversity of wildlife.

At least 25% of the landscape must contain planted (in ground) beds.



Florida-Friendly does not promote a landscape of all rocks or the use of artificial turf or rubber mulch. Such materials increase heat and may result in loss of habitat, or create an environment that does not support wildlife. If an HOA review board allows any rocks, the Florida-Friendly program recommends they are used only in landscapes that have plants. Rocks can also can be used for accents around heat-tolerant plants and trees, in rain gardens, or to lessen the impact of rainfall from roof overhangs.

Spilled fertilizer is collected and disposed of properly.



If fertilizer is spilled on a hard surface (like a driveway), sweep it up and dispose of it. Fertilizers can wash into storm drains and then move into nearby waterways. If fertilizer is spilled on lawns, collect it however you can. It might be tempting to water extra fertilizer into the lawn, but the excess nutrients may leach into the soil and into the groundwater.

If fertilizer is used, it is not applied when heavy rain is forecasted in the next 24 hours. (p. 24)



If heavy rain is forecasted, hold off on applying fertilizer. Rain can wash fertilizer off lawns or cause it to leach into groundwater, contributing to pollution.

If fertilizer is used, it is applied to turfgrass and landscape beds at less than or equal to the UF/IFAS-recommended rate. (p. 26-28)



Fertilizer is a powerful tool that can help plants thrive—if used appropriately.

Inappropriate fertilizer application (too much, before a heavy rain, during dormancy) can harm plants, and the environment. Too much fertilizer can weaken a plant, promote disease, invite pests, waste money and harm the environment. Fertilizer can also increase plant growth rate and therefore cause excessive pruning and mowing.

Consider plants' needs carefully before applying, and always follow label directions when using fertilizer.

A 2"-3" layer of one of the mulches recommended in the FYN Handbook (p.30), is maintained in plant beds as appropriate.



A layer of mulch can provide many benefits to landscaped beds.

- Mulch buffers soil temperature--It keeps soil and plant roots warmer in winter and cooler in summer.
- Helps maintain soil moisture by slowing the rate of evaporation and reducing the amount of water needed
- Mulch inhibits weed germination and growth.
- And it can protect plants. Mulch can help prevent certain plant diseases, and reduce the likelihood of damage from trimmers and mowers.

In areas that are difficult to mow, irrigate, or otherwise maintain, use mulch in place of turf or groundcovers.

Volcano mulching is not practiced on site. (p. 30)



Piling mulch against trees prevents water infiltration; suffocates trunks and roots; and causes fungal rot.

If the property is located on a waterfront: a low-maintenance zone of at least 10 ft. has been established around the water body. No grass clippings, pesticides, fertilizer, or irrigation water is applied in this zone. (p. 46)



Whether it is a natural or man-made water body, it's important to designate a "maintenance-free zone" of at least 10 feet between your landscape and the riparian zone. This area helps to protect the water from runoff. Don't mow, fertilize, or apply pesticides in the maintenance-free zone. Select plants that will do well without fertilization or irrigation after establishment.

If pesticides are used: Only affected plants and turf areas are treated with pesticide applications (spot treatments). (p. 34)



Integrated Pest Management (IPM) is the best strategy for pest management. Chemical are used on an "as needed" basis. Plants with aesthetic damage don't necessarily need to be treated. Consider the amount of damage you're willing to accept. Remember that there will always be insects in any healthy landscape, so don't worry about minor damage. Always try the safest alternatives first, such as handpicking insects or pruning only the affected parts of a plant. If pesticide use is necessary, choose products that are the least harmful to people, pets, and wildlife and treat only the affected areas of a plant or lawn. Never use blanket applications of pesticide.

If an irrigation system is present, it is calibrated to apply 1/2" to 3/4" of water per application.
(p. 18)



### Quick Tip

### Consider special conditions.

For example, clients who tell you that they apply only ¼ inch of water per application because the water runs off



Calibration is critical and important. Clients cannot effectively apply the recommended amount of water per application without calibrating the system. All irrigation zones should be calibrated since significant variations can exist among zones. Ask clients how much water their irrigation system applies and how they calibrate their system. You may have to delay landscape recognition until you are certain the irrigation system has been properly calibrated.

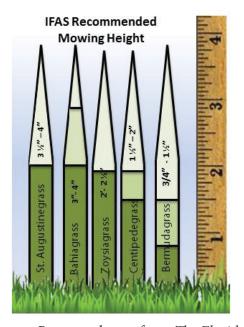
The Florida Yards & Neighborhoods Handbook (p. 19) has instructions for calibrating an irrigation system. Share with clients that shallow, straight sided, heavy-bottomed cans, like tuna fish cans or some cat food containers, work well for calibration. If over-watering has been a problem, emphasize the need to wean a landscape from excess water by gradually reducing irrigation frequency and amount. Maintaining the irrigation system and proper positioning of sprinkler heads is part of the calibration process to ensure the system evenly delivers the correct amount of water over the irrigated area. Remind clients to run the sprinkler system and check for broken or misdirected spray heads on a regular basis. Spray heads may be broken off during mowing.

Stress the need to direct heads so that water falls on lawn and shrub areas, not on paved surfaces from which it runs off.

If an irrigation system is present, a functioning automatic rainfall shutoff device is maintained on in-ground irrigation systems. (p. 14)



If turfgrass is present, turf is mowed at the UF/IFAS-recommended height for the grass species. (p. 13)



Rain and soil moisture sensors are shut-off devices that provide a great way to save water in your landscape. These devices detect when there is adequate rainfall and shut off your irrigation system, ensuring the system doesn't run when it's not needed. Rain and soil moisture sensors can also help prevent turf disease and other problems caused by excess moisture. Make sure sensors are working properly and advise clients to replace them when necessary. Having a functioning rain sensor can save over 11 thousand gallons of water a year. Be sure to periodically check the expanding disk in your rain sensor to ensure that it is functioning properly.

Mow turf at the UF/IFAS-recommended height for each grass species to encourage deeper root systems, increase drought tolerance and pest resistance.

- St Augustinegrass 3 ½ to 4"
- Bahiagrass 3-4"
- Zoysiagrass 2-2 ½"
- Centipedgrass 1" to 2"
- Bermudiagrass ¾" to 1 ½"

\* Page numbers refer to The Florida Yards & Neighborhoods Handbook, 5th ed. (2015)

If turfgrass is present, grass clippings are left on the lawn after mowing. (p. 24 & 39)



Leave clippings on the lawn—they will decompose, return nutrients to the turf and possibly reduce the number of yearly fertilizer applications. Use a mulching mower blade to cut grass into smaller pieces and speed up decomposition. You can also use clippings as mulch or compost.

If turfgrass is present, fertilizer is only applied when grass is actively growing. (p. 24)



Dormant turf

Many Florida turfgrasses go dormant or decrease growth during cooler seasons. Only fertilize when the grass is actively growing. This allows turf to make the most efficient use of the fertilizer's nutrients. Fertilization during dormancy may cause turf to grow at a time when it would not naturally do so, resulting in a weakened turfgrass. Fertilization during times of dormancy may also contribute to nutrient leaching or runoff since the grass has less root system and, therefore, less ability to take up the nutrients

\* Page numbers refer to The Florida Yards & Neighborhoods Handbook, 5th ed. (2015)

If turfgrass is present, "Weed and Feed" products containing herbicide and fertilizer together are not used. (p. 24)



"Weed and feed" products contain herbicides and fertilizer and are typically broadcast over large sections a landscape. Pesticides should be applied only to affected areas. "Weed and Feed" products can injure some trees and shrubs because their root systems often overlap with turf areas that have been treated. Preemergent herbicides are also typically applied when plants are dormant and fertilizer is not needed. Therefore, the fertilizer in these products is often wasted and can harm the environment.

#### **Aesthetics:**

Appropriate pruning practices are utilized.



Poor pruning practice

Pruning is selectively removing parts of a plant to improve plant health, control growth, or enhance fruiting, flowering, or appearance. Use these simple steps as a guideline for every pruning job you tackle:

- Remove all dead, diseased, or injured branches.
- Dip pruning shears and saws in rubbing alcohol or a 10% solution of bleach and water (1 part bleach to 10 parts water) to prevent spreading diseases between plants.
- Remove branches that cross or touch each other and any that look out of place.
- If a shrub is too large, prune it to match its natural growth habit.
- never remove more than 1/3 of a tree's canopy or shrub's canes.

#### **Aesthetics:**

There are defined and maintained (routinely weeded) landscape beds.

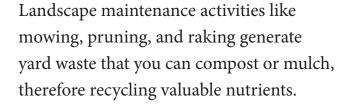


A Florida Friendly landscape can be designed in any style, formal or informal. However, there is no such thing as a "no maintenance" landscape. An unkempt (weedy and overgrown) landscape is not considered Florida-Friendly. Ensure that landscape beds and turf are defined and well-maintained (properly pruned and weeded).

\* Page numbers refer to The Florida Yards & Neighborhoods Handbook, 5th ed. (2015)

#### **Aesthetics:**

Landscape and household debris are properly disposed of or recycled. (p. 24)







#### REQUIRED PRACTICES FOR GOLD LEVEL RECOGNITION

To be eligible for Gold level recognition, a landscape must meet all of the required practices listed for Silver level recognition (above) **AND** meet the following requirements:

The landscape does not contain any plants found on the current UF/IFAS Assessment "Invasive" list.
(https://assessment.ifas.ufl.edu/types=1080,1074,24208) (p. 9)
The landscape contains at least 15 plant species.
All plants are placed in landscape locations that match their requirements for water, light, soil condition,
wind tolerance, salt tolerance, mature size, etc.
100% of roof runoff (with or without downspouts) drains onto lawn or landscaped areas, pervious surfaces
drainage swale, or is harvested in rain barrels or rain garden.
Not more than 50 percent of the irrigation system is high volume by area.
Spray and rotor heads are installed on separate zones. This does not include retrofit.
Low-flow irrigation is installed and maintained in plant and flower beds.



Gold Level Prerequisites: Landscape must meet these 7 required practices in addition to all required proactices for Silver to achieve Gold status.

\*If the landscape has no in-ground irrigation system, credit can be given for satisfying the irrigation practices.

Landscape does not contain any plants found on the current UF/ IFAS Assessment "Invasive" list. (p. 9)

See detailed instructions on how to use the UF/ IFAS assessment website on page 77 of this document.

http://assessment.ifas.ufl.edu/assessments/? types=1080,1074,24208



Wisteria sinensis- IFAS Assessment "Invasive" list.

Landscape contains at least 15 plant species.

Explain how plant variety attracts many different species of animals, from birds and butterflies to snakes and squirrels. Encourage clients to create a refuge for critters in need of shade, rest, food and water.



Gold Level Prerequisites: Landscape must meet these 7 required practices in addition to all required proactices for Silver to achieve Gold status.

\*If the landscape has no in-ground irrigation system, credit can be given for satisfying the irrigation practices.

All plants are placed in landscape locations that match their requirements for water, light, soil condition, wind tolerance, salt tolerance, mature size, etc.

Achieving a natural, healthy balance in the landscape starts with putting the right plant in the right place. Matching plants to the conditions of the landscape can help them thrive, once established, with little or no irrigation and few or no pesticides or fertilizers.



100% of roof runoff (with or without downspouts) drains onto lawn or landscaped areas, pervious surfaces drainage swale, or is harvested in rain barrels or rain garden.

Rain that falls in your yard should soak into your yard. Afterall, rainfall is an excellent water source for your landscape, and reducing stormwater runoff will reduce impacts on waterways.



Gold Level Prerequisites: Landscape must meet these 7 required practices in addition to everything listed above to achieve Gold level status.

\*If the landscape has no in-ground irrigation system, credit can be given for satisfying the irrigation practices.

Not more than 50 percent of the irrigation system (by area) is high-volume.



Spray and rotor heads are installed on separate zones.

\*this does not include retrofit



High-volume irrigation is any sprinkler or emitter with a flow rate of 30 gallons per hour (gph) or 0.5 gallons per minute (gpm) or greater. In most cases, high-volume irrigation devices are spray and rotor sprinklers. High-volume irrigation is used to irrigate turfgrass and other plant materials with high water needs.

The type of sprinklers used for irrigation systems affects the rate and efficiency that water is applied to the irrigated area. Application rates of rotors are typically lower than spray nozzles. When high volume irrigation is used for plants with lower water requirements, advise clients to consider retrofitting their zones for low-volume or micro-irrigation. Low volume irrigation, defined as 30 gallons per hour (gph) or less, efficiently applies water to the soil and establishing plants.

\*Read: http://ufdc.ufl.edu//IR00001528/00001 for more information on retrofitting your irrigation.

\*Read: http://ufdc.ufl.edu//1R00001528/00001 for more information on retrofitting your irrigation system.

Gold Level Prerequisites: Landscape must meet these 7 required practices in addition to everything listed above to achieve Gold level status.

\*If the landscape has no in-ground irrigation system, credit can be given for satisfying the irrigation practices.

Low-flow irrigation is installed and maintained in plant and flower beds.





Microirrigation systems deliver small volumes of water directly to the root zone through low-flow emitters, such as micro-spray jets, micro-bubblers, or drip tubes. Microirrigation can be a great way to water your plants more efficiently. It is commonly used for shrubs, trees, planting beds, and container gardens.





Fage numbers refer to The Florida Yards & Neighborhoods Handbook, 5th ed. (2015)

#### CHECKLIST: FIRST TIER (2 FOR SILVER, 3 FOR GOLD)

Trees and shrubs are positioned to improve the building's heating and cooling capacity, if the space allows.



Position trees and shrubs to improve the building's heating and cooling efficiency.

Plant deciduous trees on the south, east and west sides of the house to allow shade in the summer and warmth in the winter.

Emphasize <u>cost-savings</u>. Research has shown that shade can dramatically reduce energy consumption and costs by as much as 50 percent.

Tree shade can reduce air conditioning costs significantly. An air conditioning system's outdoor compressor/condenser unit uses less energy when it is shaded from direct sun during the day – but be careful not to block the unit's airflow. If the warm discharge air cannot escape, the intake air temperature rises, causing the unit to operate less efficiently.

Be aware of setback recommendations for wildfire safety or potential windstorm damage from falling trees or branches.



Rain gardens, swales, and berms are used to catch and filter stormwater runoff.



Rain garden.



Swales and berms can help capture or slow water that would otherwise runoff from your yard and allow water to soak into the ground.

For waterfront properties, use a berm-and-swale combination to filter stormwater runoff. Advise clients to always check with the Florida Department of Environmental Protection or other local government agencies before making any changes to shorelines.



Swale.

### Quick Tip



Maintained (irrigated and fertilized) turfgrass is used for functional purposes (e.g., recreation, erosion control, nutrient uptake, etc.).

\*Credit is given if no turfgrass is on site.



Grass is maintained for functional purposes.

Large areas of lawn grass can be expensive to maintain in terms of time, energy, money, and water. Ensure that at least 25% of the landscape contains planted (in ground) landscaped beds and encourage clients to determine how much grass is needed for children, pets, recreation, and other uses. Where possible, suggest replacing unused irrigated grassy areas with low-maintenance groundcovers or shrubs, mulched beds, or other porous surfaces.

Initially, large areas of lawn grass can be expensive to replace. Emphasize that this replacement can be a gradual process and more cost-effective over the long run. We recommend the following:

- Begin with problem areas where grass is difficult to grow. For example, in shady areas, replace sparse turf with ferns or other shadetolerant plants.
- Expand the size of existing mulched beds as your plants grow.
- Use additional mulch to link together existing mulched plant beds to add visual appeal and better function to your landscape.



Seating area



At least 25% of hardscape surfaces are made of porous materials.

If possible, use bricks, gravel, turf block, mulch, pervious concrete for walkways, driveways and patios. These materials reduce the amount of runoff from your yard by allowing rainwater to infiltrate into the ground and reduce pollutants that could infiltrate into groundwater. In some cases, these porous materials may even cost less to install than concrete or asphalt.



Permeable Paving



Close up of permeable paving



Grass Block

Main leaders of all shrubs are at least 3' away from the foundation of the house.

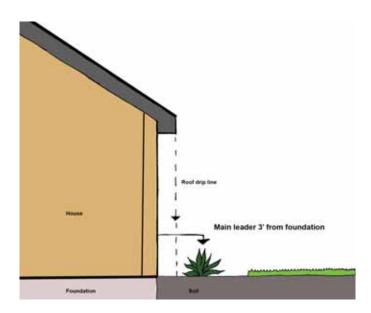


Over-crowded shrubs

Trees are located the appropriate distance from the foundation of the house based on mature size.



Improper placement of tree



Shrubs located too close to a building foundation may result in the following issues: the roof overhang can: block plants from receiving adequate water; create damaging forces of rainfall during storms; cause improper air ciculation that makes plants vulnerable to disease; and prevent access to a home for routine maintenance.

Trees need space for canopy and root growth. When certain trees are planted too close to a building, their roots can damage a building's foundation and/ or canopy growth can block or crowd a building structure.

Erosion prone areas are maintained to minimize erosion.



Ensure that erosion prone areas are maintained to slow down and minimize stormwater runoff.

Erosion has a serious negative effect on water quality. Increased nutrient levels, along with high sediment loads, are the leading contributors to reduced water quality. Plant material works best to control erosion as the roots penetrate and hold the soil in place.

Clients can consult the *The Florida-Friendly*Landscaping™ Guide to Plant Selection & Landscape

Design or a similar publication for a list of suitable groundcovers for their site.



Shrubs and groundcovers are used where grass is difficult to maintain.



Most turfgrasses do not do well in shady areas, but there are many shade-loving groundcovers to choose from.

Appropriately selected groundcovers are also better alternatives to turf for steep slopes and low-traffic areas because they will require less maintenance.

# CHECKLIST: SECOND TIER (5 FOR SILVER, 6 FOR GOLD)

A compost pile or worm bin is installed or community compost bin is available for use.



Finished compost

Effective composting returns valuable nutrients into the soil. Adding compost to the soil can: improve soil structure, texture and aeration; increase soil water-holding capacity; promote soil fertility and stimulate root development. Never place meat, animal fat, or dairy products in the compost pile as these attract rodents and other pests. Also do not place pet waste into the compost pile. Nitrogen and carbon are required in proper proportions for effective composting.

Proper moisture is necessary for microorganisms to decompose the compost material. Clients should not be able to squeeze water from the material produced at the bottom of the pile.



Plant material provides habitat and/or food sources for wildlife.



Encourage clients to select a variety of plants that provide food for birds, butterflies, and other wildlife throughout the entire year. Native plants often have the greatest wildlife value and smaller fruit that can be eaten by more creatures.

A landscape design that caters to wildlife will have a variety of layers to provide cover for animals (e.g., shade trees, understory trees, shrubs of varying height, groundcover).

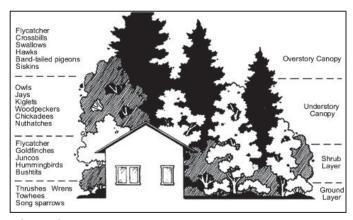
Emphasize the connection between the kind of plants and the wildlife that will visit the yard. Teach clients to consider the structure of the plant as a source of cover. For instance, our Florida state tree, the cabbage palm (*Sabal palmetto*), provides cover and nesting areas for birds, small mammals, frogs, and a variety of creatures. By contrast, a Queen palm (*Syagarus romanzoffianum*) has very little value for wildlife as a source of cover.

Host and nectar plants are present for butterflies, hummingbirds and/or other pollinators

In addition to the aesthetic benefits they provide, pollinators are beneficial to neighborhood gardens and nearby farms. Every effort should be made to include plants in the landscape that will attract and provide food for pollinating insects.

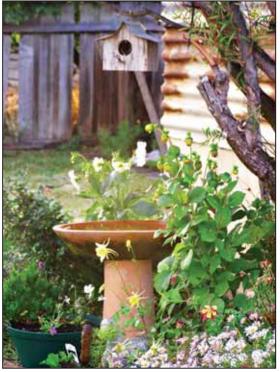


Include host and necter plants for pollinators



Plant in layers

A water source for wildlife exists in the landscape.

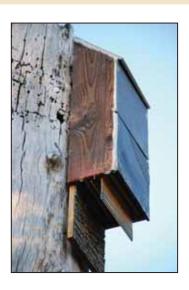


Wildlife shelters and water source

These can include a bird bath or a small pond. Caution clients to choose a bird bath carefully. Many commercial bird baths are too deep--the birds want to drink or bathe, not swim. A shallow bowl or the saucer for a garden pot can serve as an effective and inexpensive bird bath. Some homeowners set out garden pot saucers of different sizes to accommodate different-sized birds. Attracting bats requires a large water source like a pond.



Wildlife shelters exist in the landscape (e.g., bird or bat houses, snags, brush piles).



A bird house, bat house, brush pile, or a dead tree provide shelter for wildlife. Snags (dead trees) can: attract cavity dwellers, including woodpeckers and owls; provide places for birds to perch; and offer an insect supply (bird food sourcee). However, local codes may prohibit snags in some communities.

Landscape waste (i.e., tree trimmings, fallen leaves, pine needles) is used on site.



Sweep grass clippings up on yard

Grass clippings provide added nutrients to the lawn. University of Florida fertilization guidelines assume that grass clippings are left on the lawn. However, some treatment of lawn diseases may require clippings be bagged and disposed.

Mulching lawn mowers or mulching blades are optional. Remind homeowners never to mow more than one-third of the grass blade. This practice will ensure that the lawn is not "swamped" with grass clippings.



Natural leaf litter mulch in Pine Tree bed

If clients create self-mulching areas under shrubs and trees, leaves can remain as they fall. Falling leaves and pine needles make an attractive, natural mulch and are free. Emphasize the labor-saving and cost-saving benefits of this practice. Leaves, shrub trimmings, and other plant debris can also be collected and added to mulched beds or used in a compost pile.

A cistern, rain barrel or other water harvesting practice is used with proper mosquito prevention techniques in place.



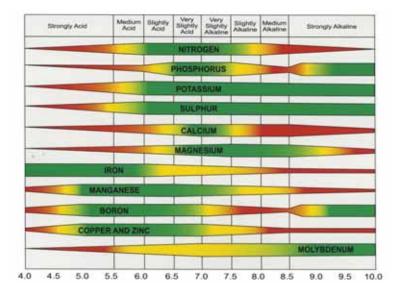
Rain Barrel

Rain barrels and cisterns can capture a significant amount of water and have a tangible effect on water bills. A rain barrel should be made mosquito-proof with a tight-fitting lid and/or mesh screen, and can be painted (if it 's not hidden by foliage or a trellis) to make it more attractive.

Cisterns also catch rain but can hold hundreds or thousands of gallons and require more engineering than rain barrels. Remind clients that their community or county may require a permit for a cistern.

A soil pH test has been performed within the last year.

A soil test can help you understand what nutrients are present in your soil. This is important when deciding what nutrients, if any, you should add. Soil pH tests are available at labs like the UF/IFAS Extension Soil Testing Laboratory (http://soilslab.ifas.ufl.edu/).Many counties perform soil testing for a small fee.



## Cypress mulch is not used.





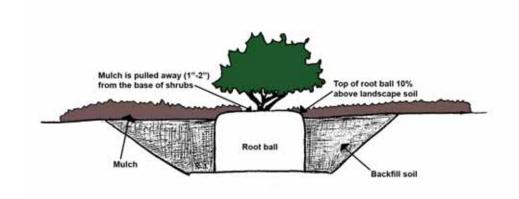
Mulch is pulled 1-2 inches away from the base of shrubs.

Cypress mulch is composed of both wood and bark. Cypress trees, which grow in Florida's forested wetlands, are often harvested for lumber and used in fencing, flooring, furniture and other wood products. Cypress mulch can be made from the waste wood generated in the manufacture of these products. It can also be made out of whole trees cut from wetlands. The Florida-Friendly Landscaping™ Program does not recommend the use of cypress mulch, as its origins are difficult to determine.

Encourage clients to use by-product and recycled mulch whenever possible. Consult *The Florida Yards & Neighborhoods Handbook (p. 29)* for a list of recommended mulches.

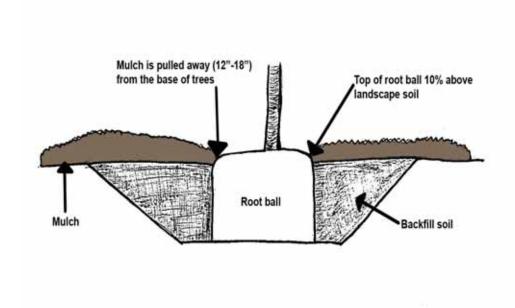
Mulch made from the invasive melaleuca tree contributes to the tree's removal in South Florida, where it is a significant problem. Be sure that the mulch has been properly processed to sterilize all seeds.

Ensure that mulch is pulled away 1-2" away from the base of shrubs. When mulch is in contact with the woody stems of shrubs, the moisture it creates can increase plant disease.



Mulch is pulled 12 - 18 inches away from the base of trees.

Ensure that mulch is pulled away from the base of the tree. Mulch located directly against the trunk draws moisture that in turn promotes disease.



# Quick Tip

# Present a united front. Landscape advisors need to present a united position when discussing landscapes with clients. A balanced pro-and-con discussion may help them understand your position.

# CHECKLIST: THIRD TIER (3 FOR SILVER, 5 FOR GOLD)

A soil nutrient test has been performed within the last year.

Find out more information at the UF/IFAS soil testing laboratory. http://soilslab.ifas.ufl.edu/



If the landscape is maintained in a natural state:

No supplemental fertilization is used in the landscape once plants are established.



Florida-Friendly Landscape

When the right plants are chosen for the appropriate locations, they may not reqire fertilization once established. Look carefully around town, and you will find that many of the older, well-established landscapes are maintained without irrigation and fertilization. When fertilization is needed, apply only as much as needed to keep the lawn and plants healthy. Stress that the recommended application rates are maximums. Many clients maintain healthy, high-quality landscapes with less than the recommended rate.

Emphasize the relationship between too much fertilizer and pest problems. For instance, research has shown that chinch bug problems increase with the over-application of fertilizer. A broadcast spreader with an operational deflector shield is used to apply the fertilizer.

A drop spreader can damage the coatings on slowrelease fertilizer, rendering it quick release. A deflector shield will keep fertilizer granules from being distributed to places where they aren't wanted.



Broadcast spreaders with deflector sheilds



Uneven fertilizer application



Improper fertilizer application can damage turfgrass

Landscape is checked every one to two weeks for signs of pest damage.



Mite damage



Assassin bug



Syrphid fly

Encourage clients to enjoy their landscape daily and to walk around at least twice a week to examine plants for signs of damage. Help them to understand that their landscape will change with the seasons. Let them know, for instance, that many oak and cypress trees will drop their leaves during the winter, and this is not a cause for concern.

Use the clients' familiarity with ladybugs and praying mantids to stress that not all insects are bad. Emphasize the important role that beneficial insects play in the balance of nature. Encourage them to learn to identify different types of beneficial insects that provide natural control of harmful pests. Three examples of beneficials are shown here.



Green lacewing

Low-impact techniques are used for insect and disease management whenever possible.











Low-impact techniques include removing pests by hand; encouraging natural predators, and the use of insecticidal soaps and oils.

Review the basics of IPM with clients, and help them identify their pest control options.

Begin with **Cultural Control** (which is usually the source of the problem). Examine irrigation and fertilization practices. Look at plant placement. Suggest that they move or remove a plant that is perpetually pest prone.

Follow up with **Mechanical Control.** Can the pest be picked off or washed away with water? Can the affected plant part be pruned?

Try **Biological Control**, if possible. Biological controls do not work as quickly as pesticides, but they are far more beneficial.

Try insecticidal soap, horticultural oil, or Bt (Bacillus thuringiensis). Repeated applications or alternate applications of soap and oil may be necessary. Caution: Bt is a stomach poison for the larvae (caterpillars) of butterflies and moths.

Use chemical pesticides only as a last resort.

We want stakeholders to be aware of the services provided by their Extension office. Although they may not be able to properly identify what is afflicting their landscape, they should be aware of the role of the Extension office and the way in which to collect samples for diagnosis.

Broad-spectrum insecticides are not selective, meaning they also kill beneficial insects. Pestspecific products, which are designed to harm only targeted pests, should be chosen instead. Pollutants such as pet waste and car oils are cleaned up so that they do not end up in storm drains.



Rain can wash exposed soil, plant materials, fertilizers, pesticides and pet waste from pervious areas (lawns, landscape beds) and road dust, oil and other materials from impervious areas (roads), all of which then become part of stormwater runoff. These materials are high in nutrients that can increase pollution. Pet wastes can also contain harmful bacteria. Ultimately every yard and neighborhood is connected to water bodies. This connection can be immediate and obvious, like in a waterfront community, or gradual and unnoticed, through the flow to storm drains, ditches, streams, rivers and estuaries.

50% or more of roof runoff (with or without downspouts) drains onto landscaped areas or pervious surfaces. (p. 43)



Permeable paver drive with coquina rock parking area

Whenever possible, use bricks, gravel, turf block, mulch, pervious (permeable) concrete or other pervious materials for walkways, driveways and patios. These materials allow rainwater to seep into the ground, thereby recharging groundwater, filtering pollutants, and reducing the amount of runoff from the yard. In some cases, these porous materials may even cost less to install than concrete or asphalt.



# CHECKLIST: IRRIGATION TIER (2 FOR SILVER, 3 FOR GOLD)

\*If the landscape has no in-ground system, credit can be given for satisfying this tier.

#### FOR A LANDSCAPE THAT USES AN IRRIGATION SYSTEM:

Not more than 50 percent (estimated by area) of the irrigation system is high volume.



Some Landscape Advisors ask clients to operate the irrigation system while they are evaluating the yard to assess their familiarity with the system.

Large amounts of water can be wasted with the use of traditional, high-volume irrigation systems. These systems can contribute to overwatering, which leads to numerous issues such as disease, pests, and water pollution. High-volume irrigation should be limited to turf areas only.

Microirrigation in the form of micro-sprayers, micro-bubblers, drippers, and drip tubing should be installed in plant beds whenever feasible. For more information refer to the Micro Irrigation Fact Sheet l (http://hillsborough\_fyn.ifas.ufl.edu/FYN%20 PDF%20Files/Fact%20Sheets/Microirrigation.pdf).

Turfgrass and landscape plants are irrigated only as needed (in compliance with any existing watering restrictions).



Folded leaf blades

Watering restrictions usually limit watering with a sprinkler or irrigation system to certain times on certain days of the week. Water restrictions apply to everyone and every water source in a water management district. (Requirements may be different for reclaimed/recycled water/ microirrigation.)

Scheduled watering can waste money and water. Teach clients to look at their plants for telltale signs of thirst and to operate their system manually instead of allowing the automatic controller to run on a set schedule.

Signs of water stress are:

•Leaf blades are folded in half lenghtwise

A smart controller (evapotranspiration, soil moisture sensor, or similar device) is

- •Grass takes on a blue-gray tint (St. Augustine turf)
- •Footprints or tire tracks remain on the grass long after they have been made.

A soil moisture sensor will shut off the irrigation system when a certain amount of rain has fallen or a



Soil moisture sensor

Separate irrigation zones for turf and landscape plants are maintained.



Drip irrigation

Low-flow irrigation is installed and maintained in plant and flower beds.



Microirrigation

Turfgrass and landscape plants have very different watering needs, so they should be watered on separate zones of the irrigation system. Trying to water turfgrass and landscaped beds on the same zone is very inefficient and can lead to problems with the landscape in the long term.

Microirrigation systems deliver small volumes of water directly to the root zone. This is a great way to water plants more efficiently. Microirrigation can be installed under shrubs and trees, in planting beds, and in containers but should be avoided in lawns.

# Quick Tip

Adjust frequency of irrigation when seasons change.



A good way to remember to adjust the frequency of the irrigation system is to do it when the time changes (i.e., daylight savings time). Always follow the Water Management District watering quidelines.

The irrigation system is examined and maintained regularly for clogs and leaks.



Remind clients to run the sprinkler system and check for broken or misdirected spray heads, clogs and leaks on a regular basis. Spray heads may be broken off during mowing.

Stress the need to direct heads so that water falls on lawn and shrub areas, not on paved surfaces from which it runs off.

# WATERFRONT TIER: (1 FOR SILVER, 2 FOR GOLD)

Shoreline (riparian zone and littoral zone) is kept free of invasive exotic plant material.



Water chestnut (Trapa natans)

Seawalls, rip rap, or gabions are used where appropriate to control erosion.



Gabion



Sea Wall

Only native vegetation can be planted on shorelines, and a permit may be required. Encourage clients to check with their local Department of Environmental Protection (DEP) office before doing any work along a shoreline.



Brazilian pepper-tree is an invasive exotic plant (Schinus terebinthifolius)

Encourage clients to look for ways to encourage native vegetation in and along these structures, especially rip rap and gabions.



Rip rap

Plant material is located to provide at least a 10' low maintenance zone to buffer, filter and prevent erosion.



This practice is required only for landscapes on the waterfront. Encourage clients to establish a border of low-maintenance plants between the lawn and shoreline/seawall to absorb nutrients and provide wildlife habitat. Encourage clients not to sod all the way to the shoreline or the seawall. If they do sod to their shoreline or seawall, they should maintain a buffer of at least 10-30' in which no fertilizers or pesticides are applied.

Where feasible, encourage clients to plant native vegetation in front of their seawall or along their shoreline. Under Florida law, only native vegetation can be planted along a shoreline. For estuarine areas, refer clients to Sea Grant publication #SG 003, Common Coastal Plants in Florida: A Guide to Planting and Maintenance. This publication provides detailed information about plant characteristics and availability, as well as planting guidelines.



Low-maintenance zone

# Appendix A - Completed Checklist

#### FFL Home Landscape Recognition Checklist

By recognizing specific landscapes as Florida-Friendly, the Florida Yards & Neighborhoods (FYN) branch of the Florida-Friendly Landscaping™ (FFL) Program honors clients' efforts to conserve water and protect water quality and other natural resources. A Landscape Advisor should use this checklist to evaluate existing landscapes, referring to The Florida-Friendly Landscaping™ Landscape Advisor's Manual if necessary. Page numbers in the right-hand column of this checklist refer to the FYN Handbook, 5th edition, The Florida Yards & Neighborhoods Handbook (2015). New construction, governmental and institutional properties are evaluated with separate checklists that can be found at http://ffl.ifas.ufl.edu/homeowners/recognitions.htm.

To maintain the integrity of the FYN program and to ensure that FYN Landscape Recognitions have a positive environmental impact, landscape evaluations must be as thorough and accurate as possible. However, the landscape evaluation process should always be a positive, educational, and enjoyable experience for all clients. Focus should be on the educational aspects of the landscape evaluation process, rather than on the recognition itself.

Client Information:						
Name:		Pho	one:			
				Zip:		
	Email:			Date:		
Do you employ a law	n service? Company	name				
Check all that apply:						
MowingWe	ed ControlFertili	zerPruning	Landscape	e BedsPest (	Control	

In order for a landscape to be considered for recognition it must contain landscape plants. Landscapes made up entirely of rock, mulch, shell, artificial turf, or other similar materials are not considered Florida-Friendly and are not eligible for recognition.

There are two recognition levels available, Silver and Gold.

For silver level recognition, a landscape must meet all required practices and achieve (2) First Tier, (3) Second Tier and (3) Third Tier practices. If the landscape has an in-ground irrigation system, (2) Irrigation practices must also be met. If the site is on a waterfront practice (1) practice must be met.

For gold level recognition, a landscape must meet all required practices plus the additional gold level practices. The landscape must achieve (3) First Tier, (5) Second Tier and (5) Third Tier practices. If the landscape has an in-ground irrigation system, (3) Irrigation practices must also be met. If the site is on a waterfront practices (2) practices must be met.

#### **Required Practices for Silver** (Check or indicate N/A)

The following practices, when applicable to the landscape being evaluated, are required for Silver level recognition:

- Client certifies that landscape complies with all codes, laws, ordinances, and HOA rules (if applicable).
- Landscape does not contain any plants found on the current UF/IFAS Assessment "Prohibited" list. (http://assessment.ifas.ufl.edu/assessments/?types=24208). (p. 9)
- Most plants are placed in landscape locations that match their requirements for water, light, soil condition, wind tolerance, salt tolerance, mature size, etc.
- Landscape contains at least 10 plant species.
- At least 25% of the landscape must contain planted (in ground) beds.
- Spilled fertilizer is collected and disposed of properly. (p. 24)
- If fertilizer is used, it is not applied when heavy rain is forecast in the next 24 hours.
- (p. 24)
- If fertilizer is used, it is applied to turfgrass and landscape beds at less than or equal to the UF/IFAS-recommended rate. (pp. 26-28)
- A 2"-3" layer of one of the mulches recommended in the FYN Handbook, is maintained in plant beds as appropriate. (p.30)
- Volcano mulching is not practiced on site. (p. 30)
- If the property is located on a waterfront: a low-maintenance zone of at least 10 ft. has been established around the water body. No grass clippings, pesticides, fertilizer, or irrigation water is applied in this zone. (p. 46)
- If pesticides are used: only affected plants and turf areas are treated with pesticide applications (spot treatments). (p. 34)

#### If an irrigation system is present:

- Irrigation system is calibrated to apply 1/2" to 3/4" of water per application. (p. 18)
- A functioning automatic rainfall shutoff device is maintained on in-ground irrigation systems. (p. 20)

#### If turfgrass is present:

- Turf is moved at the UF/IFAS-recommended height for the grass species. (p. 13)
- Grass clippings are left on the lawn after mowing. (pp. 14 & 39)
- Fertilizer is only applied when grass is actively growing. (p. 24)
- Weed and Feed" products containing herbicide and fertilizer together are not used. (p. 24)

#### Aesthetics:

- Appropriate pruning practices are utilized.
- There are defined and maintained (routinely weeded) landscape beds.
- Landscape and household debris are properly disposed of or recycled.

#### **Required Practices for Gold**

**Gold Level Prerequisites**: Landscape must meet these 7 required practices in addition to everything listed above to achieve Gold status. (If the landscape has no in-ground irrigation system, credit can be given for satisfying the irrigation practices.)

- Landscape does not contain any plants found on the current UF/IFAS Assessment "Invasive" list (http://assessment.ifas.ufl.edu/assessments/?types=1080,1074,24208) (p. 9)
- Landscape contains at least 15 plant species.
- All plants are placed in landscape locations that match their requirements for water, light, soil condition, wind tolerance, salt tolerance, mature size, etc.
- 100% of roof runoff (with or without downspouts) drains onto lawn or landscaped areas, pervious surfaces, drainage swale, or is harvested in rain barrels or rain garden. (pp. 43-44)
- Not more than 50% of the irrigation system (by area) is high-volume.
- Spray and rotor heads are installed on separate zones. (This does not include retrofit.)
- Low-flow irrigation is installed and maintained in plant and flower beds.

#### **Tiered Practices**

For silver level recognition, a landscape must meet all required practices and achieve (2) First Tier, (5) Second Tier and (3) Third Tier practices. If the landscape has an in-ground irrigation system, (2) Irrigation practices must also be met. If the site is on a waterfront (1) practice must be met.

For gold level recognition, a landscape must meet all required practices plus the additional gold level practices. The landscape must achieve (3) First Tier, (6) Second Tier and (5) Third Tier practices. If the landscape has an in-ground irrigation system, (3) Irrigation practices must also be met. If the site is on a waterfront (2) practices must be met.

First Tier: (2 for silver, 3 for gold)

- Trees and shrubs are positioned to improve the building's heating and cooling capacity if space allows. (p.5)
- Rain gardens, swales, and berms are used to catch and filter stormwater runoff. (pp. 43-44)
- Maintained turfgrass is used for functional purposes (e.g., play area, erosion control, and nutrient uptake). Credit given if no turfgrass on site.
- At least 25%t of hardscape surfaces are made of porous materials.
- Main leaders of all shrubs are at least 3' away from the foundation of house.
- Trees are located appropriate distance from the foundation of house based on mature size.
- Erosion prone areas are managed to minimize erosion.
- Shrubs and groundcovers are used where grass is difficult to maintain. (p. 6, 8)

**Second Tier**: (5 for silver, 6 for gold)

- Compost pile or worm bin is installed or community compost bin is available for use. (pp. 40-41)
- There is plant material that provides habitat, shelter and/or food sources for wildlife. (pp. 31-32)
- Host and nectar plants are present for butterflies, hummingbirds and/or other pollinators. (pp. 31-32)
- A water source for wildlife exists in the landscape. (pp. 31-32)
- Wildlife shelters exist and maintained in landscape (e.g., bird or bat houses, snags, brush piles, etc.).
- Landscape waste (tree trimmings, fallen leaves, pine needles) is used on site and/or properly composted or placed at curb for horticulture recycling.
- A cistern, rain barrel or other water harvesting practice is used with proper mosquito prevention techniques in place. (p.44)
- A soil pH test has been performed within the last year.
- Mulch is pulled away (12"-18") from the base of trees. (p. 29)
- Mulch is pulled away (1"-2") from shrubs.
- Cypress mulch is not used.

**Third Tier**: (3 for silver, 5 for gold) (If the client does not use fertilizers nor pesticides, credit can be given for gold level for this tier.)

- A soil nutrient test has been performed within the last year.
- No supplemental fertilization is used in the landscape once plants are established.
- A broadcast spreader with an operational deflector shield is used to apply fertilizer, or fertilizer is applied by hand. (p. 24)
- Landscape is checked every 1-2 weeks for signs of pest damage.
- Low-impact techniques are used for insect and disease management whenever possible. (p. 34)
- Pollutants such as pet waste and car oils are cleaned up so that they do not end up in storm drains. (p. 43)
- 50% or more of roof runoff (with or without downspouts) drains onto landscaped areas or pervious surfaces. (p. 43)

**Irrigation Tier**: (2 for silver, 3 for gold) (If the landscape has no in-ground system, credit can be given for satisfying this tier.)

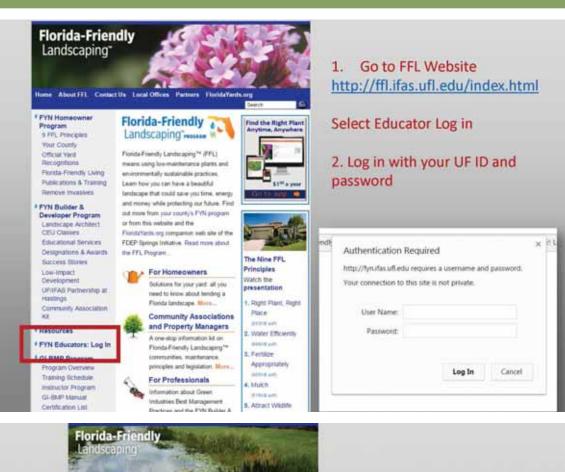
- Not more than 50% of the irrigation system (by area) is high-volume.
- Turfgrass and landscape plants are irrigated only as needed (in compliance with any existing watering restrictions).
- A smart controller (evapotranspiration, soil moisture sensor, or similar) is installed and operational. (p.20)
- Separate irrigation zones for turf and landscape plants are maintained.
- Low-flow irrigation is installed and maintained in plant and flower beds. (pp. 19-20)
- The irrigation system is maintained regularly to repair clogs and leaks.

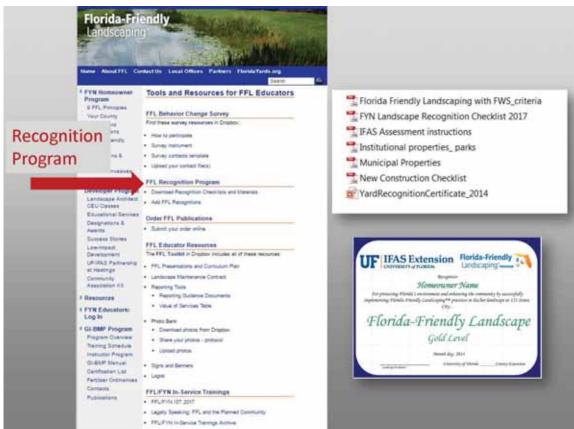
**Waterfront Tier**: (1 for silver, 2 for gold) (If site is not on the waterfront, credit can be given for satisfying all practices.)

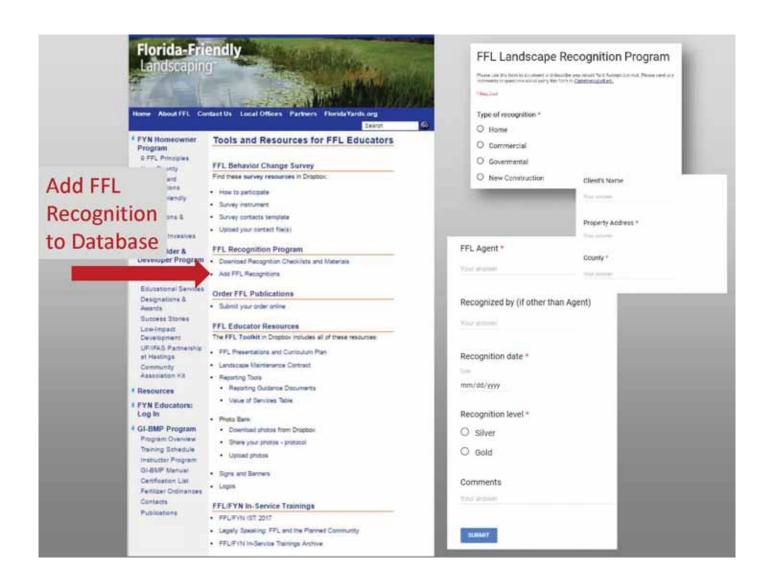
- Shoreline (riparian zone and littoral zones) is kept free of invasive exotic plant material. (p. 45)
- Seawalls, rip rap, or gabions are used where appropriate to control erosion. (p. 45)
- Plant material is located to provide at least a 10' low-maintenance zone to buffer, filter and prevent erosion. (p. 46)

Notes:			
Previous Review date (if applicable):			
Review Team Members Present:			
Is the applicant a Master Gardener?			
Was a landscape sign issued?			
Date certificate with cover letter issued:			
With permission, could the FFL program use the yard for training purposes?			
What phone numbers can you be reached at?			
Photos were taken?			
Reviewed by Extension staff member and date:			
Required Practices Met: Silver Gold No			
First Tier Practices Met: Second	Tier Practices Met:		
Third Tier Practices Met: Irrigation	on Practices Met:		
Waterfront Tier Practices Met:			
Recognition Level Awarded: Silver Gold N	Vone		

# Appendix B – How To Enter the Checklist Into the Online Database







# Appendix C – Landscape Evaluation Report

Institute of Food and Agricultural SciencesCounty Extension	Address: Phone: Extension Website:
Date:	
Dear,	

Thank you for your interest in the Florida-Friendly Landscaping<sup>™</sup> program. We enjoyed meeting you and touring your yard. You have a wide selection of plants and flowers, making your yard attractive and safe for birds and butterflies as well as making it visually appealing. You water only as necessary, are sparing with insecticide use, and let nature provide the nutrients in your landscape. You are following most of the Florida-Friendly practices and we commend you for your efforts!

During our wrap-up meeting we discussed several ideas that you may want to incorporate into your gardening practices to make your yard even more Florida-Friendly than it already is. They are:

- The Camphor tree in the front yard is on the UF/IFAS Assessment "Invasive Prohibited" list. If you can have it removed, that would be ideal. The remains of the tree should not be chipped for mulch, so please make sure the tree removal company is aware that it should be taken to the landfill rather than included with regular yard waste.
- You have mature shrubbery that is growing against the walls of your home. We recommend
  they be trimmed to create a 12-18-inch space between the bushes and the walls of the
  home. This improves airflow, reduces the possibility of disease, and helps prevent insect
  infestations.
- You said you wanted to remove some of your grass and replace it with a groundcover or another plant bed. We discussed installing some good ground covers like Perennial Peanut in the area under the tree in the front yard. Planting Plumbago or some other drought-tolerant plant at the end of your driveway might be a good alternative to having grass in that area. Once you decide what you want to put in each area, you should have your soil tested for pH levels at the UF/IFAS \_\_\_\_\_ County Extension Office. In the packet we gave you, there's a form you'll need to submit with your sample(s). This test is free, and if you include information about what you plan to install, they can help you determine if you need to add anything to the soil before planting. You can find information about pH tests at this site: (insert county website or edis.ifas.ufl.edu/ss494)
- You are effectively using yard waste as mulch throughout your yard. However, citrus is one of the few plants that should not be mulched because this practice may cause disease. Eliminating the leaves under the drip line will help keep your Satsuma orange tree healthy.
- Your small fish pond is a good source of water for birds. For birdbaths, we recommend
  changing the water every few days to ensure it's healthy for them to drink, and that it doesn't
  harbor mosquitoes. While it's not practical to do this with your pond, you can purchase
  mosquito dunks to put into the water. This will help prevent mosquitoes, and it isn't harmful

to the birds or fish.

- While bushes and trees provide good shelter for wildlife, you may want to consider installing a bat, bird, or bee house. Bats are a great mosquito control. Bird watching is an interesting and enjoyable hobby, and bees are invaluable as pollinators.
- You indicated during your phone interview that you don't regularly scout for yard pests or plant diseases. Many issues can be corrected if detected early enough. If you ever need assistance with identifying a specific yard pest or disease issue, you can call the \_\_\_\_\_\_ County Extension Office Monday through Friday between the hours of \_\_\_\_\_\_ to speak with a Master Gardener. If the problem cannot be diagnosed over the phone, you can bring a sample (in a ziplock or sealed clear plastic bag, please) to the office for an assessment. Ask the Master Gardener how much plant material is needed for diagnosis.
- We noticed the compost pile in the backyard. This is a great way to provide additional
  nutrients to your plants. We commend you on your composting efforts, and encourage you
  to continue. Turning the contents every week or two encourages faster decomposition and
  aeration, and adding water speeds up the process when there's not sufficient rainfall. Check
  out the following for information about how to maintain a compost pile: <a href="http://edis.ifas.ufl.edu/ep323">http://edis.ifas.ufl.edu/ep323</a>.
- You may wish to consider installing a rain barrel under the downspout on the side of your garage or under the roof of your house where runoff is heaviest. This will give you a good source of water for your potted plants as well as your plant beds (excluding edibles). Watch for a future class on rain barrels offered by the \_\_\_\_\_ County Extension Office.
- We did not see a rain gauge in your yard. If you do not have a way to measure the amount
  of rain you are getting, you might want to purchase one to help you determine when to
  provide supplemental water.

Thank you for the opportunity to see what you've accomplished, and for wanting to be a more Florida-Friendly gardener.

We will call you in six to eight months to conduct a brief survey to help us improve our yard review program. We look forward to hearing about your Florida-Friendly gardening successes when we call!

If you have any friends or family who would like a yard review, please forward their names and contact information to the name listed below.

Best wishes	for	future	garden	ing	success!
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Sincerely,

# Appendix D – Landscape Evaluation Report: Boiler Plate Language

## **Suggestions for Using This Document**

- 1. Save this boilerplate document (use the "save as" command) with a file name that includes the client's name and date of the review (e.g., "Robert Smith Recommendations, 3-4-15").
- 2. This document is arranged in the same order as the nine Florida-Friendly principles in the checklist. Please try to keep the client's recommendation letter in the same order. This facilitates the 9-12-month follow-up call and recording the client's actions as a result of the yard review.
- 3. As you work through the boilerplate document, delete the headings (*in bold print and underlined*) as you go. Delete these instructions when done.
- 4. Use **bullets** to separate each recommendation.
- 5. Don't use <u>all</u> the suggested paragraphs - use only the wording that fits your client's situation.
- 6. Please do not list the principles in the letter (e.g., "Right Plant Right Place"). The client has the Florida-Friendly Landscaping™ book and can reference it for more details. Provide page numbers as appropriate.
- 7. Review your checklist for recommendations discussed with client after the yard review, and use any of the suggested wording you feel is appropriate.
- 8. Focus on education, not recognition. Most clients do not receive a yard sign, and most are happy to hear our recommendations.
- 9. Please ensure you use a hyphen with "Florida-Friendly" and the trademark symbol with "Florida-Friendly Landscaping™."

## Opening Paragraphs

# If the Client Received Florida-Friendly Recognition (

Dear (Client Name),

Congratulations on your yard being officially recognized as "Florida-Friendly!" We enjoyed seeing the results of all you have done to make your yard both beautiful and Florida-Friendly.

## If the Yard Did NOT Qualify

Dear (Client Name),

Thank you for your interest in the Florida-Friendly Landscaping<sup>™</sup> program. We enjoyed meeting you and touring your yard. You are following most *(or "many" or "some")* of the Florida-Friendly practices and we commend you for your efforts.

# <u>Additional Samples of Positive Reinforcement Examples You May Wish to Use (but ONLY If Applicable):</u>

You have a wide selection of plants and flowers, making your yard attractive and safe for birds and butterflies as well as making it visually appealing.

We were impressed with the habitat you provide for the birds. You have many plants that provide food, and you have several sources of water for them to drink.

You have enough open areas around the house and throughout the yard to allow the rainfall to naturally permeate the soil rather than be directed into the street and eventually into the storm drains.

You water only as necessary, are sparing with insecticide use, and let nature provide the nutrients in your landscape.

You are effectively using rain barrels to recycle rain water and a composter to recycle your yard and kitchen waste.

#### **Lead Statement for Recommendations**

During our wrap-up meeting with you we discussed several ideas that you may want to incorporate into your gardening practices to make your yard even more Florida-Friendly than it already is. They are:

<u>OR</u>

Gardening in Florida is always a "work in progress" and we offer the following suggestions:

**OR** 

As we all know, there's almost always room for improvement. We have some recommendations to further strengthen your Florida-Friendly efforts:

<u>OR</u>

We also shared with you some additional areas for improvement that you may wish to implement to further strengthen your Florida-Friendly efforts:

# Principle 1: Right Plant, Right Place

Invasive Plants (Insert all plants found, Adjust statements if only one is found. The first paragraph may be used for "not recommended" plants and the second may be used for "prohibited" plants. Ensure you know the difference between these two designations, and check online when you create your recommendations. The designations for individual plants may change without notice.

As we walked through your yard we noticed XXXXXX and XXXXXXX. These plants are on the UF/IFAS Assessment "Invasive-Not Recommended" list. You may wish to consider removing these invasive, non-native plants and replacing them with plants on the Florida-Friendly list. The following website has numerous suggestions for you to consider: <a href="http://floridayards.org/fyplants/">http://floridayards.org/fyplants/</a>.

Unfortunately, as we discussed, you have XXXXXX (e.g., Chinese Tallow), an invasive plant on the UF/IFAS Assessment "Invasive – Prohibited" list. As we discussed, this plant should

be removed, cut up, bagged, and placed on the curb with your regular household garbage rather than with your yard waste.

# <u>Locations Match Plant Requirements (use the examples below if applicable or adjust wording to more closely match your client's situation)</u>

Aspidistra (cast-iron plant) is a shade-loving plant and you will see healthier and more vibrant growth if you move it to a shady area. (Note: use this as appropriate for any shade-loving plant that is in the wrong place.)

The XXXXXX tree in the back is too close to the fence (*or house or other tree*). It's a good practice to consider the mature size of any plant when you place it in your yard. Your trees are still small, so you might want to consider relocating them while they're young.

The XXXXXX tree in the back is planted too close to your house. XXXXXX normally grow XX to XX feet in height, but can reach up to XX feet. As they grow, the roots can cause serious damage to your foundation. Consider removing it while it's young.

We noticed some plants closer than 12-18 inches from the house. The University recommends that all plants be at least this distance from the home to prevent insect infestations and root interference with the foundation. Mature shrubbery should be at least 12-18 inches away from your walls and foundation. While it's not practical to consider moving them, you may want to trim them to provide some space between the bushes and the house. This may help to prevent insect infestations and possible damage to the home.

The lawn area to the right of your driveway is under too much shade to support St. Augustine grass. You may wish to consider using another type of groundcover in this area. Refer to another University of Florida publication, <a href="http://gardeningsolutions.ifas.ufl.edu/giam/plants\_and\_grasses/grasses\_lawncare/groundcovers.html">http://gardeningsolutions.ifas.ufl.edu/giam/plants\_and\_grasses/grasses\_lawncare/groundcovers.html</a>, for a list of publications that will help you determine the best groundcover solution for your shady area.

#### pH Test Within Past Year

You may submit a soil sample to the University of Florida for a soil nutrient test. You can find information about both tests at this site: http://soilslab.ifas.ufl.edu/

Trees and Shrubs Positioned to Improve Home's Heating/Cooling (Note: there's little the homeowner can do if mature trees are not positioned correctly. Most do not want to cut down healthy trees unless there's a danger to nearby structures. The paragraph below can be used for a client who plans to plant trees.

You said you are preparing to plant some trees in your yard. We recommend positioning them to the south or west of your home to provide shade during the summer months. If you plant deciduous trees, your home will also benefit from the sun's warmth during the winter.

#### Groundcovers Used to Prevent Erosion

You have some areas in your yard that need a groundcover to minimize possible erosion. Check out the following site for a number of publications to help you decide the best groundcover for each spot: <a href="http://gardeningsolutions.ifas.ufl.edu/giam/plants\_and\_grasses/grasses\_lawncare/groundcovers.html">http://gardeningsolutions.ifas.ufl.edu/giam/plants\_and\_grasses/grasses\_lawncare/groundcovers.html</a>.

#### **Principle 2: Water Efficiently**

Not More Than 50% of Irrigation is High-Volume (Assume what we see: drip tube, micro, soaker hose, bubblers are low volume; all others are high volume.)

See section 2d below for possible text.

#### Irrigation Used Only as Needed, in Compliance with Watering Restrictions

You have indicated you water your grass every other day (or you don't know when you may be watering). A copy of the local watering restrictions is with the material we gave you after your yard review..

#### Separate Irrigation Zones for Turf and Landscape Plants

If you need to replace any portion of your sprinkler system in the future you may want to consider replacing the high volume irrigation components with those that are more suited to the areas being watered. Generally, we don't recommend watering turfgrass and ornamental beds with the same sprinkler components. This is because most ornamentals and annuals prefer supplemental watering at the base of the plant (to prevent disease/fungus) while turfgrass can be safely watered from above. You may want to read this document for more tips: http://citrus.ifas.ufl.edu/sustainable\_liv/water\_outside.shtml.

#### Irrigation System Calibrated and Maintained

You said you aren't sure how much water your sprinklers are applying each time they run. The University of Florida recommends applying no more than 1/2 to 3/4 inches of water at one time. You can confirm this using a simple process that you can find on page 19 of the Florida-Friendly Handbook. This is the manual we gave you after we reviewed your yard. (Note: use this wording if the client is maintaining his/her sprinkler system.)

<u>OR</u>

You indicated that you use a lawn irrigation company to service your sprinkler system, but you weren't sure if the sprinklers were calibrated to apply no more than 1/2 to 3/4 inch of water at one time. You can confirm this using a simple process that you can find on page 19 of the Florida-Friendly Handbook. This is the manual we gave you after we reviewed your yard. (Note: use this wording if the client is unsure about calibration and has employed a company to maintain his/her sprinkler system.)

#### **Principle 3: Fertilize Appropriately**

#### <u>Landscape Fertilized At/Below Lowest Recommended Rate</u>

You said you are unfamiliar with how to determine how much fertilizer to apply. In addition to the information we left with you after our yard review, you can find more information at: <a href="https://edis.ifas.ufl.edu/ep353">https://edis.ifas.ufl.edu/ep353</a>.

#### Principle 4: Mulch

#### Known By-Product Mulch Used

If you do not have yard waste (e.g., pine straw or oak leaves) on site that can be used as mulch, the University of Florida recommends purchasing mulch that is a by-product of the lumber industry rather than harvested from live trees. Check out all the possibilities at: https://edis.ifas.ufl.edu/fr079.

#### Self-Mulching Areas Exist

We also discussed the advantage of leaving grass clippings on the lawn when it's mowed. Most mowers have a self-mulching mechanism that chops the grass into smaller pieces for optimum results. You may want to ask your lawn service to leave the clippings on the lawn instead of bagging them.

You have some fine oak (or pine, etc.) trees in your yard that would benefit from leaving the leaves (pine straw, etc.) where they fall, much like what happens in the wild. You can use any surplus leaves as mulch in your ornamental beds or work them into your compost pile.

#### 4c. Mulch Pulled Away From Base of Plants and Trees

Citrus is one of the few plants that should not be mulched because this practice may cause disease. Eliminating the mulch under the drip line will help keep your citrus trees healthy. (Note: use this wording if the client is mulching citrus.)

Several of your trees have mulch piled against the trunk, in some cases covering the root flare (we observed this at the maple tree in the front yard). This practice could cause problems with disease and insects. We recommend pulling the mulch at least 1-2 inches away from the trunks of all plants.

Along the same lines, if you wish to have mulch next to the foundation, the University of Florida recommends only light (1-2 inches deep) mulch within 12 inches of the house. All plants should be at least 12-18 inches from the home to prevent insect infestations and root interference with the foundation.

#### **Principle 5: Attract Wildlife**

You might want to consider installing more nectar and host plants for butterflies, bird and/ or bat houses (bats eat mosquitoes), and birdbaths to provide water for wildlife. These practices should attract interesting and beautiful creatures to your yard. More details are available in your Florida-Friendly Handbook and on the website.

#### **Host and Nectar Plants**

You indicated you wanted to know more about how to attract a variety of butterflies to your yard. Planting a mixture of different host and nectar plants will help you meet this goal. There's a great publication on this subject at: http://edis.ifas.ufl.edu/uw057.

#### Water Source for Wildlife

You might want to consider installing a bird bath or watering jar in your yard for the birds. Be sure to add fresh water every couple of days to ensure it's healthy for them to drink, and that it doesn't harbor mosquitoes.

#### Wildlife Shelters

While bushes and trees provide good shelter for wildlife, you may want to consider installing a bat, bird, or bee house. Bats are a great mosquito control. Bird watching is an interesting and enjoyable hobby, and bees are invaluable as pollinators.

#### **Principle 6: Manage Yard Pests Responsibly**

#### Landscaped Checked Regularly

Whenever you're in the yard, it's a good idea to check your plants for signs of insect damage or disease. Many problems can be fixed if treated early, and will require only spot treatment(s) to correct the issue. There are many Florida-Friendly remedies at: <a href="http://gardeningsolutions.ifas.ufl.edu/giam/maintenance\_and\_care/pesticides\_beneficial\_insects\_and\_ipm/ipm.html">http://gardeningsolutions.ifas.ufl.edu/giam/maintenance\_and\_care/pesticides\_beneficial\_insects\_and\_ipm/ipm.html</a>.

#### Low-Impact Techniques Used for Disease and Pest Management

We recommend that you discontinue applying broad-spectrum insecticides in your yard, and instead use low-impact or more pest-specific products only when a problem occurs. Please refer to pages 33-38 of The Florida Yards & Neighborhoods Handbook for more information about managing yard pests.

#### Client Can Identify Pest and Disease Issues or Brings Samples to Extension Office

If you need assistance with identifying the specific pest or disease issue,	you can call the
County Extension Office Monday through Friday between	to
speak with a Master Gardener. If the problem cannot be diagnosed over	the phone, you
can bring a sample (in a ziplock or sealed clear plastic bag, please) to the	e office for an

assessment. Ask the Master Gardener how much plant material is needed for diagnosis.

# Principle 7: Recycle

#### Grass Clippings Left on Lawn or Used on Site

The University of Florida recommends that gardeners leave their grass clippings on the lawn. This practice returns nutrients to the turf and saves on fertilizer.

#### Landscape Waste Used on Site

We encourage you to utilize some of your yard waste as mulch and/or compost. You have several deciduous trees that should provide great and inexpensive alternatives to purchased mulch.

#### **Compost Pile Maintained on Site**

You might want to look into composting as a way to enhance the soil for transplants and new plantings in your yard. Composting also enhances soil composition through the addition organic matter. Check out the following for more information: <a href="http://edis.ifas.ufl.edu/ep323">http://edis.ifas.ufl.edu/ep323</a>.

#### Compost Pile Kept Moist and Turned

We commend you on your composting efforts, and encourage you to continue. Turning the contents every week or two encourages faster decomposition and aeration, and adding water speeds up the process when there's not sufficient rainfall. Check out the following for information about how to maintain a compost pile: <a href="http://edis.ifas.ufl.edu/ep323">http://edis.ifas.ufl.edu/ep323</a>.

# **Principle 8: Reduce Stormwater Runoff**

#### Rain Barrel(s) or Cistern(s) Collect Rain

You may wish to consider installing rain barrels under one or more of your gutter downspouts. This will give you a good source of water for your potted plants as well as your plant beds (excluding edibles).

You may wish to consider installing rain barrels under the areas where your roof runoff is heaviest. This will give you a good source of water for your potted plants as well as your plant beds (excluding edibles).

#### Rain Gardens, Swales and Berms Catch/Filter Stormwater Runoff

The sloping area in the front yard near the street is always going to be a hard area to maintain. One thing you might want to consider is a mild terracing of the whole front five to six feet, making it a flower bed or other native plant area. This will encourage better water management, help prevent erosion, and reduce the mowing tasks in that part of the yard.

We recommend the installation of a berm about six to seven feet from the edge of the street

to help reduce the runoff (which can include fertilizer and grass clippings) from your front yard to the storm drain. As we discussed, this will require some grading, and perhaps stone or cinderblocks on the street side of the berm.

#### **Principle 9: Protect the Waterfront**

#### 10-Foot Maintenance-Free Zone

If your HOA requires that the grass in the no-maintenance zone be mowed, we recommend bagging the clippings and using them elsewhere in the yard. See page 46 of The Florida-Friendly Handbook for more information. If there's no HOA restriction, the recommendation is that there is no mowing, fertilizing, or pesticide application in this zone.

#### Invasive Exotic Plants Replaced w/Native Aquatic Plants

We noticed some grass growing into the water. We believe it may be torpedo grass, which is on the "not-recommended" list. You may wish to refer to the following site for more information: <a href="http://plants.ifas.ufl.edu/node/308">http://plants.ifas.ufl.edu/node/308</a>. It mentions some fine differences between torpedo grass and maiden cane, which is not considered invasive. Also see the picture below for comparison. While you should bring a sample to the extension office for confirmation, if it is torpedo grass it should be removed for the overall health of the pond, and may require a joint effort of all the neighbors whose yards end at the water.



## Miscellaneous Recommendations

#### 1. **Downspouts**

We discussed how you might re-direct the rain water from your downspout through the plant bed and onto the lawn. This will help minimize the amount of trash and plant material that might be washed from your driveway into the storm drain. (Note: adjust this wording to suit the situation at the client's home.)

The downspout on the (front, side, back) gutters should be redirected to a plant bed instead

of draining onto the driveway, which ultimately leads to the storm drain. You can do this by purchasing a flexible plastic hose made to connect with the downspout. This hose can then be directed wherever you wish.

#### 2. Pruning Practices

We observed some severe pruning on your crape myrtle trees in the front yard. This practice weakens the branches and increases the possibility of disease and insect invasion, so you may want to consider pruning them less.

You may wish to prune the Holly tree next to the house. It has co-dominant branches which may invite insects, disease, and breakage over time. We suggest cutting off the branch closest to the house.

There are two Oak trees in the side yard that have co-dominant trunks. As we discussed, this condition weakens the tree and may result in damage to your home or fence if one of the trunks separates during a storm. One of the two trees appears to be diseased. We recommend having a certified arborist examine both trees to determine what action should be taken for each.

We encourage you to prune your Yaupon tree and to evaluate other trees in your yard for possible pruning. This practice increases air flow through the plant and reduces branches that may rub against other branches, opening the tree to disease and insect infestation. (Note: adjust this wording to suit the situation at the client's home.)

#### 3. No Rain Gauge

We did not see a rain gauge in your yard. If you do not have a way to measure the amount of rain you are getting, you might want to purchase one to help you determine when you can turn your irrigation system off.

# 4. <u>No Automatic Shutoff Device or Device isn't Working (select appropriate wording below)</u>

You indicated your automatic rainfall shutoff device isn't working. You may wish to consider purchasing a new one. These devices, which have been required by law since 1991, can help conserve water resources (and eliminate over-watering), and you'll recoup the purchase expense pretty quickly through lower water bills.

<u>OR</u>

You may wish to consider purchasing an automatic rainfall shutoff device for your irrigation system. These devices, which have been required by law since 1991, can help conserve water resources (and eliminate over-watering), and you'll recoup the purchase expense pretty quickly through lower water bills.

# **Closing Paragraphs**

## 1. Florida-Friendly Recognition

Again, congratulations on having a Florida-Friendly yard! Thank you for the opportunity to review your yard and allowing us to provide suggestions to make it even more Florida-Friendly.

## AND (if applicable)

We also commend you for working with your Homeowners Association to better educate them about Florida-Friendly principles.

## 2. Yard Did Not Qualify

Thank you for the opportunity to see what you've accomplished and wanting to be a more Florida-Friendly gardener. We hope you find the booklet and other information we gave you helpful. Best wishes for future gardening success!

# Appendix E- Soil pH sample report



## UF/IFAS Analytical Services Laboratories Extension Soil Testing Laboratory

Wallace Building 631 PO Box 110740 Gainesville, FL 32611-0740 Email: soilslab@ifas.ufl.edu Web: soilslab.ifas.ufl.edu Phone #:352-392-1950

### Landscape And Vegetable Garden Test Report

Client Identification: Front Yard Set Number: E46553 Lab Number: E118670

Report Date: 26-Jan-18

Crop: Landscape Azaleas, Camellias, Gardenias, Hibiscus or Ixora

#### SOIL TEST RESULTS AND THEIR INTERPRETATIONS

Target pH: 5.5 This is the pH at which the above crop will grow at its optimum

pH (1:2 Sample:Water) 8.4 This is the pH of your sample in the water medium

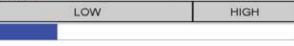
A-E Buffer Value: Buffer pH is the pH of your soil in Adams-Evans Buffer(A-E Buffer). This is done to

determine the lime requirement, which will help increase the soil pH to the target pH level desired by the crop. However since your samples' pH is higher than the target, the

AE buffer pH is not applicable.

#### AB-DTPA Extractable Nutrients

PHOSPHORUS (mg/Kg or ppm P) 7
POTASSIUM (mg/Kg or ppm K) 14
MAGNESIUM (mg/Kg or ppm Mg) 68
CALCIUM (mg/Kg or ppm Ca) 460



#### LIME AND FERTILIZER RECOMMENDATIONS

Crop: Landscape Azaleas, Camellias, Gardenias, Hibiscus or Ixora

Lime: 0.00 lbs per 1000 sq. ft.

Nitrogen: 1.10 lbs per 1000 sq. ft.

Phosphorous(P<sub>2</sub>O<sub>5</sub>): 0.30 lbs per 1000 sq. ft.

Potassium(K<sub>2</sub>O): 0.70 lbs per 1000 sq. ft.

Magnesium(Mg): 0.00 lbs per 1000 sq. ft.

The above recommendations for K and Mg are provided based on the crop needs since no interpretation for these nutrients was found using AB-DTPA extraction method. Nitrogen recommendation is based on research data not on any soil test. The soil has been determined to be calcareous in nature because of its pH(>=7.4). At this pH, AB-DTPA extraction method was found suitable. However, only Phosphorus(P) was calibrated. No calibration was possible for Potassium(K) and Magnesium(Mg). Therefore, the recommendations for K and Mg are provided solely for successful crop performance and yields. Nitrogen(N) recommendations are provided based on research data and not on a soil test. Research studies are underway at different locations in the state to identify an appropriate extraction method for improved interpretations and recommendations for these soils. At that time, the recommendations will be modified, as appropriate.

For further information, please contact:

Dr. Yuncong Li, soils specialist, UF/IFAS TREC-Homestead

18905 SW 280 St, Homestead, FL 33031 Email: Yunli@ufl.edu Fax: 305-246-7003 These interpretations and recommendations are based upon soil test results and research/experience with the specified crop under Florida's growing conditions. We do not test soil for N as there is no meaningful soil test for predicting N availability. Thus, the N recommendation was developed from research that measured response of the indicated crop to applied N fertilizer. If you expect significant nutrient release from organic sources such as crop residues or organic amendments, estimate the amount mineralized and subtract that amount from the fertilizer recommendations given below to arrive at crop needs.

UF/IFAS fertilizer and lime recommendations are advisory in nature and emphasize efficient fertilizer use and environmentally sound nutrient management without losses of yield or crop quality. It is generally assumed that the nutrients will be supplied from purchased, commercial fertilizer and that expected crop yields and quality will be typical of economically viable production. Growers should consider UF/IFAS recommendations in the context of their entire management strategy, such as return on investment in fertilizer and the benefits of applying manure or biosolids (sewage sludge) to their land. There is insufficient research available at present to support the use of UF/IFAS soil test results for environmental nutrient-management purposes. Such use is discouraged until correlation is proven.

Footnotes are printed wherever applicable. These footnotes are an integral part of fertilization recommendations. Please read them carefully.

Set Footnote(s): 650, 653, 654, 819

Client Identification: Back Yard Set Number: E46553 Lab Number: E118671

Report Date: 26-Jan-18

HIGH

Crop: Landscape Azaleas, Camellias, Gardenias, Hibiscus or Ixora

#### SOIL TEST RESULTS AND THEIR INTERPRETATIONS

Target pH: 5.5 This is the pH at which the above crop will grow at its optimum

pH (1:2 Sample:Water) 7.5 This is the pH of your sample in the water medium

A-E Buffer Value: Buffer pH is the pH of your soil in Adams-Evans Buffer(A-E Buffer). This is done to

determine the lime requirement, which will help increase the soil pH to the target pH level desired by the crop. However since your samples' pH is higher than the target, the

LOW

AE buffer pH is not applicable.

#### AB-DTPA Extractable Nutrients

PHOSPHORUS (mg/Kg or ppm P) 6

POTASSIUM (mg/Kg or ppm K) 18

MAGNESIUM (mg/Kg or ppm Mg) 40 CALCIUM (mg/Kg or ppm Ca) 687

LIME AND FERTILIZER RECOMMENDATIONS

Crop: Landscape Azaleas, Camellias, Gardenias, Hibiscus or Ixora

Lime: 0.00 lbs per 1000 sq. ft.

Nitrogen: 1.10 lbs per 1000 sq. ft.

Phosphorous(P<sub>2</sub>O<sub>5</sub>): 0.30 lbs per 1000 sq. ft.

Potassium(K,O): 0.70 lbs per 1000 sq. ft.

Magnesium(Mg): 0.00 lbs per 1000 sq. ft.

The above recommendations for K and Mg are provided based on the crop needs since no interpretation for these nutrients was found using AB-DTPA extraction method. Nitrogen recommendation is based on research data not on any soil test. The soil has been determined to be calcareous in nature because of its pH(>=7.4). At this pH, AB-DTPA extraction method was found suitable. However, only Phosphorus(P) was calibrated. No calibration was possible for Potassium(K) and Magnesium(Mg). Therefore, the recommendations for K and Mg are provided solely for successful crop performance and yields. Nitrogen(N) recommendations are provided based on research data and not on a soil test. Research studies are underway at different locations in the state to identify an appropriate extraction method for improved interpretations and recommendations for these soils. At that time, the recommendations will be modified, as appropriate.

For further information, please contact:

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18905 SW 280 St, Homestead, FL 33031 Email: Yunli@ufl.edu Fax: 305-246-7003

#### INTERPRETATION OF MICRONUTRIENT SOIL TESTS

The IFAS Extension Soil Testing Laboratory currently offers a soil test for three micronutrients, copper (Cu), manganese (Mn), and zinc (Zn). Interpretations in terms of plant needs of the particular nutrients are still quite tentative. They are presented here with the understanding that other criteria such as crop production records and observation of deficiency symptoms should be used along with the test results in reaching the management decision concerning micronutrient fertilization.

Interpretation of extractable Cu, Mn, and Zn depends on the soil pH. The critical soil levels for these nutrients increase with pH for crops grown on acid sandy soils of Florida. Micronutrient availability in the alkaline pH range is better evaluated with a plant tissue test or with soil test extractants developed especially for alkaline soils.

Indiscriminate use of micronutrient soil tests should be avoided. However, if plant performance has been less than optimum in the past and the soil test levels are below those shown in the tables, fertilization with the respective micronutrients may be indicated.

#### COPPER

In Florida, Cu deficiencies have been generally confined to soils high in organic matter and so-called "new ground" just coming into cultivation in the flatwood areas. Known Cu phytotoxicity occurs in citrus groves and vegetable crop areas where Cu applied in fungicides and fertilizers has accumulated in the soil over the years. Liming to pH 7.0 is the simplest means of overcoming phytotoxicity.

Table 1 provides guidelines for interpreting the IFAS Micronutrient Soil Test values for extractable Cu in mineral soils. Dilute acids are poor extractants of Cu on organic soils and do not give reliable estimates of crop responses. The IFAS Soil Testing Lab does not presently provide a Cu soil test for organic soils.

Application of 3 to 5 pounds elemental Cu per acre (as copper sulfate or finely ground copper oxide) will correct Cu deficiencies in most crops growing on mineral soils. Mixing these Cu sources with macronutrient fertilizers presents no agronomic problems, provided segregation of the materials is avoided. A single Cu application may be sufficient for several years. Do not repeat this application until soil or tissue tests indicate a need for Cu. Copper added to soil is there "forever" and Florida already has too many cases of soils with phytotoxic levels of Cu. Fertilizer Cu should not be applied to mineral soils where Cu will be used as a pesticide.

Table 1. Tentative interpretation of extractable Cu in mineral soils

	Soil pH Minerals Soils Only		
-	5.5-6.0	6.0-6.5	6.5-7.0
·		ppm	
Level below which there may be a crop response to applied Cu	0.1-0.3	0.3-0.5	0.5*
Level above which Cu phytotoxicity may occur	2.0-3.0	3.0-5.0	5.0**

<sup>\*</sup>If in doubt about copper nutrition of crop, get a tissue test

#### MANGANESE

There has been some success in predicting crop response to fertilizer Mn with extractable Mn. Lack of success in some cases has resulted from the complex nature of soil Mn and the many factors that affect its uptake by plants. Levels in table 2 are suggested as a guide for interpreting extractable Mn in mineral and organic soils.

Application of 8 to 10 pounds elemental Mn (as manganese sulfate or manganese oxide) per acre in banded fertilizer is recommended when the soil test levels are below those shown in Table 2. Broadcast applications are less effective and the rate should be increased to 20 or 30 pounds Mn if the fertilizer is broadcast. Uptake of Mn is generally best when Mn is banded with acid forming fertilizers. Field crops most likely to give a yield response to applied Mn in Florida are soybeans, small grains, and irrigated corn. Sugarcane grown on organic soils having pHs above 6.5 will also respond to banded Mn fertilizer.

#### ZINC

Table 2 presents a guide to interpretation of extractable Zn in both mineral and organic soils. Where Zn fertilization is needed, application rates may vary considerably with crop and Zn source but generally are around 5 to 10 pounds Zn per acre. For tree crops, use tissue tests to determine if Zn fertilization is needed, and it is known that no Zn is applied in the spray program.

Table 2. Interpretive guide to extractable Mn and Zn

	Soil pH Minerals Soils Only		
·-	5.5-6.0	6.0-6.5	6.5-7.0
·-		ppm	
Level below which there may be a crop response to applied Mn	3-5	5-7	7-9
Level below which there may be a crop response to applied Zn	0.5	0.5-1.0	1.0-3.0

The critical values shown in Table 2 are higher than those used in other states of the Southeastern U.S. and reflect a significant "margin of safety" in interpretation of the test results. These critical levels may be modified as results from field trials justify such changes.



## UF/IFAS Analytical Services Laboratories Extension Soil Testing Laboratory

Wallace Building 631 PO Box 110740 Gainesville, FL 32611-0740 Email: soilslab@ifas.ufl.edu Web: soilslab.ifas.ufl.edu Phone #:352-392-1950

Note #	Recommendations
650	Indicated fertilizer amounts, coupled with nutrients already in the soil, will satisfy the crop-nutrient
	requirement for this growing season. Fertilizer and water management are linked. Maximum
	fertilizer efficiency is achieved only with close attention to water management. Supply only enough

requirement for this growing season. Fertilizer and water management are linked. Maximum fertilizer efficiency is achieved only with close attention to water management. Supply only enough irrigation water to satisfy plant requirements and minimize leaching conditions.

Established trees (more than three to five years since transplanting) do not need routine fertilization.

For recently-planted trees, broadcast fertilizer within a diameter of 1.5 times the dripline diameter.

Broadcast P2O5 either in one application or as half the recommended amount in each of two applications during the growing season. To minimize leaching losses, broadcast N and K2O in small increments throughout the growing season. Schedule one application every 12 weeks (three times per growing season), adding 33% of the recommended amount of N and K2O at each application. To insure equal coverage when fertilizer rates are small, blend all compatible fertilizers.

The pH of this soil is quite high. If this is a natural condition (i.e. if it is not from the over-application of lime), it is generally impractical to lower the soil pH with soil ammendments. Use plant species that are tolerant of high soil pH.

SetNum: 46553

Lab Number	Sample Identification	Copper	Manganese	Zinc	Organic Matter	Electrical Conductivity
		mg/kg in the soil			%	dS/m
E118670	Front Yard	1.56	0.17	2.61		
E118671	Back Yard	2.74	0.04	5.32		

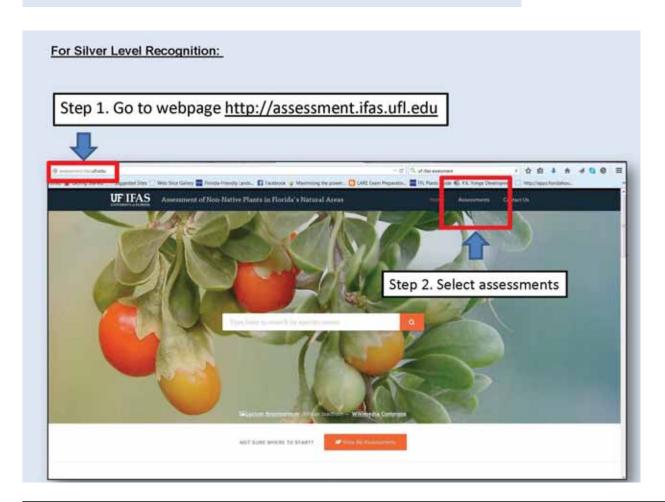
# **Appendix F- IFAS Assessment Instructions**

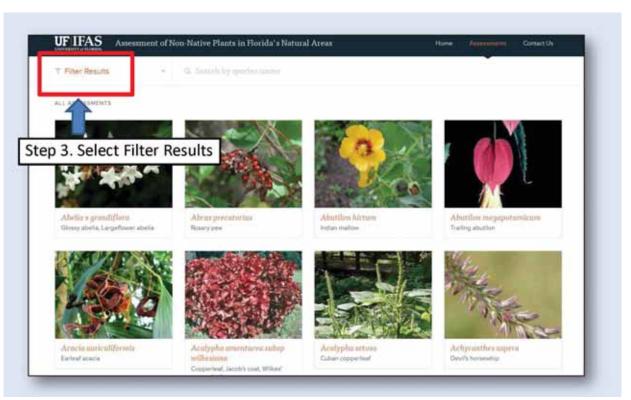
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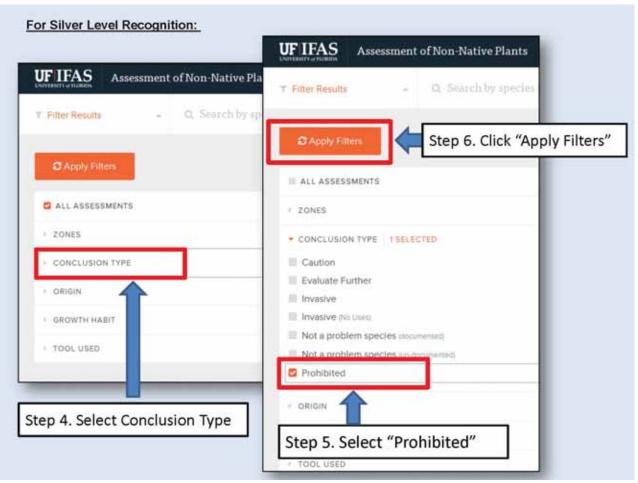
\*must not contain any plants found on the current UF/IFAS Assessment "Prohibited" list.

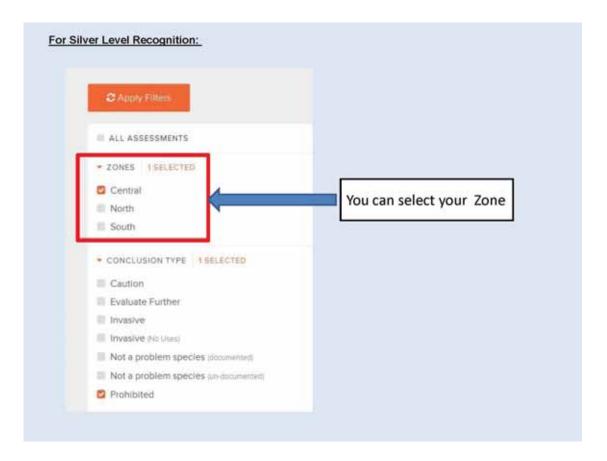
Use the following link to get to the "Prohibited" List: http://assessment.ifas.ufl.edu/assessments/?types=24208

> ...Or follow the directions on the next page to get there from the Assessment home pages









# **Gold Level Recognition Prerequisites:**

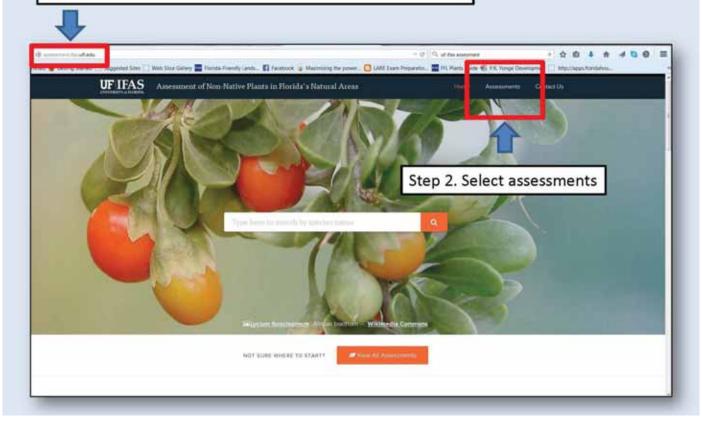
\* must not contain any plants found on the current UF/IFAS Assessment "Invasive-Not Recommended" list

Use the following link to get to the "Invasive-Not Recommended" List: <a href="http://assessment.ifas.ufl.edu/assessments/?types=1080,1">http://assessment.ifas.ufl.edu/assessments/?types=1080,1</a> <a href="http://assessments/?types=1080,1">074,24208</a>

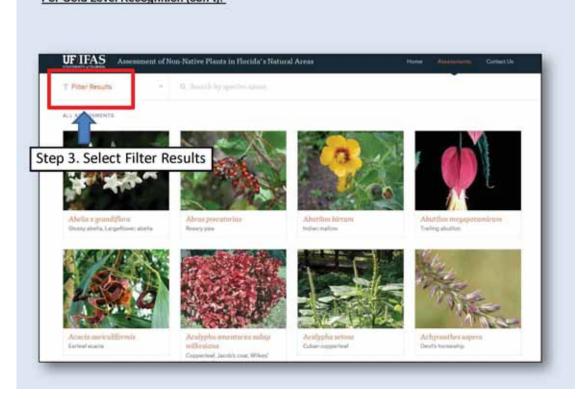
...Or follow the directions on the next pages to get there from the Assessment home page

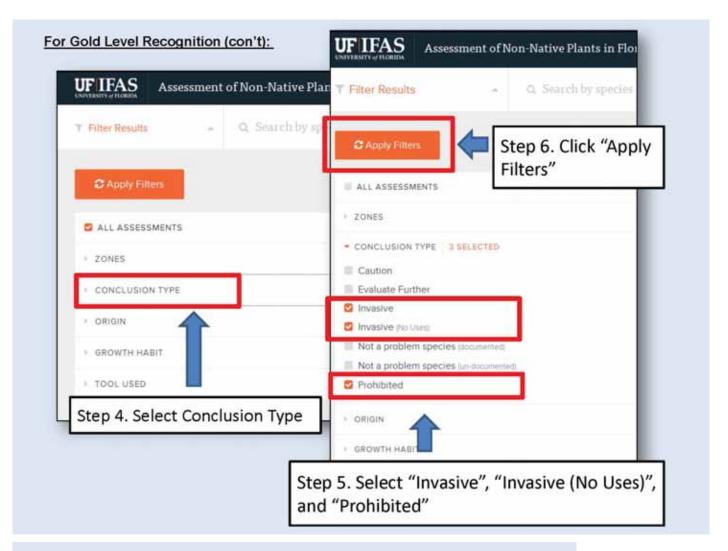
## For Gold Level Recognition:

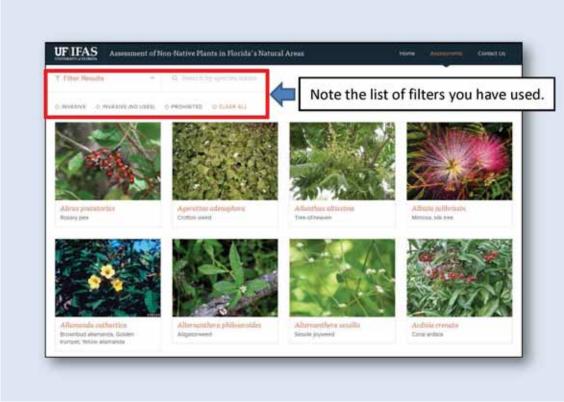
# Step 1. Go to webpage <a href="http://assessment.ifas.ufl.edu">http://assessment.ifas.ufl.edu</a>



## For Gold Level Recognition (con't):







# Appendix G-Online Resources





# References

#### **UF/IFAS References:**

- The Florida Yards & Neighborhoods Handbook, 5th ed. (2015)
- The Florida-Friendly Landscaping™ Guide to Plant Selection & Landscape Design (2010)
- The Florida Lawn Handbook (2005)
- The Master Gardener Handbook: North and Central Florida (2008)
- Master Gardener Handbook: South Florida (2008)
- Questions and Answers: 2009 Florida-Friendly Landscaping™ Legislation
- Frequently Asked Questions about Landscape Irrigation for Florida-Friendly Landscaping Ordinances
- Frequently Asked Questions about Landscape Fertilization for Florida-Friendly Landscaping Ordinances
- Enviroscaping to Conserve Energy: a Guide to Microclimate Modification A.W. Meerow and R.J. Black

Florida-Friendly Landscaping™

## **PLANT GUIDE**

Find the Right Plant for the Right Place Anytime, Anywhere

ffl.ifas.ufl.edu/plants



# The Florida-Friendly Landscaping™ Program Landscape Advisor's Manual





