It is impossible to live in Florida without encountering wildlife daily. Many of these experiences are enjoyable, but some can be unpleasant. Negative interactions with our wild neighbors can result in injury, property damage, and minor nuisances. Some of our frustrations with wildlife can be eliminated by properly preventing situations before they occur, while others may require other forms of management.

Snakes

You have a hundred times greater chance of being in a highway accident than being bitten by a venomous snake. Snake-bite-related deaths occur in Florida at a rate of approximately one death every four or five years—less than deaths from lightning strikes.

Snakes prefer shaded areas where they might come across prey like mice and toads.

Snakes will not charge or chase after people. Their typical reaction is to crawl away and hide.

When threatened, some snakes will hiss, shake their tail, and even try to bite an intimidating object.

All snakes stick out their tongue frequently to smell their environment. A snake showing its tongue is not acting aggressively or threateningly.

Prevention and Control

Most people do not want snakes (especially venomous snakes) in their homes or on their properties.

You can deter snakes from your yard and home by eliminating firewood stacks, debris, boards, or other objects close to the ground that create cool, dark shelters and prey habitat areas. Remove snakes from buildings by placing glueboards or funneled minnow traps in snake-traveled areas, such as along walls.

There are no repellents, toxicants, or fumigants registered for snakes. Unless a home remedy has been scientifically tested, its effectiveness is questionable.

Armadillos

More than 90 percent of an armadillo’s diet is made up of insects, larvae, and other invertebrates in the soil.

Armadillos are most active at night, when they root in the ground for food.

Prevention and Control

Partially buried slanted fencing can be used to exclude armadillos from an area and is a somewhat effective barrier.

Some people are successful with live trapping armadillos, even though it is difficult. Florida law requires that “nuisance” animals that are trapped be humanely killed or released on the same contiguous property where they were caught. This prevents ecological disturbances and disease spread.

Shooting is an option, and armadillo meat is edible; however, remember that it is illegal to discharge firearms in some areas and to use artificial lights to aid in shooting.

There are no successful repellents, toxicants, or fumigants registered for armadillos. Using insecticides on soil insects has not been proven to reduce armadillo digging.
Bats

Bats are nocturnal and roost during the day, normally in caves and trees. Bats enter buildings and can roost in walls, attics, and chimneys. Their accumulated droppings cause an undesirable mess and smells. Bats can squeeze into cracks as small as 3/8 of an inch. Bats eat insects and are often attracted by flying insects around streetlights.

The incidence of rabies in bats is exaggerated; only eight deaths in the United States and Canada in the past thirty years have been from bat-transmitted rabies.

**Prevention and Control**

Exclusion is the only legal method for getting rid of bats in buildings. Exclusion can only be done starting in August and continuing through the winter months. From April to August it is illegal to exclude bats from buildings because baby bats will likely be trapped inside. For more information on effective bat exclusion methods, contact your local Extension agent or read Bats in Buildings.

Bat repellents such as illumination and high-frequency sounds can serve as temporary solutions. Roosting boxes can attract excluded bats, but is not considered a control method.

Woodpeckers

Woodpeckers can peck holes in a home’s exterior, causing structural damage and a noise nuisance. Woodpeckers will peck to establish territories and attract mates; feed on insects; and excavate nest sites.

**Prevention and Control**

Hanging mesh or nylon netting provides effective protection for home siding. Make sure it is at least three inches off the siding.

Cover siding in plastic sheets to keep the woodpeckers from being able to perch on the house.

Woodpeckers are persistent and not easily driven away from established sites. Visual or sound repellents (model owl or hawk silhouettes, noise-making devices) should be used as soon as a problem develops.

Raccoons, Skunks, and Opossums

These animals frequently get into garbage cans, home gardens, attics, and crawl spaces beneath homes. Raccoons also den in uncapped chimneys.

All three are opportunistic and well-adapted to urban environments. They will eat any plant, insect, or animal food available.

Raccoons are a major rabies carrier in Florida.

**Prevention and Control**

Keep these animals out of your yard by preventing access to food. Use metal or tough plastic garbage cans with tight-fitting or clamped or weighted lids. Also, support trash cans so that they cannot be tipped over. Do not leave pet food out at night.

Cap chimneys and seal off entrances underneath homes. Repellents are sometimes temporarily effective.

Live trapping can work as a method for dealing with garden damage. Florida law requires that “nuisance” animals that are trapped be humanely killed or released on the same contiguous property where they were caught. This prevents ecological disturbances and disease spread.

NOTE:

Trapping should be a matter of last resort. Once an animal is caught, then you have to decide what to do with it. As mentioned above, under Florida law, any “nuisance” animal caught in a trap must either be humanely killed or released on the same contiguous property where it was caught. Animals can only be transported if they are taken in for a euthanasia procedure.

The Florida Fish and Wildlife Conservation Commission regulates and manages the state’s native wildlife resources. Anyone who is baiting, trapping, transporting, or killing nuisance wildlife should be familiar with certain laws, rules, and regulations. For more information or to find out who to contact for wildlife problems in your area, visit the FWC’s Nuisance Wildlife page.

Adapted and excerpted from:

Program Announcements

Invasive Exotic Plants Know No Boundaries

One of the greatest threats to our state is invasive exotic plants. These plants are popular in yards but easily spread and take over natural areas. The City of Fernandina Beach and the University of Florida/IFAS Extension want to partner with you to put a stop to the invasion.

Join us Saturday, March 8th
Fernandina Beach Rec Center and Greenway
2500 Atlantic Ave

9AM to 11AM Guided Nature Hike 11:00-11:30
Registration is FREE

Learn how to identify and remove invasive plants that may be in your yard, receive a native plant and invasive plant ID cards!

Breakfast will be provided.

Call the UF/IFAS Nassau County Extension Service to register at 904-879-1019
Barbie and Harry Byrd have a shady back yard that she has developed into “A Pots Farm.” She takes the plants out of the pots when they are no longer healthy, divides and plants healthy ones, and she calls it the “survival of the fittest.” Harry enjoys her ability to have the garden beautiful most of the year and he likes to call it “Barbie's Wild Kingdom.”

Almost all of the plants are in pots. Near the pond and water fall is a beautiful collection. To name a few they are coleus, bromeliad, begonia and many others. In another area is a beautiful Chenile Plant and a purple Zabrina pendula. Her sister gave her the lovely Trumpet Tree 3 years ago when it was only 12 inches tall. She loves to add color in the shade and plant herbs such as thyme, basil and oregano for her special cook Harry. It is great to see so many creative ideas!

November Winner - Barbie Byrd

View more photos online at http://nassau.ifas.ufl.edu/horticulture/spotlight/spotlight.html.
To be considered for Spotlight on Nassau Gardens, send a digital photo, with a description of your garden, along with your name, address and phone number to ncmg@nassaucountyfl.com. For more information contact Rebecca Jordi at 491-7340 or 879-1019.

[View more photos online at http://nassau.ifas.ufl.edu/horticulture/spotlight/spotlight.html.]

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Hello everybody! Welcome back to Harvest Gold!

Here we are in January, the beginning of another new year. The New Year has always been seen as a time of new beginnings, renewed commitments, and personal growth. The month of January, being the “doorway to the New Year,” was aptly named after Janus, the Roman god of doors, gates, passages, transitions, beginnings, endings, and time. Janus was usually depicted as having two faces, one peering into the past, and the other looking forward into the future. New Year’s Day itself was consecrated to Janus, and on this day, Romans would make promises to Janus with the goal of self-improvement. Taking Janus as their model, the Ancients would look to the past and evaluate deeds and actions of the previous year with the intention of correcting past mistakes, and choosing better paths for the future. This practice of the Romans has carried over to the present day in the form of making New Year’s resolutions.

I would imagine most of us have made our New Year’s resolutions by now. If you are like me, the resolutions will last, maybe, for about a day and a half, and then that will be it. This year, though, I am making a resolution I plan on sticking with, and that is to eat healthier. I know what you are thinking, eating healthier means giving up taste and eating bland foods. But this is just not the case. Healthy (and tasty) meals can be prepared by just following four simple rules: Reduce sodium/salt intake, substitute good fats for bad fats, stay away from...
overly processed foods, and try to go organic as often as possible.

Sodium is an essential element our bodies need to function properly, and is good for us in small amounts. Sodium helps regulate body fluids and blood pressure, helps transmit nerve impulses, and influences the contraction and relaxation of muscles. Too much sodium can be bad for us, and has been linked to high blood pressure, heart disease, kidney disease, and stroke. According to the United States Department of Agriculture (USDA), most Americans consume more sodium than their bodies need. On average, Americans consume about 3300 milligrams of sodium per day. That’s about one thousand milligrams more than the USDA recommended daily allowance of 2300 milligrams. (Just one teaspoonful of salt contains about 2300 milligrams of sodium.) If one is over 51 years old, has high blood pressure, diabetes, chronic kidney disease, or is African-American, the USDA recommended daily allowance of sodium is 1500 milligrams per day.

The vast majority of sodium (75 percent) in the typical American diet comes from processed and prepared foods, such as bread, store bought prepared meals, pizza, cured meats such as bacon and smoked ham, lunch meats, soups, and restaurant foods. These foods tend to be not only high in salt, but also include other additives that contain sodium. Just 20 percent of the sodium in the typical American diet comes from salt added in cooking or at the table.

So how can one reduce one’s sodium intake without sacrificing taste? First of all, purchase fresh (not processed) meats and vegetables, and prepare your own meals whenever possible. Don’t use salt when cooking, and avoid adding salt at the table. In cooking, substitute fresh or dried herbs, spices, and other flavorings for salt to enhance the flavor of food. Use rosemary, basil, oregano, garlic, cayenne pepper, sage, thyme, and/or other desired herbs, or a no-salt blend of herbs and spices to achieve great taste without the sodium. Meats can be marinated in vinegar, orange juice, or another favorite fruit juice to add flavor and avoid sodium. Mix and match your favorite herbs, spices, and juices, and soon, you will not even miss the salt. If you purchase canned vegetables, some of the sodium can be eliminated by draining and rinsing the vegetables before preparing your meal, or better yet, purchase low, or no sodium added products. Another way to avoid excess sodium in the diet is to choose unsalted, or no-salt-added, snacks and condiments. Choose instead lite or reduced sodium catsup and soy sauce, and unsalted chips, pretzels, and nuts. Also, oil and vinegar dressing can be substituted for bottled salad dressings, which tend to be high in sodium. Finally, read the nutrition label. You would be surprised at how much sodium can be found in everyday foods. Compare labels of different brands, and choose the one with the least amount of sodium. Every little bit of sodium eliminated from the diet, and replaced with a healthier alternative, is a step in the direction of a healthier you for the New Year.

According to the USDA, in addition to sodium, Americans also consume much more fat in their diets than is healthy. Excess fat in the diet has been linked to high blood pressure, coronary heart disease, diabetes, high cholesterol, and a host of other health-related issues. But not all fats are created equal. There are both “bad fats,” and “good fats.” Bad fats tend to be grouped into two categories: saturated fat, and trans
fat. Saturated fat comes mainly from animal sources, and raises total cholesterol levels and low-density lipoprotein (LDL) cholesterol levels in humans, which has been linked to an increased risk of cardiovascular disease and diabetes. Most trans fats used in cooking are synthetic fats produced during food processing through partial hydrogenation of unsaturated fats. Research has shown synthetic trans fats can increase unhealthy LDL cholesterol levels, and lower healthy high-density lipoprotein (HDL) cholesterol in humans, leading to a greater risk of cardiovascular disease. Processed and fast foods tend to be high in both saturated and trans fats, and should be avoided (again, read the nutrition labels). Most fats that have a high percentage of saturated or trans fats are solid at room temperature, and include lard, shortening, stick margarine, and butter.

Good fats tend to be grouped together as monounsaturated fats (MUFAs), or polyunsaturated fats (PUFAs), and are found mostly in plant based foods and oils. MUFAs and PUFAs are healthy alternatives to saturated and trans fats, and have been shown to improve blood cholesterol levels, thereby lowering the risk of heart disease in humans. PUFAs may also help lower the risk of Type 2 diabetes, while MUFAs may benefit insulin levels and blood sugar control, which is helpful if one has Type 2 diabetes. In addition, Omega-3 fatty acids (a type of PUFA), found in certain types of fatty fish, appear to decrease the risk of coronary artery disease, protect against irregular heartbeats, and help lower blood pressure. Fats high in MUFAs and PUFAs tend to be liquid at room temperature, and include olive oil, corn oil, peanut oil, and safflower oil.

Among the MUFAs and PUFAs mentioned above, olive oil is probably one of the healthiest. Olive oil is high in MUFAs, and contains a powerful mix of anti-oxidants that can help to lower “bad” LDL cholesterol, but leaves “good” HDL cholesterol untouched. According to the Food and Drug Administration (FDA), “Eating about 2 tablespoons (23 grams) of olive oil daily may reduce the risk of coronary heart disease.
due to the monounsaturated fat in olive oil. To achieve this possible benefit, olive oil is to replace a similar amount of saturated fat and not increase the total number of calories you eat in a day.” Olive oil is my mother’s favorite oil with which to cook. She fries with it, bakes with it, mixes it into salad dressings, and uses it in many other ways. I can guarantee you that heart-healthy olive oil is a tasty substitute for unhealthier saturated and trans fats. (One final note on fats: Remember, even the so-called “healthy fats” are high in calories, and should be used in moderation. Use olive oil, or another healthy fat, instead of, not in addition to, other fats in your diet. Unhealthy foods cannot be made healthy just by adding olive oil.)

In order to eat healthier, and maintain a healthy diet, it is best to avoid overly processed foods. In simplest terms, processing foods means preparing raw foods for human consumption. We process food when we prepare a meal, or preserve produce for future use. Manufacturers process foods to preserve and prepare foods for market. When I use the term “overly processed foods,” I am not referring to the meals we make at home, or the produce we can or preserve for future use at home. I trust when we prepare meals, and preserve foods at home, we have our families’ health and best interests at heart, and use only the best and healthiest of ingredients. By “overly processed foods,” I mean foods that are canned, preserved, or prepared for our use by big conglomerates, and sold in supermarkets and restaurants. Commercially processed foods tend to contain much more sodium, unhealthy fats, refined sugars, undesirable preservatives, and other unhealthy ingredients than we would ever use at home. Commercial processing also affects the nutritional value of food, and often strips away vitamins and other beneficial natural qualities of food. For example, brown rice (unmilled, or whole grain rice) is much healthier (and in my opinion, much tastier) than processed white rice, and has been shown to decrease the risk of obesity, heart disease, and diabetes. The same goes for other whole grain foods. Also, the heat involved in commercial processing destroys Vitamin C and other nutrients, making canned fruits and vegetables less nutritious than fresh. One final reason to avoid commercially processed foods is because commercial preparers process large amounts of food at one time, the risk of contamination from toxins, bacteria, and foreign objects is much greater in commercially prepared foods than in foods you prepare yourself. When we prepare food at home, we control what we put into the processing. Fresh, organic foods we prepare for ourselves and our families are always healthier and preferable to commercially prepared foods, because with commercially processed foods, we do not always know what we are getting and putting into our bodies.

The terms “Organic” and “Natural” are terms we often see on foods and labels in supermarkets, but these terms can be confusing. Just what do they mean? Well, standards have been set by law for foods that are labeled organic. The Organic Foods Production Act of 1990 established the National Organic Program (NOP), and the National Organic Standards Board (NOSB) under the control of the USDA. The NOP and the NOSB then created uniform standards for the production of organic food. In the United States, in order to sell, label, or represent products as organic, operations must follow all of the specifications set out by USDA organic regulations, and must be certified organic. Before organic certification can be granted, agricultural systems seeking

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**TOP 10 WORST PROCESSED FOODS**

1. Chicken nuggets 24%
2. Hot dogs 19%
3. Fake cheese 14%
4. Lunchables 13%
5. Spam 9%
6. Twinkies 5%
7. Soda 5%
8. Artificial sweeteners 4%
9. Diet versions 4%
10. French fries 3%
certification must also operate for a minimum of three years under NOP guidelines, and demonstrate that the farmland has been free from prohibited synthetic chemicals during that time. According to the NOP, “Organic is a labeling term that indicates that the food or other agricultural product has been produced through approved methods. These methods integrate cultural, biological, and mechanical practices that foster cycling of resources, promote ecological balance, and conserve biodiversity. Synthetic fertilizers, sewage sludge, irradiation, and genetic engineering may not be used.” In addition, synthetic pesticides are also forbidden.

Organic certification for the farm is just the beginning of the process for the foods labeled organic that we find in the supermarket. After harvest, foods that will be labeled organic must be kept separate from non-organically certified crops, and processed separately as well. Foods claiming to be organic must also be free of all artificial food additives. Labeling of organic products in the marketplace is regulated by the NOP. The NOP allows the following organic claims to be printed on product labels: “100 Percent Organic”, “Organic”, and “Made With” organic ingredients. According to the NOP, products labeled “100 Percent Organic” must contain all certified organic ingredients, processing aids must be organic, and product labels must state the name of the certifying agent on the information panel. In addition, products labeled 100 Percent Organic may display the USDA Organic Seal on the label. Products labeled “Organic” must contain all certified organic ingredients, with the exception that non-organic ingredients allowed per the National List of Allowed and Prohibited Substances may be used up to a combined total of no more than five percent of non-organic content (excluding salt and water). Products labeled Organic must state the name of the certifying agent on the information panel, and may display the USDA Organic Seal on the label. Products labeled “Made With” organic ingredients must meet the following criteria: At least 70 percent of the product must be certified organic ingredients (excluding salt and water); any remaining agricultural products are not required to be organically produced but must be produced without excluded methods; non-agricultural products must be specifically allowed on the National List; and product labels must state the name of the certifying agent on the information panel. Products advertising “Made With” organic ingredients may list up to three organic ingredients contained in the finished product, but may not represent the finished product as organic, or use the USDA Organic Seal. Any multi-ingredient products containing less than 70 Percent organic ingredients may list certified organic ingredients as organic in the ingredients list, and the percentage of organic ingredients, but otherwise may not make any organic claims whatsoever. For more information on organic foods, see the EDIS publication “Understanding the ‘USDA Organic’ Label” at http://edis.ifas.ufl.edu/bs397.

Unlike the term “Organic,” the term “Natural” is not defined by law. Neither the USDA nor the FDA has a defined definition as to what “Natural” means regarding food items. All “organic” foods are by definition natural, but not all “natural” labeled foods are necessarily organic. The term “organic” refers not only to the food itself, but also to how the food was produced on the
farm, and processed in the factory. The term “natural” just refers to how the food was processed. Most foods labeled “natural” are not subject to government health codes or regulations other than those that apply to all foods. According to the USDA, “meat, poultry, and egg products labeled as ‘natural’ must be minimally processed, and contain no artificial ingredients” or added color. However, according to the USDA, the natural label does not include any standards regarding farm practices, only applies to the processing of the food items, and does not apply if the finished product does not include meat or eggs. As far as the FDA is concerned, the FDA does not object to the use of the term natural “on food labels provided it is used in a manner that is truthful and not misleading, and the product does not contain added color, artificial flavors, or synthetic substances. Use of the term ‘natural’ is not permitted in a product’s ingredient list, with the exception of the phrase ‘natural flavorings.’” Like the USDA’s definition of natural, the FDA’s definition only applies to how the food was processed, and does not apply to how it was produced on the farm. Many non-meat food products, despite being labeled “natural,” are often highly processed and may contain a wide variety of processed sweeteners, additives, preservatives, lab-produced “natural” flavors and colors, and possibly even pesticide residues left over from when it was grown. Just to be on the safe side, if you really want produce that is good for you, “All Natural,” and “100 Percent Organic,” grow it yourself using only organic fertilizers, disease and pest control products. Only then will you really know what you are dealing with. For more information from UF/IFAS, go to http://smallfarms.ifas.ufl.edu/organic_production.

Well, my friends, that just about does it for today. Before I go, I will leave you with a couple of delicious recipes my mother makes from the left over Thanksgiving or Christmas turkey, and serves as a simple meal for the family sometime after the New Year. The meal consists of turkey noodle soup, and what the family calls “Hot Pasta,” a traditional Italian meat pie my grandmother learned to make from my grandfather’s Italian mother. (The onions, potatoes, and celery in these recipes are cool season crops that can be easily grown here in Nassau County.) In addition, my mother will usually serve these dishes with cranberry sauce, and home-made coleslaw, made from home-grown cabbage (another cool season crop that grows well here). These family favorites are quite healthy, and I hope your family enjoys them as much as mine does.

In closing, I wish you all a happy, peaceful, and prosperous New Year. Until we meet again, take care, God Bless, and Happy Harvesting!

Peace and Goodness,

Joseph
Miss Alice’s Turkey Noodle Soup

Ingredients
Leftover Turkey Bones (With Some Meat Still Attached)
6 Stalks Celery (Diced)
2 Large Onions (Peeled and Diced)
1 Pound Extra-Wide Egg Noodles
Salt and Pepper (To Taste)

Directions
Take bones from leftover turkey, and boil in a large pot for about two and a half hours with onions, celery, salt, and pepper. After broth has cooled, remove all bones (it is best to use a strainer to strain the broth in order to insure even the smallest bones are removed, then manually pick meat from bones, and return meat, onions, and celery to broth). Add noodles to broth, bring to a boil, and simmer for about 10 to 15 minutes until noodles are cooked.

Notes
This is an easy way to use up every scrap of the Thanksgiving or Christmas turkey. It is very healthy, and the family loves it.

Recipe courtesy of Alice Marie Smith
Grandma Scussel’s Hot Pasta

Ingredients

5 Large Potatoes (Peeled and Diced)
1 Large Onion (Peeled and Diced)
Salt (To Taste)
1 Pound Cooked Pork (Diced)
1 Pound Cooked Turkey (Diced)
2 Eggs
Pepper (To Taste)

Dough

3 Cups All Purpose Flour
1 Cup Crisco
1 ½ Teaspoons Salt
9 Tablespoons Cold Water

Directions

Place potatoes and onions in a pot, cover with water, and add salt to taste. Cook until done (about 30 minutes), drain, and let cool. After potatoes and onions have cooled, add meat, eggs, pepper, and a bit more salt if desired, and gently mix to combine. Set aside.

For the pastry dough, put flour and salt in a large mixing bowl, and cut Crisco into flour with a fork or pastry blender until blended. Add water and mix until well blended. Shape into a ball. Pinch off a piece of dough large enough to roll out a circle about 6 to 7 inches in diameter. Put potato/onion/meat mixture on half of the circle. Dampen edges of dough, and fold the top half of the dough over the half containing the potato/onion/meat mixture. Use a fork to seal the edges. Cut 2 slits on the top of dough to allow steam to escape. Repeat until potato/onion/meat mixture is used up. Place on baking sheets, and bake for about 30 minutes, or until golden-brown, in a 350 Degree Fahrenheit preheated oven.

Notes

This traditional family recipe was handed down to me from my mother, Bessie Scussel, who learned how to make it from my father’s Italian mother. Because there are 25 in the family, I usually have to triple this recipe in order to feed them all.

Recipe Courtesy of Alice Marie Smith
Invasive Plants: **Air Potato**

* Dioscorea bulbifera *

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

**Introduction**

A native to tropical Asia, air potato, Dioscorea bulbifera, was first introduced to the Americas from Africa in 1905. It was introduced to Florida. Due to its ability to displace native species and disrupt natural processes such as fire and water flow, air potato has been listed as one of Florida’s most invasive plant species since 1993, and was placed on the Florida Noxious Weed List by the Florida Department of Agriculture and Consumer Services in 1999.

**Description**

Air potato is in the family Dioscoreaceae, or simply the Yam Family. It is an herbaceous twining vine, growing 70 feet or more in length. Leaves are broadly cordate (heart shaped) and alternately arranged on stems. A distinguishing characteristic of air potato is that all leaf veins arise from the leaf base, unlike other herbaceous vines such as smilax and morning glories. Flowers are inconspicuous, arising from leaf axils in panicles 4 inches long, and are fairly uncommon in Florida. Vegetative reproduction is the primary mechanism of spread. This species of Dioscorea does not produce nearly as many bulbils as D. bulbifera. However, this species can also be considered invasive and problematic, but to a lesser extent than D. bulbifera. Although considered to be a species of yam, these plants are very toxic and should not be consumed.

**Impacts**

Air potato can grow extremely quickly, roughly 8 inches per day. It typically climbs to the tops of trees and has a tendency to take over native plants. New plants develop from bulbils that form on the plant, and these bulbils serve as a means of dispersal. The aerial stems of air potato die back in winter, but resprouting occurs from bulbils and underground tubers. The primary means of spread and reproduction are via bulbils. The smallest bulbils make control of air potato difficult due to their ability to sprout at a very small stage.

**Management**

**Preventative**

Prevention is a key step in the management of air potato. Bulbils are the primary mechanism of spread, and research has shown even minutely small propagules can sprout and form new plants. How these bulbils are spread is speculative, but it appears movement of contaminated brush, debris or soil is the primary mechanism. Mowers and other brush-cutting equipment may also disperse long distances, either through contaminated equipment or throwing of the bulbils during the mowing operation. Spread via birds and other animals may occur, but this has not been confirmed. Water is also a major means of dispersal, so care must be taken to first eliminate populations along water bodies where bulbils may be easily spread. In addition, extra time must be utilized after flood events, as spread may be extensive.

**Cultural**

Weeds such as air potato generally invade open or disturbed areas – following a burn, clearing mowing, etc., so these areas are particularly vulnerable to invasion. Therefore, a healthy ecosystem with good species diversity will help to deter infestation. Another very important combined cultural and mechanical method is the air potato roundup. Each year many counties in Florida, including Hernando, Alachua, and Duval counties, recruit volunteers to help protect and conserve Florida’s natural areas through the removal of air.
potato. During the air potato round up, citizens, organizations, and local businesses get together to collect vines and bulbils. In 2003, the City of Gainesville collected 13 tons of air potato and other invasive plants (Gainesville Parks and Recreation). Removing bulbils and vines from natural areas helps prevent air potato to new areas, as well as reduces the possibility of reinfestation. In addition to collecting and removing aboveground bulbils, digging up and removing below ground tubers will help. This may be particularly useful to eliminate isolated plants/small populations – especially in areas that cannot be easily accessed or chemically treated. One of the most important control measures for air potato is the removal of bulbils and tubers.

**Mechanical**
Mechanical methods are limited for air potato, as control of the vines generally results in damage to the vegetation being climbed/smothered by the air potato. Burning also results in excessive damage to the native vegetation, as the fire follows the vines into the tree canopy. Mowing will help to suppress air potato, but as mentioned previously, this may increase the overall problem due to spreading of the bulbils.

**Biological**
There is limited research and data on biological control of air potato.

**Chemical**
Chemical control is one of the most effective means of control for air potato, but single applications will generally not provide complete control. This is due to resprouting of bulbils or underground tubers. A dilution of triclopyr (Garlon 3A at 1 to 2% solution or Garlon 4 at 0.5 to 2% solution) in water can be an effective control for air potato when applied as a foliar application. Be sure to include a non-ionic surfactant at 0.25% (10 mls or 2 teaspoons per gallon of spray solution). A 2 to 3% solution of glyphosate (Roundup, etc.) can also be effective. These herbicides are systemic (move throughout plant tissue) so care must be exercised to minimize off-target damage. If air potato vines are growing up into trees or other desirable species, vines should be cut or pulled down to minimize damage to the desirable vegetation. Pulling the vines down without severing them from the underground tuber will allow the herbicide to move into the tuber and provide better control. The best time to apply an herbicide is in the spring and summer when air potato is actively growing. Be sure to allow adequate time for the plant to regrow from the winter to ensure movement of the herbicide back into the underground tuber. (As plants grow and mature, they begin to move sugars back into the roots and below-ground tubers). However, treat before the plants begin to form new bulbils. Persistence and integration of control methods will be the key to complete air potato management.
During cool weather in winter and early spring, some Florida homeowners begin to notice foul-smelling mushrooms popping up in their yard. Although their strong rotting smell is unappealing, these fungi, known as stinkhorns, are not actually bad for your landscape and can be beneficial.

**Identification**
Stinkhorns are in the same order of fungi that includes puffballs and earthstars.

**Stinkhorn "egg"**
Stinkhorn fungi start out as white, egg-like structures in mulch or other damp, decomposing material. Most of this fungal structure is underground. When enough water is available, this egg-sac structure will rupture and the mature mushroom (the “stinkhorn”) will emerge.

**Stinkhorn mushroom**
Depending on the type of stinkhorn, this mushroom (the fruiting body of a fungus) is stalk-like, globular, or latticed. Stinkhorns vary in color but are usually pink to orange in Florida.

**Odor**
All stinkhorns produce foul odors, which some people describe as a putrid, rotting meat smell. The smell attracts ants and flies that then pick up and carry the mushroom spores to other places.

**Stinkhorns Are Beneficial**
As a fungus, stinkhorns break down organic matter. This is especially helpful for landscapes and gardens in Florida’s naturally sandy and nutrient poor soils. In your garden, stinkhorns break down materials such as mulch and make those nutrients available for plants.

Stinkhorns do not harm landscape plants or grasses.

**Management**
Homeowners can take heart that stinkhorns are seasonal. Stinkhorn mushrooms usually appear for a few weeks only once or twice a year, and especially during wet, cool weather.

While stinkhorns do occur naturally in Florida, they can also be introduced to an area through mulch materials.

You can use a few methods to deal with stinkhorns in your landscape:

- Remove decaying organic matter, especially sawdust piles, dead roots, underground stumps, and hardwood chip mulch.
- Consider using vegetative ground covers as opposed to mulch, and/or keep large mulched areas away from your house.
- Handpick stinkhorns in the “egg” stage, put them in a zipper freezer bag, and throw them away.
- Tolerate them. Stinkhorns are beneficial for your soil. Try keeping your windows closed to minimize the odor problem.

**Chemical Control**
There are no registered or safe products for use on stinkhorn fungus, and using chemicals is not a recommended or practical control method.

Adapted and excerpted from:
L. Williams, “Stinkhorns are Smelly Fungi,” Gardening in the Panhandle (3.87MB pdf), UF/IFAS Northwest District Extension (01/2009).
T. Friday, “Mushrooms creating a stink” (173KB pdf), UF/IFAS Santa Rosa Extension (01/2006).
Belted Kingfisher

by Master Gardener Mary Chudzynski

A frequent visitor to “my” pond during the winter and early spring months, the belted kingfisher is a marvel to watch. Sitting above the pond on a branch or rooftop, it watches the pond for prey. In addition to its favorite diet of minnows or bugs, it may also eat lizards, crabs, crayfish, even mice! When the prey is seen, the kingfisher flies over the site and plunges into the water after it. Be sure to watch the video!

The belted Kingfisher has distinct, alternating bands of white, blue and rust from its throat through its breast. It has a large, crested head, a long black bill and flashy plumage. It looks like it’s out of proportion.

As it flies, it also makes a distinctly loud and penetrating “rattle” while it is searching for food. It is not a common sounding call, so if you hear an unusual noise coming from around a pond or riverfront, look for the little kingfisher, scouring the area for its food.

I have attempted to photograph the kingfisher, but it is really too fast for me. I found a video so you, too, can watch this little sensation.

http://www.arkive.org/kingfisher/alcedo-atthis/video-08b.html
“TO DO” LIST FOR JANUARY

Citrus: Water as needed - especially 24-48 hours before a freeze. Protect above and below grafted area on the trunk when freezing temperatures occur.

Fruits: Major removal of twigs and branches should occur before spring. Weed as needed. Keep grass away from root areas. Apply 6-6-6- or 8-8-8 fertilizer to Pears.

Flowers: Annuals to plant are carnations, pansies, petunias, snapdragons, delphiniums, larkspur, dianthus, and foxgloves. Be ready to move less hardy bulbs inside. Most others, like ginger and amaryllis, may show foliar damage during severe cold, but they can be left in the ground and they should survive. Tulips, hyacinths, and daffodils can be planted now if you refrigerated them for 8 weeks to meet their chilling requirements.

Roses: DO NOT Fertilize. Water as needed. Prepare sites for new plants 1/3 top soil, 1/3 dehydrated cow manure, 1/3 peat moss, ½ cup super phosphate or bone meal. Roses should be pruned once each year. In north Florida the best time is around Valentine’s Day, February 14th. A little sooner or later doesn’t really matter. If you want roses to bring to a show, you should begin pruning seven to eight weeks before the show. Some varieties take a little longer and some will bloom sooner, but eight weeks is a good rule of thumb.

Herbs: Plant anise, borage, chives, chervil, coriander, fennel, garlic, lavender, marjoram, mint, parsley, rosemary, sage, sesame, sweet marjoram, and thyme.

Lawns: This is fertilize free month. Check the soil to determine water needs. When the grass blades fold it’s time to water. Water once every 10-14 days in the winter unless we receive rainfall. If mowing, keep your mower height at the highest level.

Perennials: Water during morning hours only, when surface soil is dry to the touch. Make sure you have 2-3 inches of mulch around the roots. Outdoor plants require less water in the winter months.

Trees: Remove dead limbs, trim off suckers, lanky growth, and crisscrossing limbs; remove old seedpods. Don't perform major pruning on any flowering trees producing blooms during the spring months.

Vegetables: English peas, beets, broccoli, potatoes, cabbage, celery, carrots, bunching onions, radishes, turnips, and cauliflower can be planted now.

Selected from Florida Vegetable Guide by JM Stephens, RA Dunn, G Kidder, D Short, & GW Simone, University of Florida and Month-by-Month Gardening in Florida by Tom MacCubbin
“TO DO” LIST FOR FEBRUARY

**Citrus:** Water as needed. Prune any water sprouts, suckers, rubbing or crossing branches. Weed as needed.

**Fruits:** Major removal of twigs and branches should occur before spring. Weed as needed. Check irrigation to ensure it is working. Make repairs.

**Flowers:** Remove all dead plant portions of annuals. Baby’s’ breath, calendulas, carnations, dianthus, dusty miller, Marguerite daisies, pansies, petunias, and snapdragons can be planted this month. Prune out declining foliage of bulbs as needed. Use insecticidal soap for aphids.

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

**Roses:** Water as needed. Apply organic materials around each plant. 1 cup cow manure, 1 cup fish meal, ½ cup Epsom salts. Begin spray program every 7-10 Days with appropriate fungicide but remember to rotate types of fungicide; spray entire plant including underside of leaves.

**Lawns:** Cut St. Augustine lawns as needed; keep the mowing height highest level for your grass variety. Cutting grass too short encourages insect damage and disease. No fertilizer this month.

**Perennials:** Do not rush to prune out the dead or declining portions, as some cold may linger until March. Leaving dead portions on may provide some protection in case another freeze occurs.

**Ornamental grasses:** Remove all dead stems on deciduous grasses by cutting stems to 6-12 inches above ground. Remove only dead stems on evergreen ornamental grasses, leave green portions intact. Fertilize ornamental grasses at the end of this month!

**Trees:** Existing well-established trees and palms do not normally need special watering - the nearby irrigation of lawns, shrubs, and flower beds normally supply adequate moisture. Some exceptions may be dogwoods or red maples.

**Vegetables:** This month you can plant beets, broccoli, carrots, cabbage, collards, cauliflower, celery, endive/escarole, lettuce, mustard, bunching onions, parsley, turnips. Before you start your garden, be sure to have the soil tested. The University of Florida will do a full nutrient test for only $7. Come by the office to pick up a soil kit or call us at 904 879-1019 for more information. Put raked leaves and grass clippings in a compost pile. As they rot, they make an excellent organic material to add to the soil when planting vegetables and some ornamental plants.

Selected from Florida Vegetable Guide by JM Stephens, RA Dunn, G Kidder, D Short, & GW Simone, University of Florida and Month-by-Month Gardening in Florida by Tom MacCubbin
Q: Can you identify this plant for me? I purchased it at the local garden centers and it did not have any label on it. It has never bloomed. It does die back when the temperatures get cold but it comes back.

A: I was not immediately familiar with this plant so I sent a brief description to the horticulture agent in Alachua and she recognized it as a clerodendrum, most likely one called “shooting stars” or “starburst”, Clerodendrum quadriloculare. It does seem odd that you have not seen blooms on it as this plant puts on large, clusters of white or pink blossom clusters during the winter months. Like many other clerodendrum, it has a tendency to be “weedy” as it can put out suckers from the roots and spread quickly. Therefore it might work better in a large container or raised bed. It can grow to heights of 6-8 feet if the winter is mild. Shooting star plants are not picky about the soil type or pH, although well drained soils work best. It is just at or slightly out of our cold hardiness range which is 9 – 11. The leaves are quite striking as they are dark green on the top and a deep purple on the bottom. It can grow in partial shade to full sun but produces better flowers in full sun. Some people develop it as a single trunked tree while it is most often found in multi-stemmed forms similar to crape myrtle.

Q: I moved here a few years ago and I love all the variety of plants and trees around the area. However, I miss the gingko tree from my home town. Why don't I see more of it growing here?

A: I love the ginkgo tree, Ginkgo biloba, too; especially the yellow fall foliage and the unique shape of the leaves. It has no serious insect or disease issues which would make it a wonderful tree in a landscape. This particular tree, however, prefers to grow in more northern climates, where it is exposed to fewer hot and humid days. Although I have seen it as far south as Central Florida, it never flourishes like it does in areas north of cold hardiness zone 9. Gingko trees tolerate most any type of soil, most any type of light conditions and they are fairly drought tolerant. It is relatively disease free but it is important to select only male trees as the females produce fruit which put off a disgusting and offensive odor. In addition, fruit drop can be very messy. Too many commercial sites have selected the wrong plant and ended up years later with messy, female trees. According to the University of Florida, select a grafted male plant by purchasing a specific cultivar such as `Autumn Gold', `Fastigiata', `Princeton Sentry', or `Lakeview'. If the plant is propagated by seed, it could take as long as 20 years or more for Ginkgo to fruit and then it is too late. `Autumn Gold' has a bright gold fall color and rapid growth rate. `Fastigiata' has an upright growth. `Princeton Sentry' has a narrow conical crown for restricted overhead spaces, which works well on commercial sites but can reach heights up to 65 feet. `Lakeview' has a compact, broad conical form. 

http://edis.ifas.ufl.edu/st273
Q: I found a small, turtle with a very long tail in my driveway. It did not look like any turtle I am familiar with as the outer shell was very rough. Do you have any idea what it might be?

A: I believe you may have found a hatchling of the Common Snapping Turtle, *Chelydra serpentine* or possibly the Florida Snapping Turtle, *Chelydra serpentine oceola*. They are sometimes confused with their larger distant relative the Alligator Snapping turtle. But the Common Snapping turtle has a serrated tail unlike the Alligator Snapple turtle. Plus the Common Snapping Turtle is much smaller. Its shell or carapace can be tan, black, or dark brown and only about 8 - 14 inches in length whereas the Alligator Snapping Turtle carapace can reach up to 31 inches. Adult Common Snapping Turtles weigh from 10 - 35 pounds while the Alligator Snapping Turtle can be up to 200 pounds. Common Snapping Turtles are freshwater turtles with a long tail and neck and three rows of low carapace keels. Mating can occur in any month from April and November. Nesting generally occurs between early May and mid-June. Females come out to lay eggs in either the morning or evening in loose sand, loam, or plant debris. Females lay from 20 - 40 eggs which are incubated for 75 - 95 days. The eggs hatch in August to October. The Common Snapping Turtle can inhabit almost any freshwater river, lake, marsh, swamp, or pond. Some have even been found in brackish salt marshes. It prefers bodies of water which have a soft mud or sand bottom, aquatic vegetation, and plenty of submerged tree trunks or brush. It will eat almost anything such as aquatic plants, algae, arthropods, insects, fish, amphibians, reptiles, birds, and mammals. Its eggs are preyed upon by raccoons, skunks, foxes, coyotes, bears, crows, and Hognose Snakes. Juveniles and hatchlings are eaten by herons, egrets, alligators, and predatory fish. When approached by humans or other predators this turtle can bite viciously. In the wild, snapping turtles are estimated to live up to 30 years and potentially 47 years in captivity. Once these turtles reach a certain size there are few natural predators willing to tangle with them. Snapping turtles sometimes bury themselves in mud with only their nostrils and eyes exposed. This burying behavior is used as a means of ambushing prey. Snapping turtles will eat nearly anything such as carrion, invertebrates, fish, birds, small mammals, amphibians, and a surprisingly large amount of aquatic vegetation.
Garden Talk with Rebecca Jordi

Q: My sister grows peacock gingers and they look so easy. What can you tell me about them?

A: I actually have several different varieties in my own yard and I love them. Peacock gingers are classified under the genus Kaempheria and are suited for USDA Hardiness Zones 8–11. They should be grown in shady sites where they will receive dappled light or full shade. Peacock gingers only grow about 6 – 8 inches high so they work beautifully as ground cover. They will die back in the winter but usually return late in the spring (between April and May) and bloom from early summer through the fall. The small, one inch flowers range from pale pink to deep lavender. Even though the flower is pretty, it is the pattern on the leaves which makes peacock gingers most attractive. The leaves can be anywhere from 3 – 6 inches long with a variety of coloring ranging from bronze to deep green. My peacock gingers have loved all the rain we have been receiving this summer but they have also grown well without receiving weekly irrigation. They are not particular about the soil type although I would suggest planting them in soil which contains a good organic mix – similar to most other perennials. Peacock gingers reproduce by rhizomes and can be divided easily. They also will adapt well to container gardening.

For more Garden Talk” questions answered by Ms. Jordi, see our website at nassau.ifas.ufl.edu/