A weed in a home landscape is defined as a plant in an undesirable location that is unusually persistent. This may include an undesired plant or a desired plant that has outgrown its original space or desired boundary. Numerous strategies can be utilized as part of a home weed control program. Many homeowners and gardeners are interested in managing weeds in their landscapes and gardens without the use of chemical herbicides. A nonchemical approach is possible but requires more planning and effort to be successful. There are multiple options described below and homeowners are most likely to achieve the desired results if they incorporate more than one approach into a management plan. There are many benefits to nonchemical approaches, including lower risk of damage to non-target plants, decreased costs, and the opportunity to more frequently scout the landscape for potential problems. To adequately manage weeds without herbicides requires frequent and consistent monitoring. Homeowners should take the time to walk through their property on a regular basis and identify problematic areas or weeds that need to be addressed. A basic knowledge of the weed species present around the home will help identify the best management approach. In addition, home owners may want to consider modifying areas of their landscape where weeds are a persistent problem. It is important to maintain weed populations at the lowest level possible to prevent re-infestation. Established perennial weeds produce vegetative reproductive parts such as roots, rhizomes, stolons, or tubers. These structures facilitate rapid spread, make them difficult to kill, and enable quick population rebound. Annual weeds do not produce vegetative reproductive parts but will flower and produce large numbers of seeds that may greatly increase future problems. For example, annual grasses are capable of producing several thousand seeds per plant, while some annual broadleaf weeds are capable of producing tens of thousands of seeds per plant. Both annual and perennial weeds are typically easier to control when they are small and prior to flowering. Timely and routine monitoring and weed management are essential to maintain low levels of troublesome weeds.
Below are some of the most common options for weed control and descriptions of their pros and cons.

**Hand Pulling**

This strategy is a low-tech option that provides exercise and the opportunity to frequently scout the landscape for other potential problems. Pulling weeds can be very effective in some situations, such as when weeds are growing close to sensitive plants. Hand pulling can be strenuous, and some weed species are extremely difficult to pull by hand. It is best to pull weeds while they are relatively small. Hand pulling of larger weeds is difficult and can result in uprooting of nearby annual plants. Hand pulling is most effective if employed on a regular basis so that weed populations in landscape beds and gardens are kept to a minimum. In the case of perennial weeds that have an extensive root system, numerous sessions of hand pulling will be required before effectively exhausting the stored energy in the root systems. Until that time, the perennial weeds will continue to grow from their roots. A good pair of gloves and some knee pads will make this option easier and more comfortable.

**Cultivation or Tillage**

This method utilizes a tool or implement to physically remove or destroy weeds. The use of a hoe, shovel, trowel, weeder, or knife is adequate for cultivation of small- to moderate-sized areas. For larger areas, tillage with a rototiller or similar equipment may be more efficient. Cultivation or tillage is often more effective at removing weed species that are difficult to remove by hand, such as perennials with an extensive root system. These perennials will sprout again, but with successive cultivation it is possible to exhaust the food reserves in the roots. As with hand pulling, cultivation or tillage is most effective if employed on a regular basis so that weed populations are kept low. It also provides exercise and the opportunity to frequently scout the landscape for other potential problems. A rototiller should never be used around existing trees, but it is a great way to incorporate soil amendments such as organic matter, fertilizer, and lime.
Mulch

One of the many benefits of mulching in home landscapes and gardens is the suppression of weeds. A 2–3 in. layer of mulch is adequate for weed suppression in most situations. In fact, mulch depths over 3 in. may actually be detrimental to plant health because of potential decreases in soil oxygen. Mulch provides a clean, finished look to landscape beds and paths. Mulch may also help to moderate soil temperatures, maintain soil moisture, and provide plant essential nutrients. There are numerous types of mulches available for use in home landscapes and gardens. For more information on mulch, visit http://edis.ifas.ufl.edu/topic_mulch.

Landscape Fabric

It is increasingly popular to use landscape fabric to help prevent the emergence of weeds in planting beds. This fabric can also be used in the home garden. While potentially costly, these fabrics can suppress weeds for two or more years. It is important to note that landscape fabrics suppress many weed species but may increase the populations of others. Nutsedges (those weeds with a triangular stem) have a sharp growing point and can penetrate through the thinner styles of landscape fabrics. If weeds are coming through the fabric, it is important to hand pull them as soon as possible before they establish a foothold and become difficult to control.

Flaming

Flaming uses the high temperatures created by a propane burner to burst the cell walls of plants. Burning the plant tissue is not necessary as plants will quickly dry out and die if their cell wall is destroyed. A quick way to tell if a weed is going to die from the flame treatment is to let the weed briefly cool and then press your thumb to the leaf. If it leaves a thumbprint or smudge, the treatment succeeded in causing the plant cells in the leaf to rupture. This weed control method will only control above-ground portions of a plant and will not adequately control perennial plants or grasses.

Conclusion

It is important to note that flaming can be dangerous to the operator and desirable plants. Never burn around the base of desired plants as the heat can damage shallow roots or thin-barked stems. Do not apply flame to landscape fabric, dry mulch or any other dry, flammable material as it may start a fire. Be careful around irrigation systems and be careful not to melt any plastic or rubber portions of a soaker hose or garden hose.

Each strategy for nonchemical weed control has pros and cons associated with it. Most of these strategies can be used alone or in conjunction with each other. In fact, these strategies can even be incorporated into a weed management program that includes the use of chemical herbicides. A successful weed management program for the home will use more than one technique. If a person is persistent, a good weed management program will reduce weed populations over time, making each successive season easier to maintain weed free.
Program Announcements

Landscape Matters

Bluebirds
Wednesday March 4 10AM -11AM
Rebecca Jordi
Preregistration required by February 25

Nuisance Wildlife
Wednesday April 1 10AM -11AM
Master Gardener Vicki Martin

Snakes
Wednesday May 6
Rebecca Jordi

Location
Yulee Satellite Office (attached to Fire Station #30)
86026 Pages Dairy Rd. Yulee, FL

Plant Clinics 10AM-2PM

Monday March 2
Monday March 16
Monday April 6
Monday April 20

Bring us your tired, diseased, insect infested plants yearning to be free of problems. When possible place your plant in a plastic bag to prevent chances of spreading issues to other plants. You will receive current researched based information on proper plant care, disease management and insect control. These sessions are free to the public. No registration required. Come anytime between 10AM and 2PM for expert advice.

Location
Yulee Satellite Office (attached to Fire Station #30)
86026 Pages Dairy Rd.
Yulee, FL

SPECIAL PLANT CLINIC
Saturday March 7 - Turner Ace Hardware Fernandina Beach
Hello everybody! Welcome back to Harvest Gold! I remember a long time ago when I had a talk about the birds and the bees with my nephew P.J. He was only five years old at the time. Here’s how it happened. One day, we were walking through the garden, and he saw the squash plants. He was fascinated by them, because they were almost as big as he was. He then noticed that they had two different kinds of flowers: one flower had a small squash below it connecting the flower to the stem, and the other flower connected directly to the stem. He asked about the difference between the two flowers. I explained that the flower that was connected to “the baby squash” was the Mama (female) flower, and the one connected directly to the stem was the Daddy (male) flower. In order for the “baby squash” to grow, the yellow stuff (pollen) from inside the Daddy flower had to be moved from the Daddy flower to the Mama flower. P.J. then asked how the pollen was moved from the Daddy flower to the Mama flower. I looked around, and saw a bee buzzing from one flower to another. I pointed out the bee, and told P.J. that the bee was taking the pollen from the Daddy flower to the Mamma flower, and that’s what makes the baby squash grow into a big squash. I also explained to him that many of our fruits and vegetables depend on bees and other insects, birds, and even bats to take pollen from the Daddy flowers to the Mama flowers in order to reproduce. Thank God P.J. was satisfied with that. I preferred to leave the “Rest of the Story” (as Paul Harvey would say) about the birds and the bees up to my brother.

Pollination is the act of transferring pollen grains from the male part (anther) to the female part (stigma) of a flower, or the transmission of pollen from a male flower to a female flower, resulting in production of seeds, fruits, or vegetables. This transfer can happen via insects, birds, bats, and/or the wind. Worldwide there are more than 200,000 different insect, bird, and animal species that pollinate plants. Insects, especially bees, are the most common pollinators. More than three-fourths of all flowering plants and 35 percent of the world’s food crops rely on these pollinators for reproduction. Worldwide, roughly 1,000 plants grown for food, beverages, fibers, spices, and medicines need to be pollinated by pollinators in order to produce the goods on which we depend. Some of the foods and beverages that would practically disappear without pollinators include apples, blueberries, blackberries, raspberries, chocolate, coffee, melons, peaches, potatoes, vanilla, almonds, cranberries, pears, plums, cherries, avocados, cucumbers, squash, onions, citrus fruits, pumpkins, and
tequila. (Gasp—A world without pumpkins for Halloween—Sad. A Halloween without pumpkins and tequila—Downright Depressing.)

In a world without pollinators, not only would many of our favorite fruits and vegetables disappear, but our economy would take a $40 billion annual hit. In the United States, pollination by honey bees, native bees, and other insects, contributes over $40 Billion to the economy annually in the form of increased yields and superior quality crops.

To put all of this another way, one out of every three bites of food we eat exists because of pollinators like bees, birds, butterflies, moths, beetles, other insects, and bats; and without pollinators, the United States would be more than $40 Billion poorer each year.

Now for the bad news: Pollinator populations are declining. In addition to disease (over 50% of managed honeybee colonies in the United States have disappeared due to imported diseases and parasites in the last 10 years), the most probable causes of the decline in pollinators include habitat loss, and misuse of pesticides.

So what can we do to help mitigate this loss of pollinators? First of all, we can conserve or create habitats for native pollinators. We can leave some bare soil in undisturbed areas of our landscapes, so ground-nesting bees can tunnel through the ground. If it is not a safety hazard, since many species of solitary bees use small cavities in dead wood for nesting, consider leaving a dead tree or decaying tree stumps to attract nesting bees. Plant a variety of shrubs, tall grasses, and low-growing plants, or leave small patches of fallen branches and brush, to attract many varieties of pollinators. Make sure mud is available for bees who build nests in wood cavities (if you don’t live near mud, make some by placing soil in a dish or pan and keeping it moist). Plant a pollinator or butterfly garden, and include native and nectar flowers, shrubs, trees, berries, and herbs that pollinators love, such as Tickseed, Blanket Flower, Beach Sunflower, Southern Sage Salvia, Tropical Sage, Climbing Aster, Blazing Star, Pennyroyal, Bee Balm, Parsley, Dill, Blueberries, Walter’s Viburnum, Florida Privet, Goldenrod, Sea Grape, Saw Palmetto, and Cabbage Palm. Install hummingbird feeders, consider a bat house, or even build your own bee nesting house. (Create your own bee nesting block by drilling different diameter holes in a length of preservative-free, non-treated 4x4 wood, and hang it on a post or on the south side of your house.)

Second, and most importantly, we can eliminate or restrict our use of chemical pesticides. Using pesticides wisely is really quite simple. Remember, not all insects are pests; most are pollinators and/or predators of the bad guys. Figure out the difference between the good guys and the bad guys, and leave the good guys alone to do their jobs.

Do not use pesticides unless there is a serious problem. Learn to tolerate some insect “damage” to your plants and trees. Use organics or Integrated Pest Management (IPM) as a first resort. (Integrated Pest Management is a strategy that helps gardeners manage pests with as few chemicals as possible for a healthy, sustainable approach to keeping landscapes safe from pest insects. For more information on IPM, see http://livinggreen.ifas.ufl.edu/landscaping/ipm.html.)
Only use chemical pesticides as an absolute last resort, and always read and follow label directions carefully when using. Remember, pesticides can kill more than the target pest. Some pesticide residues can kill pollinators for several days after the pesticide is applied. Pesticides can also kill natural predators, which can lead to even worse pest problems. Consider the following when managing pests in your garden: Encourage native predators with a diverse garden habitat. If you must use a pesticide, choose one that is the least toxic to non-pest species, and does not persist on vegetation. Do not use pesticides when plants are in bloom. Never use systemic pesticides. Always apply pesticides in the late afternoon or at night when pollinators are least likely to be active. Never spray under windy conditions, and use liquid sprays or granules instead of dusts if possible. Even when the above precautions are taken, some beneficials and pollinators that rest or overnight in crops, or are active at night, may still be harmed.

If we do not do something to conserve pollinators, besides all of the fruits and vegetables we would be missing, we would also be missing another very important commodity, a commodity whose origins are shrouded in the mists of time. A commodity valued by humankind since primeval days, found in the tombs of ancient Pharaohs, and produced by probably one of the most iconic and beloved of all pollinators, the honey bee. Yep, you guessed it—honey. Sweet, sticky, gooey honey! On that note, I will leave you with a couple of recipes calling for honey as a major ingredient.

Take care, my friends. Enjoy the recipes, and until we meet again, Happy St. Patrick’s Day, Happy Passover, Happy Easter, God Bless, and Happy Harvesting!

Peace and Goodness,
Joseph

A Plug for Native Bees

Unlike honey bees (which were introduced to our shores by the European explorers and colonists), native bees are mostly solitary, and are often non-stinging, unless provoked. They are not susceptible to the diseases and parasites honey bees are. Native bees have narrow nests that are either below ground or in wood cavities. There are over 4000 species of native bees in North America. Florida alone is home to over 300 native bees species.

To see a full list of all Landscape Matters offerings (remember, all Landscape Matters classes are free and open to the public), please visit our county website at http://nassau.ifas.ufl.edu/horticulture/landmatters/landmatters.html.
Ingredients
• 1 (16 Ounce) Package Phyllo Dough
• 1 Pound Pecans, Walnuts, or Pistachios (Chopped)
• 1 Teaspoon Ground Cinnamon (Or More, To Taste)
• 1 Large Pinch of Ground Nutmeg (Optional)
• 1 Cup Butter (Melted)
• 1 Cup Water
• 1 Cup White Sugar
• 1 Teaspoon Vanilla Extract
• ½ Cup Honey

Directions
Butter the bottoms and sides of a 9x13 inch pan. Chop nuts, and toss with cinnamon and nutmeg. Set aside. Unroll phyllo dough, and cut in half to fit pan. (Cover phyllo with a dampened dishcloth to keep from drying out while working.) Place two sheets of dough in pan, and using a pastry brush, butter thoroughly. Repeat until you have eight sheets layered. Sprinkle two to three tablespoons of nut mixture on top. Top with two sheets of phyllo, butter, and nuts, layering as you go. The top layer should be about eight sheets deep. Using a sharp knife, cut baklava into diamond or square shapes (cut all the way to the bottom of the pan). Bake in a 350 Degree Fahrenheit pre-heated oven until baklava is golden and crisp (about 50 minutes). While baklava is baking, make topping sauce. Boil sugar and water until sugar is melted. Add vanilla and honey. Simmer for about 20 minutes. Remove baklava from oven, and immediately spoon sauce over it. Let cool, and serve in cupcake cups. For baklava with a lemony twist, add a tablespoon of lemon zest, or substitute 1/8 cup of lemon juice for 1/8 cup of water, when boiling down the sauce.

Notes
During my tour of Greece, which was more years ago than I care to remember, I came upon a local festival in a small village on the island of Lesbos honoring the goddess Athena. It was a delightful festival, and the baklava (which, according to local lore, was sacred to Athena) was out of this world. My island hosts taught me how to make baklava the local way, and here’s the recipe.

Recipe courtesy of Mrs. Henrietta Witherspoons.
Miss Alice’s
Honey-Pineapple Upside-Down Cake

Ingredients
• 2/3 Cup Honey (Plus More for Drizzling)
• 1 Can (16 Ounce) Pineapple Slices in Juice (Drained)
• Maraschino Cherries (Drained)
• 1-1/3 Cups Sugar
• ¾ Cup Butter (Softened)
• 1 Teaspoon Vanilla Extract
• 1 ¾ Cups All-Purpose Flour
• ¼ Cup Plain Yellow Cornmeal
• 1 Teaspoon Baking Powder
• 1 Teaspoon Kosher Salt
• ½ Teaspoon Baking Soda
• ¾ Cup Buttermilk
• 3 Large Eggs

Directions
Pour 2/3 cup honey into a buttered 10 inch cast-iron skillet, tilting skillet to spread honey evenly. Arrange pineapple slices in skillet, and place a maraschino cherry in the hole of each pineapple. Beat butter and sugar at medium speed with an electric mixer until fluffy. Stir in vanilla. In a bowl, whisk together flour, cornmeal, baking powder, and salt. In another bowl, whisk together buttermilk and eggs. Add flour mixture to butter/sugar mixture alternately with buttermilk mixture, beginning and ending with flour mixture, and beat just until blended. Spread batter over pineapple. Bake in a 350 Degree Fahrenheit pre-heated oven for 50 minutes, or until a toothpick inserted into the center comes out clean. (If necessary, shield with aluminum foil for the last five minutes or so of cooking to prevent excessive browning.) Cool in skillet on a wire rack for ten minutes. Invert cake onto a serving platter, and drizzle with a bit of honey. Let cool for an additional 15 minutes before serving. Serve with Cool Whip or vanilla ice cream, if so desired.

Notes
This is an old family favorite. The best honeys to use are either tupelo or Florida orange blossom.

Recipe courtesy of Mrs. Alice Marie Smith.
Ingredients
• ½ Cup Butter (Softened)
• ¾ Cup Honey
• 2 Eggs
• 1 Teaspoon Vanilla Extract
• 3 ½ Cups All Purpose Flour
• 2 Teaspoons Anise Seeds
• 2 Teaspoons Ground Cinnamon
• ½ Teaspoon Baking Powder
• ½ Teaspoon Salt
• ¼ Teaspoon Baking Soda
• 1 Cup Dried Cranberries (Or Raisins)
• ¾ Cup Slivered Almonds

Directions
Using an electric mixer, beat butter until light. Gradually add honey, eggs, and vanilla, and beat until smooth. In a separate bowl, combine flour, anise seeds, cinnamon, baking powder, salt, and baking soda. Gradually add this mixture to honey mixture, and mix well. Stir in cranberries and almonds. Shape dough into two 10x3x1 inch logs and place logs on a greased baking sheet. Bake at 350 Degrees Fahrenheit for 20 minutes, or until light golden brown. Remove from oven and place on a wire rack. Let cool for five minutes. Reduce oven temperature to 300 Degrees. Transfer logs to a cutting board, and cut each log into ½ to ¾ inch slices, cutting slightly on the diagonal. Arrange slices on baking sheet, and bake for an additional 20 minutes, or until crisp. Cool on wire racks.

Notes
My grandfather picked up this recipe when he was in Italy during the Korean War, and ever since it has been a family favorite. Hope you all enjoy it.

Recipe courtesy of Kassandra Withakay.
Ingredients
• 1 Cup Honey
• ½ Cup Butter or Margarine (Softened)
• 1 Can (16 Ounce) Solid-Pack Pumpkin
• 4 Eggs
• 4 Cups Flour
• 4 Teaspoons Baking Powder
• 2 Teaspoons Ground Cinnamon
• 2 Teaspoons Ground Ginger
• 1 Teaspoon Baking Soda
• 1 Teaspoon Salt
• 1 Teaspoon Ground Nutmeg

Directions
In large bowl, cream honey with butter until light and fluffy. Stir in pumpkin. Beat in eggs, one at a time, until thoroughly incorporated. Sift together remaining ingredients. Stir into pumpkin mixture. Divide batter equally between two well-greased 9x5x3 inch loaf pans. Bake at 350 Degrees Fahrenheit for 1 hour, or until a wooden pick inserted in center comes out clean. Let loaves cool in pans for 10 minutes; invert pans to remove loaves, and allow to finish cooling on racks.

Notes
Nutritional Information per serving (based on 1/8 loaf, about 1-inch slice): Calories—261; Fat Total—7.51 g; Protein—5.43 g; Cholesterol—68.8 mg; Carbohydrates—44.5 g; Sodium—411 mg; Dietary Fiber—2.53 g; Calories from Fat—25%.

Recipe courtesy of the National Honey Board
Finally we’ve got the beginning of Spring, at least officially. With the warmer weather we should start seeing a lot of animal behavior we haven’t seen since...well, since last spring.

**Birds**

- Migrating birds from Central and South America visit the state.
- Mourning doves nest now through November.
- Carolina wrens are nesting now.
- Mangrove cuckoos return to the Keys.
- Summer tanagers and great-crested flycatchers arrive to breed.
- Swallow tailed kites return to south Florida wetlands.
- Listen for newly-returned chuck-will’s-widows calling after sunset.
- Plant columbine, coral bean, and other wildflowers to attract hummingbirds.
- Wild turkey and quail begin breeding in central and north Florida.
- Quail are breeding in many parts of the state

**Mammals**

- Look for red foxes emerging from remote beaches.
- Last chance to see manatee concentrations in the Caloosahatchee River this winter.
- Striped skunks are fighting over mates - watch out!

**Amphibians**

- Male frogs and toads move to ponds, streams, and ditches to breed during rainy nights

**Reptiles**

- Snakes become active and move to favorite feeding areas

**Fish**

- Gulf of Mexico Sturgeon spawn in the Suwannee River during the spring or early summer.
- Largemouth bass spawning throughout central and north Florida
- Redear sunfish begin bedding in central Florida
- White bass run up the Ochlockonee River above Lake Talquin.

**Plants & Trees**

- Chicksaw plum and crabapples bloom in north Florida
- Bromeliads flower in south Florida
April brings spring into full force for Florida, so here are some spring-like animal behaviors to look for this April:

**Birds**
- Sooty Terns take over Dry Tortugas for nesting.
- Bobwhite quail nest now through September.
- Migrant warblers concentrate on coasts after cold fronts.
- Watch for hummingbirds feeding on blooms of columbine, buckeye, and others.
- Grosbeaks, warblers, tanagers, orioles, and thrashers begin returning to North America

**Mammals**
- Black bears begin moving after winter’s inactivity.
- Long-tailed weasels, minks, and river otters will be born April through May.
- Endangered Gray Bats return to Florida caves to raise young.
- Manatees move up the Wakulla and St. Marks rivers

**Amphibians**
- Pine barrens treefrogs begin calling.

**Reptiles**
- Most Florida snakes begin mating rituals.
- Beginning of Sea Turtle nesting season on Florida beaches.
- Alligators begin moving about, seeking new territories and mates

**Fish**
- Largemouth Bass move into shallow water in Lake Talquin.
- The cobia migration is in full swing in the Panhandle

**Insects**
- Plant extra parsley for black swallowtail butterfly larvae to eat.

**Plants**
- Blooming wildflowers and pitcher plants blanket the wet savannahs of the Apalachicola National Forest
Invasive Plants: **Coral Ardisia**  
*Ardisia crenata*

**Center for Aquatic and Invasive Plants University of Florida, IFAS**

**Introduction**

*Ardisia crenata*, or Coral Ardisia, is a small upright shrub that is used and sold extensively in the horticulture industry as an ornamental plant – often called Christmas berry. Ardisia’s native range includes areas of Japan and northern India. Ardisia escaped cultivation in 1982, spreading into wooded areas. Currently ardisia has established in many counties in northern and central Florida. In the landscape, ardisia is known and grown for its persistent red berries, glossy foliage and low maintenance.

**Description**

Coral ardisia is a small upright shrub that can grow up to 6 feet in height. Ardisia can be seen growing in clumps, often times multi-stemmed. Leaves are dark green and thick, somewhat glossy, roughly 8 inches long with scalloped margins. The flowers are white or pinkish, borne in axillary clusters. The berries, which are readily eaten by birds, turn a bright coral red color and hang or droop on the plant. Ardisia is usually seen in fairly large colonies with its persistent red berries. Recent research has also shown the presence of large seedling clumps in association with larger plants. These seedlings can remain juvenile for quite some time and once removal of the larger, dominant specimens occurs, the seedlings begin to grow.

**Impacts**

Coral ardisia has naturalized in many natural areas across Florida, such as hardwood hammocks, becoming a significant pest. The Florida Exotic Pest Plant Council lists Coral ardisia as a category I species because of its invasive nature and ability to disrupt native plant communities. Ardisia can potentially shade out native seedling and understory plants, preventing their growth and development. Mature plants are prolific seed producers and can be surrounded by many seedlings, also leading to reduced seed germination of valued native species.

Ardisia is capable of resprouting after cutting back or after a fire. Heavy fruit set is produced after 2 years. Viable seed can remain on plants throughout the year, providing a food source for birds and other wildlife. Birds and raccoons have been shown to consume and disperse fruits. Germination rates are fairly high for ardisia, ranging from 84-98%, with germination taking up to 40 days once the fruit has been removed from the plant. Ardisia seeds can germinate in a wide range of soil types from acidic to alkaline and at temperatures of 25 C or higher.
**Management**

**Preventative**

The first step in preventative control of ardisia is to limit planting and removal of existing plants within the landscape. If possible, removal should occur before seeds are produced. Since seeds remain on the plant for several months, care must be exercised to prevent seed spread and dispersal during the removal process.

**Cultural**

Cultural management is difficult once the plant has established, but a healthy ground cover will limit seedling establishment.

**Mechanical**

Mechanical methods can be grouped into several strategies. With small or isolated infestations, hand-pulling is effective for seedling control. Larger plants can be cut or burned, but regrowth from underground rhizomes and root crowns. Disking can be very effective if the disking operation is frequent and sufficiently deep to cut the rhizome/rootstocks. However, the use of disking is very limited due to the type of areas that ardisia is most problematic – woodlands. It must also be noted that any type of mechanical operation, whether it be diskig or burning, should be monitored for at least one year to inspect and remove seedlings and/or resprouts.

**Biological**

There are no known biological control agents for ardisia.

**Chemical**

In areas with a dense groundcover of seedlings, a broadcast spray of a glyphosate or triclopyr-ester may be effective, generally a 2-3% solution. The waxy leaves of ardisia may limit glyphosate uptake, so a surfactant is recommended. Due to the non-selective nature of glyphosate, use precaution to avoid damaging desirable plants. The woody bark of desirable trees may be contacted, but avoid green bark. Triclopyr herbicide is also very effective, especially on larger, more mature specimens. A low-volume basal application mixed with an oil diluent has shown very promising results. Triclopyr applications containing 18% basal oil is effective. Ardisia is also susceptible to 2,4-D, but more so at the seedling stage or regrowth after cutting/burning of mature plants.
**March Checklist**

**Citrus:** Always remove graft freeze protection once threat of freeze is over. Fertilize program begins for lemon, orange, kumquat using citrus fertilizer. Follow fertilizer label for frequency (slow release is used less often). Check for citrus insects and disease, apply fungicide just at new leaf flush or after bloom drop.

**Fruit:** For mature Loquat trees, fertilize trees 2 to 3 times per year. The fertilizer should be applied just before or at bloom, perhaps during late fall, again in March, and once during the summer. The fertilizer mix should also include phosphate (P2O5) and potash (K2O); use a 6-6-6, 8-3-9 or similar material.

**Flowers:** Water as needed. Over-watering causes root and stem rot. Opt for drought tolerant plants such as purslane or periwinkle. Group your plants together according to their watering and light requirements. Bulbs will be in full bloom. To conserve plant energy, cut off the old seedpods after flowering. Fertilize perennials this month if you missed last month. Plant poinsettias in landscape during late March. Use a 6-6-6, 8-3-9 or similar material.

**Herbs:** Anise, basil, bay laurel, borage, caraway, cardamom, chervil, chives, coriander, culantro, cumin, dill, fennel, ginger, horehound, lemon balm, lavender, lovage, marjoram, Mexican tarragon, mint, parsley, oregano, rosemary, sage, savory, sesame, thyme and watercress can be planted now.

**Roses:** Continue spray program (every 7-10 days). Water as needed. March 15, apply liquid fertilizer. Check your micro irrigation system (leaks, dirt in system, timers)

**Lawns:** I know it is hard to wait, but fertilization should begin April 15 - see below. Watering may change this month but unless grass is actively growing, err on the side of less water rather than more. March is the month to add a pre-emergent weed killer to lawns if you have had a problem in the past with summer weeds.

**Shrubs:** Wait to prune and fertilize azalea with acid fertilizer as soon as they finish blooming. Always a good rule - prune flowering plants AFTER they bloom. Azaleas may be transplanted now as well. Overgrown shrubs can be cut back using selective pruning, avoid shearing these shrubs. Dr. Ed Gilman’s UF/IFAS publication on pruning shrubs and trees is an excellent source of information: [http://edis.ifas.ufl.edu/pdffiles/MG/MG08700.pdf](http://edis.ifas.ufl.edu/pdffiles/MG/MG08700.pdf)

**Trees:** Make sure younger trees maintain a straight trunk as new growth begins. Remove or prune all limbs competing with the central leader. Fertilize Tea Olive using acid loving fertilizer. Palms should have a “palm special” fertilizer applied over the root system under the spread of the fronds. The configuration should be 8-2-12-4 (N-P-K-Mg). Ideally this would also include manganese, boron, sulfur, etc. with appropriate formulations. Use a slow release fertilizer March, June and September. Anything within 30 feet of the palm should just be getting palm fertilizer. Nutrient deficiencies may take months to recover so please use an appropriate palm fertilizer.

**Vegetables:** Have soil tested prior to planting. The pH and the nutrient content of the soil is an important factor in production of vegetables. This month’s choices for planting include snap beans, pole beans, lima beans, beets, cantaloupes, carrots, celery, collards, corn, cucumber, eggplant, endive/escarole, kohlrabi, lettuce, mustard, okra, bunching onions, parsley, English peas, Southern peas, peppers, potatoes, sweet potatoes, pumpkin, radishes, summer squash, winter squash, tomatoes, turnips, and watermelon. Be sure to use the Florida Vegetable Guide when selecting the best cultivars for our area: [http://edis.ifas.ufl.edu/wh021](http://edis.ifas.ufl.edu/wh021).
**April Checklist**

**Citrus:** Depending on citrus fertilizer label, apply fertilizer every six weeks or as directed. Check for citrus insects; apply ultrafine horticulture oil or insecticidal soap before 10am or after 6pm if insects are detected. Check for diseases; apply fungicide just at new leaf flush or after bloom drop. Maintain 2-3’ unmulched area just outside the root ball (which would be 12-18 inches away from the trunk).

**Fruit:** Granular fertilizer may require about 1/4 inch of water to allow the root to absorb the nutrients. Blueberries can begin fertilization program using acid loving fertilizer in February, April, June, August and October in small amounts. Apply general garden fertilizer to plum trees. Weed as needed.

**Flowers:** Annuals to plant now include celosia, coleus, coreopsis, dusty miller, geraniums, hollyhocks, impatiens, kalanchoe, lobelias, marigolds, portulacas, rudbeckias, salvia, verbenas, zinnias. Groom to reshape perennials. Prune hard to correct growth problems. Divide overcrowded fall flowering perennials and bulbs. Bulbs to be planted now include achimenes, agapanthus, amaryllis, Asiatic lilies, begonias, blood lily, caladiums, cannas, crinum, dahlias, gladiolus, gloriosa lily and zephyranthes.

**Herbs:** Anise, basil, bay laurel, borage, caraway, cardamom, chervil, chives, coriander, culantro, cumin, dill, garlic, ginger, horehound, lemon balm, lavender, marjoram, Mexican tarragon, mint, nasturtium, parsley, oregano, rosemary, sage, sesame, and thyme can be planted now.

**Roses:** Begin watching roses for black spot fungus disease, small black spots on the leaves can quickly worsen. Continue spray program. Water as needed. April 15, apply granular rose fertilizer. Cut and remove spent blooms. Check for spider mites (wash underside of leaves with strong water pressure). Add mulch, 2-3 inches deep (oak leaves, cedar pine straw).

**Lawns:** Water during early morning when the leaves curl and turn gray-green. Reduce fertilizers and pesticides during seasons of drought. Select a fertilizer with the configuration of 15-0-15 or 16-0-8 which represents nitrogen (N), phosphorus (P), potassium (K) respectively to lawns on April 15. Follow the directions on the label. No “weed and feed products”, winterizers, turfbuilders, etc. They generally contain too much nitrogen compared to potassium. Keep mower height at the highest setting for grass type. Apply no more than 1 inch of sand to uneven areas for leveling. Allow grass clippings to stay on the lawn as long as grass is healthy.

**Trees:** Most older trees and palms are fine and can exist with the seasonal rains. Look for aphid, borer, and scale infestations. Caterpillars may be extra heavy this month. Caterpillars may be extra heavy this month.

**Vegetables:** This month you can plant snap beans, pole beans, lima beans, cantaloupe, collards, corn, cucumbers, eggplant, kohlrabi, okra, Southern peas, pumpkin, peppers, squash, sweet potatoes, tomatoes, turnips, watermelon, and yams.
Q: I see the maples are bursting with color right now. After looking closely, I noticed a pair of seeds. What are they?

A: The botanical term for these structures containing the maple seeds is samaras, but they are more often referred to as “helicopters,” or “whirligigs.”

All maple trees produce samaras, but red, silver and Norway maples often produce the largest quantities. Over the next few weeks, these seeds will rain down on lawns, decks, roofs and gutters in many locations which can become a nuisance, especially after we have had such a large number of laurel oak leaf drop within the last few weeks. But raking leaves from the yard and removing them from our gutters in the spring is a small price to pay for having such large, beautiful trees on our property.

Both oaks and maples are also the source of much of the yellow pollen we are seeing all over our cars lately, in addition to being the reason for our allergic reactions to pollen. It is possible to take the seeds and propagate your own maple tree. Red maple trees are incredibly fast growers so you should have a nice size tree within a few years. Seed propagation would be a wonderful project for any young person. Nothing is more rewarding than seeing a tree develop from seed.

Q: I have a very shaded lot and I am thinking of adding more ferns to my plant beds. What can you tell me about the Ghost fern? It sounds so intriguing.

A: ‘Ghost’ is a hybrid fern which was developed from a cross between Athyrium niponicum var. pictum and Athyrium filix-femina. It gets the popular name Ghost because of the silvery color of the outer edge of the fronds. When temperatures get warmer, the color often gets a hint of blue. The silver color on the fronds comes from its Japanese painted fern parent and the upright growth of the fronds comes from its lady fern parent.

It generally grows to no more than 2 ½ feet tall with an even smaller spread. The mature size makes it a wonderful plant for small, shade gardens. It can tolerate dappled light, but direct afternoon sun here will cause brown edges and the plant will be very unattractive if it survives. Ghost fern is less sensitive to dry soils but it should not be allowed to get too dry.

If you have a rabbit problem, this plant does not appear to be very appetizing to the furry creatures. However, I must warn you, if rabbits or deer get hungry enough, they will eat most any plant.
I have a Ghost fern in my garden now, and it survived the winter beautifully. In some colder climates, the fern is considered deciduous, meaning it will lose its fronds but return when temperatures are warmer. Its cold hardiness zone is 4-8. I am in cold hardiness zone 9a, so those of you on the east part of Nassau County Florida might want to add this little beauty to your landscape.

Those of us on shaded lots should consider adding more ferns as they add texture and color to our beds and are fabulous fillers for small, tight areas. But, you know how I feel about Boston fern – please keep it in the pot and do not plant it in the ground here.

Q  I left some of the kumquat fruit on my tree and with the extreme cold weather over the last few weeks, some of the kumquats froze on the tree. Now, I am seeing some of the fruit with large, black spots, others have turned white and collapsed onto themselves. What should I do with this fruit?

A: The same thing has occurred to the tree in our demonstration garden. I have been removing the damaged fruit as it can be a source of fungal disease which can easily be passed to other parts of the tree. The fruit is not good to eat so I would recommend you take all the damaged fruit off and compost it or throw it away. No reason to take a chance at potentially spreading disease. Leave ny fruit which does not appear to be damaged on the tree until it has matured. One of the nice things about kumquat fruit is it can remain on the tree for longer periods of time than other citrus like Satsuma.
Nassau County is proud to provide you with this information. Horticulture News is a joint project with contributions by county agents and Master Gardener Volunteers.

Sincerely,

Rebecca L. Jordi,
County Extension Director
Horticulture Agent III

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Garden Talk - with Rebecca Jordi

Q: What is the name of the plant I see along the roadsides with round, white flowers?

A: I suspect you are referring to the Buttonbush, *Cephalanthus occidentalis*. Buttonbush grows as a shrub or small tree - typically growing 10 or 20 feet tall. This plant is deciduous, losing its leaves for 1 or 2 months in winter. Buttonbush is a native plant which occurs in swamps, ponds, and stream banks throughout Florida. Keep that in mind if you are thinking about adding it to your landscape, it is not a true drought tolerant plant. However, it might make an excellent choice for areas around retention ponds. It flowers from early spring to late summer and provides nectar for many important pollinators. Waterfowl and shorebirds consume the seeds of common buttonbush. White-tailed deer browse foliage in the northeastern United States. Wood ducks use the plant's structure for protection of brooding nests. Butterflies, bees, and hummingbirds are attracted to common buttonbush for its nectar and bees use it to produce honey. Buttonbush is named for its ball-like clusters of small white flowers around fruits. Flower balls can be an inch or more across which dangle from long stalks. Buttonbush leaves are about six inches long, elliptic, and tapering to pointed tips. As buttonbush becomes older, its bark becomes rough and bumpy. According to the USDA Common buttonbush contains the poison Cephalathin which can induce vomiting, paralysis, and convulsions if ingested. [http://edis.ifas.ufl.edu/pdffiles/FP/FP11700.pdf](http://edis.ifas.ufl.edu/pdffiles/FP/FP11700.pdf)