

Micro-plastics have big presence in Coastal waters

http://blogs.ifas.ufl.edu/global/2016/12/0 2/microplastics-big-presence-coastalwaters/

GAINESVILLE, Fla. — Each time you do a load of laundry, you may inadvertently send tiny pieces of plastic to a nearby lake or ocean, according to Maia McGuire, Florida Sea Grant agent with the University of Florida Institute of Food and Agricultural Sciences Extension.

That's because when we wash synthetic fabrics, such as rayon and spandex, plastic threads get washed out with the rinse cycle and sent to a wastewater treatment plant, McGuire said. These threads are a kind of micro-plastic called microfiber. Like all micro plastic, microfibers are less than 5 millimeters in size—less than the width of a pencil eraser. Because they are so small, microfibers pass through many filters used in treatment plants and end up in lakes and oceans.

A little over a year ago, the Florida Microplastic Awareness Project, a citizen science project that has trained volunteers throughout Florida to gather data about micro-plastics in coastal waters was formed. So far, volunteers have collected and analyzed 770 water samples at 256 locations, McGuire said.

These citizen scientists found an average of eight pieces of plastic per sample. 82 percent of plastic found was microfiber, McGuire said.

"When I started, I knew we would find plastics, and I thought we would find more plastic fragments and microbeads — plastic beads found in personal care products that have gotten a lot of attention lately as a source of plastic pollution," McGuire said. "What surprised me was that microfibers were by far the most common type of micro plastic we came across."

"I wanted to find a way to help people understand that this [is] a local issue and that there are things we can do as Floridians to help," McGuire said.

Like larger pieces of plastic, micro-plastic can affect marine life, McGuire said. Plastics tend to absorb toxins floating in the ocean, and over time, high concentrations of these chemicals can build up on plastic surfaces. Furthermore, some plastics are manufactured with substances that can do harm to marine life. When animals ingest plastic, toxins can enter their bodies and may move up the food chain." (That's us!)

So, don't scoff at your water bill. They are trying to do their best at protecting you from things you can't even see.

Learn more about the Florida Microplastic Awareness Project and how to get involved at plasticaware.org. FMAP was funded by a 2015 grant from the National Oceanic and Atmospheric Administration's Marine Debris Program.

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Planting Calendar

http://solutionsforyourlife.ufl.edu/lawn_and_garden/calendar/pdfs/January_Central.pdf

Frost or freezes are likely in January and February. Be ready to cover tender plants to minimize damage and make sure covers extend all the way to the ground.

You get a break from some maintenance since lawns and landscape plants are dormant and need minimal irrigation. But gardening is a give-and-take proposition and there's always other work to do.

<u>January</u>

Camellias and deciduous fruit trees should be planted now while they are dormant. This will give roots time to develop before the warm and dry spring months.

To control scale on citrus, shrubs, camellias, and deciduous fruit trees, apply horticultural oil while plants are dormant.

Prune non-spring flowering shrubs and trees this month to improve form.

Crape myrtles do not require pruning

and such action could cause serious damage to the plant.
Only remove seed pods,



crossing branches and small twiggy growth.

Now is also the time to start any spring **veggie seeds**. If directly planted in the garden, set up or plan on some type of frost protection – just in case.

<u>February</u>

Bedding Plants: To add color to the winter garden, plant masses of petunia, pansy, and snapdragon.

Bulbs: Amaryllis is a popular plant for the holiday season. Force it to bloom now or plant outdoors for spring.



Herbs: Plant herbs that thrive in cool weather. Some to try are parsley, thyme, sage, dill, fennel, and cilantro.

Poinsettias: Now's the time to get those holiday plants in the ground: full sun and water daily until established.

Vegetables: Begin planting warm season crops this month. Bean, pepper, cucumber, tomato, and squash can be started while temperatures are cool.

Cold protection: Prepare now to protect tender plants should cold weather threaten.

Soil Test: A yearly soil test can help you keep your plants happy and growing. pH tests are done at the Seminole County Extension Service.

March

Replace declining winter annuals with varieties such as angelonia, gazania, and salvia that will provide color now and into the summer months. Caladiums can go in now for a showy tropical display all summer.

It's time for Herbs and Vegetables! In addition to their culinary value, many herbs are ornamental and attract butterflies to the garden.

Warm season crops such as cucumber, eggplant, and summer squash should be planted now for late spring harvest.



Azaleas: If azaleas need pruning to shape or produce a fuller plant, do it

just after plants finish blooming.

Prune **spring flowering trees** and shrubs after blooming: Prune after the last flowers fade but before new buds set in mid to late summer.

Prune other shrubs and trees when new growth begins: The end of the dormant season is a good time to prune many trees and shrubs. Cold damaged shrubs can be pruned back to where new growth appears.

Don't forget to mulch organically.

Plants and Grasses

http://sfyl.ifas.ufl.edu/lawn_and_garden/plants_and_grasses/

Whether you're looking for colorful flowers, choosing a lawngrass, or adding a tree to your landscape, this section can help you find information about plants that are common in Florida yards.

This page will feature a section of this web link in order to illustrate and help you navigate through the vast collection of researched data for the most current advice available.

Choosing Plants for Your Yard

http://edis.ifas.ufl.edu/pdffiles/EP/EP41600.pdf

A healthy environment for one plant may not be suitable for another. Choose a variety of plants that will flourish in your yard.

You live in Gardening Zone 9b. The "b" indicates a warmer temperature difference between North Florida but not as warm as Miami. Seminole County is *sub-tropical*: we can successfully grow some adaptable tropical plants but less accommodating plants will either burn up from the heat or wither without sufficient, continuous warm temperatures. In other words, plants that do well in Tallahassee or Miami may not do very well here. Micro-climates will also affect your success.

http://gardeningsolutions.ifas.ufl.edu/design/ten-planning-tipsfor-design.html

Microclimates

Every landscape has microclimates that are based on the amount and length of sun and shade exposure the area receives. A microclimate can also be created by a nearby natural water source, hills or urbanization. This could result in colder or warmer temperatures in your landscape than your neighbor or town. Get to know your temperature and light areas.

Invasive Plants

Invasive plants are non-native plants that form expanding populations in natural areas and other plant communities with which they were not previously associated (Langeland 2012). Invasive plants can cause ecological impacts, such as displacing native plants and associated wildlife or altering natural water flow and fire patterns.

http://edis.ifas.ufl.edu/pdffiles/EP/EP46800.pdf (includes a great table comparing invasive species with a similar native and non-invasive, non-natives that will fill your needs).

This is where reading the plant information tag on the nursery pot is vitally important. Lantana is just ----- Lantana, right? Nope. There is a popular version of Lantana that will spread and choke out everything else and getting rid of it is a nightmare.

Some invasives actually *poison* **the wildlife** you are trying to attract. An example of this is **Red Passion Vine:** http://www.butterfly-fun-facts.com/gardening-plants/host-plants/passion-vine-species-that-are-safe-for-caterpillars/



Ornamental Grasses

http://edis.ifas.ufl.edu/pdffiles/EP/EP23300.pdf

So many choices: the desired height; seasonal interest; type or color of ornamental grasses. Remember, the way a grass looks in a pot at the garden center may not reflect the ultimate appearance or size it will have once established in the garden.

Read the valuable information provided by the link above that



advises on best choices and problem plants like the Japanese Blood Grass (Imperata cylidrica) that has been banned in the

state of Florida and is among the world's worst weeds.

Gardening Ideas

Tomato Bucket - yet another version

Drill holes in the *bottom rim* of a deep bucket and a second row up about 10 inches from the bottom.

Bury the bucket to where the top holes are just barely above the ground. Add two shovels full of compost to the bucket, then fill the bucket up with water. Cover the top of the bucket with a fine mesh, screening or even pantyhose to keep out the mosquitoes. Plant 4 tomato plants *around* the bucket.



Keep bucket filled with water. You can add a light amount of water-soluble fertilizer to the water once a week if your soil is lacking nutrients, but do not over-fertilize. Read the directions on the package.



NOTE: Every little hair on the tomato stem is a potential root. If you want more tomato plants, clip out some of the "suckers" and plant them in starter soil. Be careful: tomato flowers are produced at the tips so you don't want to knock them around anymore than you have to.

Gardening Tips

Here are some of the latest tips and tricks from Paul James, host of Gardening by the Yard:

- To prevent accumulating dirt under your fingernails
 while you work in the garden, draw your fingernails
 across a bar of soap and you'll effectively seal the undersides of your nails so dirt can't collect beneath them.
 Then, after you've finished in the garden, use a nailbrush
 to remove the soap and your nails will be sparkling clean.
- Turn a long-handled tool into a measuring stick! Lay a long-handled garden tool on the ground, and next to it place a tape measure. Using a permanent marker, write inch and foot marks on the handle. When you need to space plants a certain distance apart (from just an inch to several feet) you'll already have a measuring device in your hand.
- To have garden twine handy when you need it, just stick
 a ball of twine in a small clay pot, pull the end of the
 twine through the drainage hole, and set the pot upside
 down in the garden. Do that, and you'll never go looking
 for twine again.
- Little clay pots make great cloches for protecting young plants from sudden, overnight frosts and freezes.
- Got aphids? You can control them with a strong blast of water from the hose or with insecticidal soap. But here's another suggestion, one that's a lot more fun; get some tape! Wrap a wide strip of tape around your hand, sticky side out, and pat the leaves of plants infested with aphids. Concentrate on the undersides of leaves, because that's where the little buggers like to hide.
- The next time you boil or steam vegetables, don't pour the water down the drain, use it to water potted patio plants, and you'll be amazed at how the plants respond to the "vegetable soup."

Horticultural Services

Working for you and with you

Soil Testing

The University of Florida recommends that you test your soil every season in order to maintain optimal results.

http://edis.ifas.ufl.edu/ss494

The Master Gardener Help Desk will test the pH of your soil in the office: \$2.00 per sample. Call for instructions or request a copy of the brochure that fully explains the proper way to collect samples: 407-665-5550.

For a more comprehensive soil test, the Help Desk personnel will provide you with the requirements and cost to send your sample(s) to the University of Florida. Weekdays: 9 am – 12 pm AND 1 pm – 4 pm 407-665-5550

Master Gardener Help Desk

An experienced Master Gardener will help solve garden problems through discussion, knowledge and computer research. Other services include, but are not limited to:

- Plant Problems: bring us a sample of your plant, including the flower and the pest.
- Plant identification and care
- Irrigation questions and solutions
- Bug and treatment identification
- The Help Desk has a wide range of FREE printed copies of University of Florida IFAS publications.
- PLEASE NOTE: At this time, we are not equipped to perform house calls.

Classes

The Extension Service continually offers specific classes relevant to the season and needs of the community.

Class offerings include Vegetable Gardening; Rain Barrels; Hydroponics; butterfly gardening and much more!

School Gardening



The Master Gardeners have launched an extensive onsite interactive school gardening program.

Master Gardener Expo: 3/4/2017

MARCH 4, 2017: Held in the spring of each year. Includes local horticulture vendors and craftsmen; food; popular gardening speakers; demonstrations; children's section, etc. To be held at the Seminole County Extension Service Complex: County Home Road, Sanford (across from the County Fire Station).

Great fun!

Annual Plant Sale

This is an event that residents look forward to each year! It offers a huge array of beautiful locally grown plants and generous donations from local nurseries.



Seminole County Garden Walk

A neat opportunity to visit extraordinary private gardens throughout the county. Residents open their gardens to the public for a day. A printed guidebook includes a map of the location of each garden. You choose which gardens you want to see. A Master Gardener stationed at each garden will answer any questions you may have.

Theme & Demonstration Gardens

- Micro Irrigation: The Florida Friendly Landscaping Florida Native Plant garden, Butterfly garden and the vegetable garden at the Seminole County Extension.
- Butterfly/Pollinator Garden at the Seminole County Extension complex: This garden includes a small pond and ground bee houses.
- Florida WaterWise Garden Located at the Extension Service complex.

"Ask a Master Gardener" booth at special events

You will often find this service at local municipal events such as May Day; Arbor Day; Plant Sales; Expos/community celebrations, and garden related retail locations. If your community or business would like to have an "Ask a Master Gardener" booth at your event, contact the extension service: 407-665-5550.



Taryn Sudol, FFL Agent Seminole County Cooperative Extension

In case you were wondering: A Fertilizer Q & A

Why should you tell me how to fertilize?

Good question! We can help you choose what fertilizer to use, when to apply it and how much you need, but first you should consider if your objectives are the same as FFL's. While fertilizer applications help to supply nutrients that are essential to your plants' and grass' growth, just a little bit too much fertilizer can critically impair our water bodies. If you choose to have turf grass, we want it to be healthy. Not only is healthy turf grass attractive, but it has the strongest root system and best erosion control capacity. Fertilizers can increase turf's growth and resilience. Our second objective is to keep our waterbodies healthy. Improper fertilization can impair our lakes, ponds, and streams. If you want healthy grass and healthy waterbodies, we are on the same team.

Secondly, proper fertilization depends on many factors that we have had to study to perfect. What grass type do you have? What plants or water features are nearby? What time of year is it? Have insects or diseases impaired your grass? What type of fertilizer should you buy and once you bought it, how much should you put down? All of these factors amount to an individualized treatment. As you can see, a fair amount of research goes into proper fertilization. Rather than figure it out on your own, we have the answers ready for you!

How does fertilizing my yard affect our lakes?

You may not live close to a waterbody and yet every one of us is connected to one. All of our land is broken up into watersheds. The land within a watershed drains to one waterbody. If we're not careful, the fertilizer we used for our turf will instead wash away into a pond, lake, or stream. Fertilizers have multiple nutrients; two main ones are nitrogen and phosphorus. In the water, nitrogen and phosphorus feed algae and aquatic plants. Enough nitrogen and phosphorus in the water will fuel nuisance levels of algae and aquatic

weeds. Fertilizing appropriately wherever you live will limit the nutrients that enter our waterways.

What difference does slow-release and quick-release nitrogen make?

Nitrogen comes in several forms both in nature and what we synthetically produce in factories. Some nitrogen forms are immediately available for plants to use; we call them "quick-release". Other forms of nitrogen are locked up in some way so that it takes more time for the nitrogen to become available. These are "slow-release" products. Our turf is much better at using nitrogen in small doses over time rather than using all the nitrogen in one high application. If we have excess nitrogen that the turf hasn't absorbed, this excess finds its way to waterbodies. We found that slow-release products support healthy turf and reduce the amount of nitrogen that reaches the water.

Do we have an algae problem?

Sadly, but definitely, yes! Algae needs water, light, nitrogen, phosphorus and other nutrients to grow. In Seminole county, our waterbodies are impaired with too high nitrogen and phosphorus levels. You can learn about Seminole County's lake health at Seminole County's lake health at <a href="Seminole.W

Gardening and Landscaping Resources

Seminole County Extension Residential Horticulture

250 W. County Home Road Sanford, FI 32773 407-665-5550

www.seminolecountfl.gov/extensionservices

Located at the intersection of Hwy. 17-92 and County Home Road, across from the Seminole County Fire Station

SEMINOLE GREENTHUMB

Free Quarterly Newsletter

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Useful websites

University of Florida IFAS-Extension
http://solutionsforyourlife.com
http://edis.ifas.ufl.edu
http://hort.ifas.ufl.edu
http://fyn.ifas.ufl.com

To view Monthly Planting Calendar:

Florida Gardening Calendar - UF/IFAS Extension: Solutions for Your Life Vegetable Gardening:

http://edis.ifas.ufl.edu/pdffiles/VH/VHo2100.pdf

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COOPERATIVE EXTENSION WORK IN AGRICULTURE, HOME ECONOMICS, STATE OF FLORIDA, IFAS, UNIVERSITY OF FLOR-IDA, U.S. DEPARTMENT OF AGRICULTURE AND BOARDS OF COUNTY COMMISSIONERS COOPERATING

Watering Schedule

Restrictions and Tips

November 6, 2016 - March 2017

THESE RESTRICTIONS ARE MANDATORY IN SEMINOLE COUNTY AND INCLUDE THOSE ON PRIVATE WELLS OR LAKES, ETC. THESE RESTRICTIONS apply to everyone in Seminole County who uses water for lawn and landscape irrigation, regardless of whether the water comes from a private well, surface water or a water supply utility.

NO WATERING BETWEEN 10 a.m. TO 4 p.m. ANY DAY

Seminole County returns to one (1) day per week landscape irrigation starting November 6, 2016. During the cooler weather months, less water is needed in the landscape. The water restrictions are MANDATORY for all water sources, including wells, except for reclaimed water which is twice (2) a week year round.

- Residential customers with **Odd** street addresses water on Saturdays.
- Residential customers with Even street addresses water on Sundays.
- Non-residential customers water on Tuesdays.

Reclaimed water customers may water two times a week according to your address year round (Follow the odd, even schedule for Daylight Saving Time) These restrictions are mandatory in Seminole County and include those on private wells or lakes, etc.

No watering between 10 a.m. to 4 p.m. any day These restrictions are mandatory in Seminole county and include those on private Wells or lakes, etc.

If you see Watering Violations, report them!

- Watering is allowed at any time with a hand-held hose provided it is fitted with an automatic shutoff nozzle.
 This applies to all sources of irrigation water.
- Personal vehicle washing allowed only if you use a hand-held hose fitted with an automatic shutoff nozzle.
- Newly planted landscaping may be irrigated any day between the hours of 4:00 PM and 10:00 AM for the first 30 days following installation.

http://www.seminolecountyfl.gov/departments-services/environmental-services/water-conservation/watering-restrictions.stml

Community Calendar

Classes, Community Events and CEU courses

http://www.seminolecountyfl.gov/departments-services/leisure-services/extension-services/

COMMERCIAL

The Seminole County Commercial Horticulture Agriculture program provides education and training based on the latest research from the University of Florida.

CEU classes

http://www.seminolecountyfl.gov/departments-services/leisure-services/extension-services/commercial-resources/
http://sfyl.ifas.ufl.edu/education/index.shtml

Training & CEUs

Many training programs, certification opportunities, and continuing education units (CEUs) are available through Extension, often in conjunction with FDACS and the USDA. Get information about the courses and materials offered for professionals in Florida's agriculture, building construction, childcare, nutrition, horticulture, and pest control industries.

Agricultural Production

Building Construction & Development

Child Care

Food & Nutrition

Horticultural Production

Pest Control & Pesticide Licensing

Short Courses

More online interactive training modules and videos are available (for free or for sale) through Extension Continuing Education Solutions.

- For information about training programs available for gardeners, naturalists, and beekeepers, see Nonprofessional Programs. http://solutionsforyourlife.ufl.edu/education/nonprofessional.shtml
- For personal assistance or information about the Extension services and courses offered in your area, contact your county Extension office. 407-665-5550
- For information on college-credit courses, certificates and degrees at either the undergraduate or graduate level offered by University of Florida see Distance Learning: http://www.distance.ufl.edu/