July - September 2005

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Tetanus Danger in the Garden

One of our master gardeners, Julie Fox, had a "run in" with a tomato cage and received a bad scrape, which required a tetanus shot. She found an online article about tetanus that is worth passing along to you. Excerpts are as follows:

Tetanus Dangers May Await Spring Gardeners - Survey Shows Few Aware of Disease Danger in Dirt
By Jennifer Warner, WebMd Medical News

"A new survey shows 57% of adults don't know that tetanus bacteria are commonly found in soil, dirt, and manure. Despite the fact that about a third of tetanus infection occurs while gardening, researchers found that 40% of those surveyed aren't protected against the infection.

Tetanus is a nerve condition that occurs when humans become infected with a bacteria commonly found in the environment know as Clostridium tetani. Bacterial spores are found in soil as well as in human or animal waste. Humans become infected with the bacteria when spores enter an open wound, such as a cut or scrape, and enter the bloodstream.

Tetanus commonly causes muscle rigidity and painful spasms usually starting at the top of the body. Lockjaw is often the first symptom, followed by stiffness in the neck and abdomen and problems swallowing. Symptoms appear anywhere from days to weeks after infection.

Immunization is the best way to protect against tetanus in the U.S. Vaccine protection against tetanus must be boosted every 10 years with a combined vaccine known as Td, which also protects against diphtheria. But according to the CDC, 53% of people in the U.S. aged 20 years and older are not adequately protected against tetanus and diphtheria.

"Tetanus is rare in the U.S. today, but it's difficult to tell when you may be exposed, and the potential consequences can be devastating," says Susan Rehm, MD, president of the National Foundation for Infectious Diseases, in a news release.

The telephone survey of more than 2,000 households commissioned by the National Gardening Association in January shows that many people
are unaware of the tetanus dangers lurking in their home, garden, or yard.

Researchers found 80% of gardeners surveyed had sustained an injury that could put them at risk for tetanus infection, including scratches, insect bites, cuts, scrapes, splinter, puncture wounds, and pet or animal bites.

According to the CDC, 31% of tetanus injuries occur in the yard, garden, or farm and 23% happen at other outdoor locations.

Since the late 1940s, children in the U.S. have been vaccinated against tetanus with a combined vaccine that protects against tetanus, diphtheria, and pertussis (whooping cough).

Adults over 60 may have never had this series. In those cases, the Td vaccine series can be used to provide protection against tetanus and diphtheria. Vaccine protection with the Td vaccine must be boosted every 10 years."

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**Storing Pesticides Safely**

- Don't stockpile. Buy only the amount you will need in the near future.
- Follow all storage instructions on the pesticide label.
- Store high enough so that they are out of reach of children and pets. Keep in a locked cabinet in a well-ventilated utility area or shed.
- Do not store flammable liquids inside your living area, and store them far away from ignition sources such as the furnace, car, outdoor grill or power lawn mower.
- Never store in cabinets near food, animal feed or medical supplies.
Always store pesticides in the original containers, complete with labels that list ingredients, directions for use and first aid steps, in case of accidental poisoning.

Never transfer pesticides to soft drink bottles or other containers. Children or others may mistake them for something to eat or drink.

Use child-resistant packaging correctly - close the container tightly after using the product.

Do not store in places where flooding is possible or in places where they might spill or leak into wells, drains, ground water or surface water.

If you can't identify the contents of a container or if you can't tell how old the contents are, dispose of the item in an approved, safe manner.

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Cybergardening - Bulbs
By Julie Fox, Master Gardener

Information for this article is from: www.dutchbulbs.com

(Note: Use of the website named in this publication is solely for the purpose of providing information. UF/IFAS does not guarantee or warranty the products named, and references to them in this publication does not signify our approval to the exclusion of other websites with similar products.)

Free paper catalog available, e-newsletter signup with shipping for zone 9 in February and October.

Van Bourgondien has been a family business in America since 1904. The owner is directly engaged in the business and adds a nice personal touch with good articles including particular bulb care, garden design, dealing with allergies and pets, deer and shade. Although the website opens to a rather bland home page if you dig a little, this website is full of helpful advice. But before we explore, check out the 50% off sale. It is chock full of really beautiful plants (with color photos) for CHEAP! Bulbs are often sold in packages but can be found individually for the more exotic kinds. In addition to plant groupings there are design option grouping, trees, shrubs, vines and water plants.

A nice homey touch is the link to photos from customers. One
customer from Florida has sent in very nice pictures of her amaryllis bed.

Want to know how, where and when to plant a particular bulb? How about an Arabian Starflower or Feather Hyacinth? There is a handy GARDEN GUIDE for such questions, including bulbs, ferns and perennials with easily understood symbols.

I ordered and recently planted egret flowers (Habenaria radiata, Arum italicum, and a Peruvian daffodil, Ismene calathina). I have confidence of their growing well because I can look up planting advice from the Garden Guide. I ordered them this past spring and the huge, healthy bulbs arrived dry and well packed in sawdust and a sturdy box. I have even waited a few months before planting and they are still firm. You can often find further discount codes in various gardening magazines. Bulbs are covered by warranty.

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A Primer of Planting: Tree Planting 101

By Peter Matt, Master Gardener

The past year has been one of sweeping change for trees in Osceola County. Hurricanes knocked over the mighty oaks, the U. S. Department of Agriculture ripped out citrus due to the citrus canker infestation, and the onslaught of new housing developments paid minimal attention to established trees. Whether you are in a recovery, replenishment or renewal mode, a few basic ideas could go a long way in helping you achieve success in tree planting.

Proper Prior Planning Prevents Poor Planting:

Since you are going to be investing both time and money, there are a couple of things you can do before you even take hold of your shovel. First, call 1-800-432-4770 (a Sunshine State -1 call). They will arrange to have local utility companies check and mark your property for underground cables and pipes. There is no charge for this service and it is not a legal requirement, but it could save you some inconvenience or embarrassment. They do not mark your property's irrigation system so you will need to research that.

Since you are checking below the surface, it also recommended that you check overhead clearance. That cute three-foot sweetgum in a five-
gallon pot is going to grow about three feet a year before maturing to 40' - 125' tall with a spread of 20' - 60'.

If you live in a community with covenants or a homeowners association, give them a courtesy call. Some communities can and do ban certain trees. The female ginkgo and coconut palms are two that come to mind. The former produces a fruit that will chase you away and the latter can drop a coconut that will destroy a car's windshield. You also want to ask if there are any easements, i.e., how far from the road can you plant and if there is a limit to the number of trees.

**Right Tree, Right Place:**

Although we live in paradise, not all trees will grow in all places. Drive around your neighborhood; better yet, walk around your neighborhood. "If you do not see your dream tree growing nearby, there is probably a reason." In my neighborhood, the ever-popular pygmy date palm (*roebelenii palm*) does great where it gets full sun but struggles when in shade for most of the day.

**Seek Advice**

The Osceola County Master Gardeners staff the plant clinic from 10:00 a.m. - 2:00 p.m., Monday - Friday. Call 321-697-3000 for assistance. The Master Gardeners are University of Florida trained volunteers who have access to the most up-to-date tree information available.

Local nurseries are a wonderful source of knowledge. These are people who not only know what works best for the local area, but they have a vested interest in the community.

Chain retailers are another source. Their ability to buy in volume often results in the lowest price and some offer warranties. I hesitate to buy trees from chain stores as they are often trucked in from 300 miles away and may not be the best tree for this area. I prefer to obtain my fertilizers and garden tools from these sources.

With the initial planning out of the way it is now time for tree selection. The major schools of thought on this subject are native species vs. non-native species, and deciduous vs. coniferous. (A future Roots & Shoots article will address the native vs. non-native species pros and cons and the associated terms of exotic, invasive, and endangered).
Deciduous vs. Coniferous

A deciduous tree is one that will drop its leaves as summer passes into fall. This oftentimes results in a spectacular display of colors as well as a prompt to start preparing for the holiday season. In New England, it triggers an annual invasion of leaf gazers known as "peepers". In central Florida, a welcome advantage of the deciduous tree is shade. A tree planted on the sunrise side of a house cuts down on the morning warming. A tree planted on the sunset side will give you an afternoon shade advantage. Once the tree has dropped all of its leaves, the temperature has also dropped and you benefit from the sun warming your house. A downside to the deciduous tree is that you have to rake leaves.

In the spring your tree will really start to do its thing -- blossoming, blooming and growing. After the destruction of last year's hurricanes, this past spring's display really indicated that things were going to be okay.

A coniferous tree is one that does not loose its leaves. Usually, we think of pines.

Another consideration is if your tree is fruit bearing. For most of us that means something we can eat, but in the world of trees, the fruit can be a cone, a pod, or seeds. Something that we may not find too palatable but wildlife does. Include in your planning if you want to be attracting wildlife or cleaning up the leftovers.

A final consideration is variety. Some trees did not fare too well during the hurricanes. In the areas where only one species was flourishing, they were often wiped out in mass. Recent studies are being devoted to wind tolerance. You don't have to wait for this to be published.

Perhaps an upside to the hurricanes is that you can now see what survived and make your own decision. If you limit yourself to just one species, you don't benefit from each tree's uniqueness.

After you have selected your tree, bring it home and enjoy it in its pot. You have done enough for one day.

Planting

It's all in the hole. It is better to put a $100.00 tree in a $200.00 hole than put a $200.00 tree in a $100.00 hole. Devote a little time and pre-dig your hole. It is always better to go wider than deeper. A rule of thumb is that the hole should be two to three times the diameter of the root ball, and the bottom of the root ball needs to be resting on undisturbed
soil. The top of the root ball should be level with or slightly higher than the surrounding ground. I prefer to dig the hole removing obstacles and loosening soil as I go. I then use a sifter made out of chicken wire and 2" x 4"s, sift the soil and use this to backfill. Usually, the root ball of the tree will compensate for any obstacles that have been removed. If you have had to do any major excavating, blending the dirt from the hole with some topsoil and manure works well.

Place the tree in the hole on its undisturbed platform. Now is the time to turn your tree and check it from different views. It's a lot easier now than after you have back filled. As you are backfilling, you will want to be filling the hole with water. Turn your hose to a slight flow and drop the soil back in. This eliminates air pockets and assists in settling. Take your time. Don't shake or rock the tree; let the water and gravity do the work. Once you are level with the surrounding ground, build a tree ring about 3" - 4" high around the perimeter of the hole. Remove and turn off the hose, add additional dirt if needed, and prepare for the last step.

**Mulching**

Add good quality mulch to a depth of three to four inches but keep it about six inches from the trunk.

**Well Done**

Continue with light frequent watering, which means three to five times a week for three months. Call the Osceola County Master Gardeners at 321/697-3000 for maintenance tips.

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**EXOTIC HERPTILES:**

**Reptiles and Amphibians**

By Monica French, Master Gardener

As Master Gardeners, we have grown accustom to the term exotic as dealing with plant life. A couple of months ago, I spoke with Kevin Engle from the Florida Game and Fresh Water Commission about exotic herpetofauna of Florida.

Did you know that Florida has more exotic herps than any other state? Hawaii is second. We have twice as many exotic lizards as native species. Florida has forty established exotic herptile species. Our
climate and lush plant life, combined with canals serving as dispersal corridors, has made Florida inviting to many things. Many reptiles came in through Miami because it is a port for foliage plants.

A lot of reptiles are released accidentally. International release is against the law. Beginning in 1880, the Brown Anole led the way across the state of Florida, followed by the Mediterranean Gecko in 1910. The Texas Horned Lizard invaded Palm Beach in 1923 and has spent fifty years basking on Santa Rosa Isle. Nine hundred Green Iguanas were removed from Key Biscayne from 2002 to 2004 at Bill Briggs State Park. Since July 2003, Nile Monitors have been found from South West Cape Coral to Orlando; and they are a potential threat to furrowing owls, turtle eggs, nesting shore and wading birds, and even small mammals.

Burmese Pythons have been sighted from Highway 29 to East Krone to Alligator Alley. They are established in Everglades National Park and since the mid-1990's, the park has caught one per week. The large ones are eating deer-sized prey. Also included in their diet are gray squirrels.

In 1970, Boas were established in Miami's Charles Deering Estate, which includes pine rocklands and tropical hammocks. Since 1996, the Estate has removed 51 boas including babies, gravid (with eggs) females, and nine-footers. These reptiles seem to dine on opossums and raccoons. The most widespread terrestrial snake in the world came to Florida in 1979. Called the Brahminy Blind Snake, these creatures are worm-like and all female.

Let us not forget the Cuban Tree Frog with its toxic secretions that was introduced into Florida by foliage. This frog is causing the decline of native squirrels and green tree frogs. Also, the Apple Snail is destroying foliage and habitat in Lake Brantley, the canal to Lake Apopka, the St. Johns River and reported (not confirmed) in Lake Toho.

Many of these arrivals probably came from someone's aquarium. Pet owners must be careful of the great potential for harm to our environment.

Preventing for Hurricanes and Other Disasters
Again, it is that time of year when we need to think about hurricane preparedness. While you are surfing the web, check out the wealth of
information that can be reached through the Master Guide in the Disaster Handbook published by IFAS. To access this information, visit our website at http://osceola.ifas.ufl.edu. Click on Events Calendar and scroll down to Announcements.

Central Florida Gardening Calendar
Planting Guide
July - September

ANNUALS

- Few annuals can tolerate the summer heat and frequent rain showers. In July plant: Celosia, Coleus, Crossandra, Exacum, Hollyhock, Impatiens, Kalanchoe, Marigold, Nicotiana, Ornamental Pepper, Periwinkle, Portulaca, and Salvia.
- Refresh your garden with summer color in August by planting Coleus, Kalanchoe, Marigolds, and Salvia.
- If you desire cold hardy plants for winter, August is the time to sow seeds of the following in a germinating container: Ornamental Cabbage, Alyssum, Calendula, Pansy, Statice, Carnation, Petunia, Snapdragon, and Shasta Daisy. When sowing seeds in a germinating container, the growing medium should never be allowed to dry. The soil mix should be moist but not excessively wet. Certain seeds require light in order to germinate. Transplant seedlings to small pots as soon as the first true leaves appear.
- In September, plant Alternanthera, Blue Daze, Exacum (Persian Violet), Foxglove, Kalanchoe, and Wax Begonia. All are heat tolerant and will be colorful until first frost, which may be late November.

PERENNIALS AND BULBS

- Bulbs for July and August planting include: African Iris, Aztec Lily,
Butterfly Lily, Crinum, Gladiolus, Iris, Kaffir Lily, Society Garlic, Spider Lily, and Walking Iris.

- Pentas, Verbena and Blue Daze will bloom until frost and usually sprout from the roots in the spring.
- Additional bulbs for September planting include Elephant Ear, Amaryllis, Calla, Watsonia, Lilium, Shell Ginger, Zephyr Lily, and Pineapple Lily. Gladiolus will bloom three months after planting.

FRUIT

- Fruits grown in containers can be planted year around. Set out strawberry plants in the landscape, garden or containers for winter and spring crops.
- Harvest any oranges from last year's crop, which may still be on the tree. Holding fruit on the tree this long will result in dry and tasteless fruit. Bears lemon, Persian lime and Key limes are harvested during the summer. All are very cold sensitive so take special precautions.
- Summer fruit harvest includes avocado, figs, guava, mango, pears, persimmon, and pomegranate. Bunch grapes usually ripen in July, while muscadine grapes are ready for harvest in August and September.
- If citrus shows symptoms of greasy spot disease (black oily spots on yellowing leaves), spray with a fungicide and rake fallen leaves. Keep grass and weeds away from citrus tree trunk. Check for flaking of the bark, near the soil line and yellow leaf veins indicating "foot rot" disease of citrus.
- In July, fertilize first year blackberries, peaches, pecans, chestnuts and persimmons.
- Blueberries need only a small amount of fertilizer. Over fertilizing will kill the plants, so limit application to February and July.
- In August, fertilize established banana, avocado and guava. Apply the third and final fertilizer for the year on established peaches, pecans, persimmons, chestnuts, and blackberries.
- September is the last month of the year to fertilize. Fertilize citrus, pineapples, guavas, loquats, and mango.

VEGETABLES

- July heat limits planting. Okra and southern peas are tolerant of summer conditions.
- August is the beginning of our fall planting season. Plant pole beans, broccoli, celery, collards, okra, sweet corn, eggplant, onions, southern peas, peppers, pumpkin, summer squash, Swiss chard and watermelons.
- In September, plant southern hybrid bulbing onions (Texas Grano, Granex, Excel) to have bulbs for spring harvest. Bulbing onions
planted after **December** yield only green onion tops instead of bulbs. Also in **September**, cool and warm season plantings overlap. Plant cold sensitive crops which mature before frost: beans, corn, cucumbers, eggplant, peppers, summer squash, and tomatoes. Cold hardy vegetables include broccoli, cabbage, celery, endive, escarole, lettuce, mustard, bulbing and bunching onions, peas, radishes, rutabaga, Swiss chard, strawberries, and turnips.

- If roots show swelling from nematode damage, treat soil before fall planting. A chemical free way is to solarize using free solar energy to heat sunny gardens and bake soil pests. Cover moist, prepared soil with clear plastic for at least six weeks.
- Test soil pH every two to three years and adjust if necessary. It is good to make adjustments when preparing the soil for the upcoming season.
- Insects and disease can be major problems in the fall garden. Summer rain and warm temperatures are ideal for disease and insects. Remove old or dead plants. Throw them away so they are not a breeding ground for pests and disease.
- Peanuts planted in the spring should be ready for harvest in **September**.

**LANDSCAPE**

- Prune azaleas before **July 4** or you will have few flowers next spring. Do last pruning of other shrubs in **September** so new growth matures before first frost. Remove old flower blooms to extend flowering. Poinsettias set buds in **mid-September** so continue pruning poinsettias until Labor Day for best growth and flowering.
- Fertilize annuals and perennials during soil preparation and then monthly. Do not fertilize new plants at planting time, wait at least a month. In **September**, apply fall application of fertilizer to landscape plantings. Occasionally poinsettias need another application of fertilizer in **July** if heavy rains follow the **June** application.
- Check weekly for lacebugs, aphids (new growth), caterpillars, scale (variegated Ligustrum, camellias, pittosporum, holly, podocarpus, and magnolia), spider mites and whitefly. Check for powdery mildew (crape myrtle, roses, and Gerbera) and maintain frequent rose fungicide spray program during summer rains.
- **September** is the time to root-prune plants to be moved in **January** or **February**.
- Balled and burlap or bare root field dug palms can be planted during our rainy season. Be sure to purchase from a reputable individual with experience moving palms. Cold hardy landscape plants grown in containers can be planted any time of year. Hold off on planting tropicals, which will need to be protected from frost, and freezing
temperatures.

LAWNS

- Sow seeds or lay sod for Bahia grass, Bermuda grass and Centipede grass. Plant St. Augustine grass plugs, sprigs, or sod.
- Keep mower blades sharp. Leave grass clippings on the lawn to recycle nutrients naturally.
- Wait until September to apply the fall application of complete fertilizer to Bermuda, Bahia and St. Augustine grasses. Obtain green-up without applying nitrogen fertilizer by using liquid iron. If fertilizer is deemed necessary earlier in the summer, apply fertilizer containing only natural organic or slow release nitrogen to prevent insect problems.
- For the most effective control of mole crickets, apply baits or sprays as soon as the pest is seen. Due to the maturity of the mole crickets later in the summer, control is more difficult.
- Watch for brown thinning patches in the lawn, which could indicate chinch bugs in St. Augustine grass, or caterpillars or diseases. Diseases can be severe due to frequent afternoon showers.

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Osceola County Extension
Calendar of Events
July-September 2005
Free programs! Call 321-697-3000 to register for class (unless otherwise noted).

Water Gardening
Tuesday, July 5th
7:00pm-8:30pm
Central Library, 211 E. Dakin Ave., Kissimmee

Water Gardening
Wednesday, July 6th
3:00pm-5:00pm
Central Library, 211 E. Dakin Ave., Kissimmee

Fall Vegetable Gardening
Tuesday, August 30th
6:30pm-8:30pm
Extension Services, Osceola Heritage Park

Trees in the Landscape
Saturday, September 24th
9:00am-Noon
St. Cloud Civic Center, 3001 17th Street
Water Gardening  
Thursday, July 7th  
7:00pm-9:00pm  
BVL Library, 405 Buenaventura Blvd., Kissimmee

Low Maintenance Landscapes  
Saturday, September 10th  
9:00am-Noon  
St. Cloud Civic Center, 3001 17th Street

Water Gardening  
Saturday, July 9th  
10:00am-Noon  
BVL Library, 405 Buenaventura Blvd., Kissimmee

Low Maintenance Landscapes  
Tuesday, September 27th  
10:00am-noon  
Extension Services, Osceola Heritage Park

Low Maintenance Landscapes  
Saturday, July 9th  
9:00am - Noon  
Extension Services, Osceola Heritage Park  
Call 407-518-2267 to register for program.

Landscaping for the Fall  
Saturday, October 8th  
9:00am - Noon  
Extension Services, Osceola Heritage Park  
Call 407-518-2267 to register for program.

Landscaping for Wildlife  
Wednesday, July 27th  
10:00am-Noon  
Extension Services, Osceola Heritage Park

Low Maintenance Landscapes  
Thursday, August 18th  
6:30pm-8:30pm  
St. Cloud Civic Center, 3001 17th Street