As we begin the New Year, much of our outdoor surroundings are well into the grip of a north Florida winter. Cold and below freezing temperatures have caused deciduous trees and shrubs to shed their leaves, green lawns to turn brown, and damage or loss of plants in the landscape.

In this issue, you can learn about the benefits of soil testing, managing cold damaged palms, adding winter color to your landscape, protecting your vegetable garden from the cold and so much more. It also contains informative articles and resources to help you get ready for the 2011 growing season, such as, how to design a Florida landscape like a pro, edible landscaping, and how to make a self-watering container system. We also venture into the home with management options for pesky bed bugs.

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Don’t Guess, Soil Test

Most of our warm season lawn grasses have now gone dormant for the winter. While your lawn chores will be reduced, there are a few tasks that still need to be done to ensure a healthy lawn in the spring.

Having a soil test performed on your lawn is something that can be done now that will certainly pay dividends later. It is advisable to get a soil test done about every three years.

A soil test performed at the University of Florida’s Extension Soil Testing Laboratory will provide you information on nutrient levels as well as the pH of your soil. The cost is $7 per sample. For more information, or to pick up a collection kit, contact your local Extension Office.

The soil pH refers to the relative acidity or alkalinity of the soil and is measured on a scale from 0-14, with 7 being neutral and anything lower being acidic and numbers above 7 indicating alkalinity. Soil pH has a tremendous impact on the availability of soil nutrients and soil microbial activity.

Most of our turf grasses prefer soils that are slightly acidic with a pH range of 6.0-6.5. Centipede is an exception and will perform better in the range of 5.0-5.5. If your soil pH results indicate the need for lime, winter is a great time for an application.
Liming sources take months to alter the pH, so putting lime out now will give you a head start for next spring. The winter rains during these idle months will also help get the lime reacting in the soil.

The health and vigor of your lawn also depends on applying the right type of fertilizer at the appropriate times. Too little or too much fertilizer will cause problems for the growth, appearance, and health of your lawn. A soil test will help you determine the best type of fertilizer for your spring lawn application.

A soil analysis may be just what your lawn needs for greater fertilizer efficiency, thatch control, disease management, and overall turf health.

Winter’s Unwanted Guests
Recent news reports have made us all wary of bed bug infestations. Since many people travel during the holidays, this may be one bug that stays on our minds during winter months.

Bed bugs are wingless true bugs that feed on blood from birds and mammals. The common bed bug that feeds on people can sometimes be a pest in hotels, houses, barracks, or other living areas. The insects feed at night and inject saliva into the wound that can cause an irritating reaction on the skin. During the day, bed bugs will hide in wall cracks, under baseboards, in bed springs, under mattresses, behind wallpaper, or similar areas. Their bodies are very flat so they can rest in small crevices and then come out at night to feed.
Cold damage to Palms

In the March-April issue, I wrote an article about cold damage to palms. The week of December 6th 2010 saw freezing temperatures throughout the panhandle. I have received several phone calls from homeowners concerning their palms and the cold weather. Here is a reprint of that article.

Patience, patience, patience is essential with cold-damaged palms. If the palm leaf has any green tissue remaining, the leaf should not be removed until later in the year. Leaving damaged leaves on the palm during the remainder of the winter may actually help the palm survive future cold events. Once the palm has produced substantial new growth (2 to 3 new leaves), damaged leaf tissue can then be removed.

All new leaves of a palm develop from the bud located in the crown of the plant. It is the bud that needs to be protected. Leaf bases naturally provide insulating protection to the bud. This natural protection is one reason not to over-prune palms at any time of the year. As I drive around the county, I constantly see palms over-pruned.

When warmer weather returns, primary or secondary plant pathogens often attack stressed plants through the cold damaged tissue. Copper fungicides are recommended as an attempt (not a guarantee) to protect the bud and developing leaves from diseases that may attack damaged leaf tissue. In most situations, it is the base of the spear leaf not yet emerged from the whorl of leaf bases that is damaged first, leading to a spear rot, which may then lead to a bud rot. Copper fungicide is used to prevent the spear rot from developing into a bud rot that kills the bud, and then the palm.

If the spear leaf does rot and can be easily pulled from the bud, it should be removed immediately, followed by a copper fungicide spray or drench of the bud region, which is now exposed.

You will not know if the palm has survived the cold until new growth emerges, which may be 4 to 7 months later. The new growth may be severely malformed or damaged, but the emergence of any living leaf tissue is a sign the palm is alive. Subsequent leaves will gradually improve in quality, but it may take as long as a year before normal leaves emerge.

Source: Cold damage on palms, ENH-92, Dr. Timothy Broschat, professor, Environmental Horticulture Department, Ft. Lauderdale Research and Education Center (FLREC), Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida, Gainesville FL 32611. Original publication date December 1992. Revised September 2010. Additional Comments Regarding Cold Damage to Palms, email form Drs Monica Elliott and
Winter Color That Doesn’t Take Over

*Nandina domestica*, also known as heavenly bamboo, is a popular evergreen cane-like shrub native to China and Japan. The lower temperatures that occur in the fall and winter turn the outer leaves burgundy red in color making Nandina a highly ornamental species of economic importance to the nursery and landscape industries. However, since being introduced to the United States around 1804, Nandina has been listed by many organizations as being invasive in most southeastern U.S. states and is recorded in natural areas of nine states. In fact, the wild type is listed as a Class 1 invasive species by the Florida Exotic Pest Plant Council, which means that it is “actively disrupting plant communities”. To address this issue and identify non-invasive selections, University researchers have developed and evaluated several sterile cultivars.

Many cultivars have been developed for size and winter leaf color. Dwarf selections are the most commonly grown by nurseries. There are several dwarf cultivars that range in height from 1.5 – 4 ft. ‘Harbor Dwarf’ is a popular dwarf selection that grows to about 3 ft. ‘Woods Dwarf’ grows as little leafy spheres that are about 1.5 ft. in diameter. Because of its beauty and toughness, ‘Firepower’ dwarf nandina, standing about 2 ft. in height, is often used as a low maintenance mass planting in traffic islands and commercial landscapes. It shows up well against light colored buildings and is good to use in groupings of three or more. Additionally, University of Florida researchers noted in their evaluations of the nandina cultivar selections that ‘Firepower’ failed to flower or fruit leaving it no potential for becoming invasive.

*Erysimum* 'Citrona Orange' and 'Citrona Yellow' are cool-season annuals that make a great background planting for pansies and violas. The flower spikes reach a height of 18-24 inches. An added plus is that the flowers are very fragrant. Plant in full sun.

Photo Credits: David W. Marshall
Color in the Landscape

Winter can be gray and dreary at times in north Florida. But that doesn’t mean your landscape has to be. Many camellias are at the peak of bloom during January and February. But there are other plants you can use to add color now too.

Visit your local garden center for some of the hybrid verbenas. These flowers have really surprised me, being much more cold-tolerant than I would have ever thought. They were one of the few things still blooming in the garden after December’s freezes. They even survived last winter’s hard freezes. These would look great in a bed with Erysimum ‘Citrona Yellow’ or ‘Citrona Orange’ in the background.

There are a number of types of dianthus that are very reliable cool-season annuals and perennials. This one is ‘Corona Cherry Magic,’ a low-growing, very floriferous selection with large flowers of both light pink with darker centers and dark rose pink. The combination of both light and darker flowers makes a really strikingly beautiful planting. The plants may or may not make it through the summer heat. If they don’t, you will have to replant next fall.

Gloxinia sylvatica, or Bolivian Sunset gloxinia, is a perennial that starts blooming late every fall and continues blooming on through the winter. The very hard freezes will burn it back, but it soon bounces back and is flowering again. Add a clump of these in a sunny or partially sunny spot (4-8 hours of sun) and you’ll enjoy them for years to come.

Add a little color to the winter herb or vegetable garden with red Swiss chard. Or tuck some plants into the landscape. It’s a good complimentary planting for cool-season flowering plants like diascia, nemsia, and petunias. And, of course, it’s edible. Just be sure to give it full sun.

Photo Credits: David W. Marshall

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New Landscaping Guide Helps Homeowners Look Like Pros

Are you considering trying something new in your landscape this year? A well-thought out, written landscape design plan is the best way to begin, and this is a great project to tackle while sipping cocoa in front of the fire on a chilly day. Winter is also a great time to take the first steps in a good landscape plan, which includes installation of hardscape (patios, benches, fences, etc.) and planting trees. Trees often serve as the focal points of a landscape, and

Want a good container plant that you don’t have to worry about dragging in for the winter? Cordyline australis ‘Red Sensation’ and ‘Red Star’ are much more cold-tolerant than their appearance may lead you to think. Grow these red cordylines in full sun to partial shade.

Photo Credits: David W. Marshall

The ‘Okame’ flowering cherry can be quite cheery, pardon the pun, on a gray winter day. The more frequently planted Taiwan cherry has darker pink, almost reddish, flowers.

Photo Credits: David W. Marshall

The native eastern redbud, Cercis canadensis, often begins blooming by late February and continues on into March. It is a small but rapidly growing tree, reaching a height of 20-30 feet. Flowers appear before the tree leaves out, so they are quite noticeable.

Photo Credits: David W. Marshall

The red maple, Acer rubrum, is also an early bloomer. Flowers usually appear in late February and are followed by the even showier red seeds. The tree grows to about 45-50 feet tall. Red maples prefer moist soil, so avoid very sandy sites.

Photo Credits: David W. Marshall

November-February are ideal for planting them in north Florida.

The Florida-Friendly Landscaping™ (FFL) program at UF has recently introduced a wonderful (and free!) tool for homeowners to utilize when considering starting or re-working a landscape. Found online along with many other helpful publications at http://fyn.ifas.ufl.edu/homeowners/publications.htm, The Florida-Friendly Landscaping™ Guide to Plant Selection & Landscape Design includes an overview of the principles of FFL, how to use the landscape guide, and eight scenarios for making an existing landscape more Florida-friendly.
The design scenarios include particular portions of the landscape that can help improve curb appeal, such as a front entryway, along sidewalks and walls, or under windows. The model landscapes also address places that are traditionally more complicated due to their proximity to obstacles or problem sites, such as along fences, under trees, near utilities, and in standing water. Because of this focus on specific areas, the guide is perfect for the do-it-yourselfer who wants to tackle one project at a time.

Each scenario section gives readers a sample landscape design, challenges to overcome, and an overall goal for improving the area. Plant types that work best, design solutions, and both overhead and side views of a completed landscape help the reader visualize the outcome.

The guide includes a planning worksheet with a step-by-step overview of landscaping, along with ecological considerations such as soil type, wind resistance, shade conditions, and native vs. non-native plants. Perhaps the most eye-catching portion of the guide is the plant list, which is a detailed 66-page, full color overview of the best plants to use in Florida landscapes. Categorized by plant type (tree, shrub, vine, etc.) and including details such as drought tolerance, soil type, attractiveness to wildlife, light requirements and salt tolerance, this guide is a one-stop-shop for plant information. If you live in north Florida, be sure to select plants with the green “N” highlighted and check the map for whether you live in USDA cold hardiness zone 8a or 8b. A separate list of these plants and design patterns for their use can be found at http://fyn.ifas.ufl.edu/pdf/FFL_Book_Zone_8A-8B_081610.pdf

If you have any questions about plant selection or landscaping, be sure to contact your local extension office. Until then, happy designing!

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Protecting Vegetables from the Cold

Home gardeners in Florida can enjoy growing vegetables year round, even in fall and winter months when temperatures drop below freezing. Timing, garden site selection, and cold protection are key gardening strategies to consider for a successful fall/winter vegetable garden. Most Cole crops (these include cabbage, cauliflower, broccoli, collards, etc.) can be planted in the beginning of fall up through November. However, they will need to be protected from cold temperatures to prevent cold weather damage and crop
losses. A good variety of tender and hardy plants should be planted in order to prevent total devastation of the garden by extremely cold weather.

Site selection for tender plants should be number one on your list of strategies when preparing for a freeze. Vegetable plants need a site with good air circulation that is not in a low area where cold air settles. Arranging tender plants along a barrier to protect them from cold winds improves the plants’ cold protection, especially during hard freezes. Watering vegetable garden plants before a freeze can help protect plants. A well watered soil will absorb more solar radiation than dry soil and will reradiate heat during the night by as much as 2°F. However, saturated soil conditions can damage the root systems of most plants over a few days, so make sure the ground is well drained. Poorly drained soils result in weak shallow roots that are more susceptible to cold injury.

Healthy vegetable plants are more resistant to cold than vegetable plants that may have been weakened by disease, insect damage, or nematode damage. Routine inspection for pests and implementation of necessary control measures are essential. Plants grown with the correctly applied rate of nutrients will also tolerate colder temperatures better and recover from cold injury faster than plants grown with little to no nutrients. Contact your local county extension office for information on pest identification, recommended controls, and fertilizer rates.

Plastic or cloth coverings can help protect vegetable plants more from frost than from extreme cold. Covers that extend to the ground and are not in contact with the vegetable plants foliage can lessen cold injury to the plant. If the vegetable plant foliage is in contact with the protective covering, it can result in cold burn/injury due to heat transfer from the plant foliage to the protective cover. Some examples of excellent plant covers are cloth sheets, quilts or black plastic. If plastic covering is used, it is extremely important to remove the covering during the day to provide ventilation of trapped heat. To learn more on cold protection of vegetable plants call your local extension office.

Creating an Edible Landscape

I often talk to gardeners who tell me that flower gardening is fine, and they enjoy the spirit-lifting color of floral displays, but they want their landscapes to provide something to nourish the body as well as the soul. In other words, they want a landscape that provides something to eat, as well as being attractive. The concept is called edible landscaping.

Trees, vines and bushes that produce edible fruit are an important part of this approach. January and February are great times to plant hardy fruit trees, bushes, or vines, and local nurseries should have an excellent selection newly arrived for planting in winter and early spring.

Double-duty
Because these plants are expected to do more than just look nice, careful attention must be paid to selection, planting, growing conditions and care. As a rule, plants we grow for fruit require full sun, excellent drainage and room to grow. Find out the mature size and proper spacing of the fruit plants you want to grow, and take all of this into consideration when choosing locations.

The cultivars you choose must be adapted to the mild winters of the coastal South. Always check that the chilling hours the plant requires will be satisfied by the cold we normally get (chilling hours are the accumulated hours below 45 degrees that occur during winter). Generally, choose fruit cultivars that require 500 or fewer chilling hours.

You must also know whether the fruit you want to grow is self-fruitful or requires a pollinator. Self-fruitful plants will pollinate themselves, and you need only plant one. Plants that require a pollinator will not pollinate themselves, and another plant of the same type of fruit, but a different cultivar, must be planted for cross-pollination and reliable production to occur.

The fig is one of the most common and easily grown fruit trees in our area. Most gardeners choose the Celeste fig because of its reliability. Other good fig cultivars include Southeastern Brown Turkey (fruit similar to Celeste, but more prone to splitting and souring) and Florentine (large yellow fruit).

Fruiting pears produce beautiful displays of white flowers in February and delicious fruit in August. Other pears to consider include Baldwin, Garber, Orient, Kieffer, Biscamp and LeConte. It is best to plant two cultivars to ensure pollination and good fruit production.

Japanese persimmons are low-maintenance fruit trees that rarely, if ever, need to be sprayed. Their major problem is fruit drop, which generally is worst the first five years after planting the tree, but improves as it matures. Recommended Japanese persimmons for our area include Taninashi, Hachiya (harvest these two cultivars when the fruit is very soft), Tamopan, Fuyu and Suruga (these three are non-astringent and can be eaten when the flesh is crisp). Only one tree is needed for production.

**The Acid Test**

If you want to grow blueberries, you will definitely want to check the pH of your soil, since they need to be grown in an acid setting. Blueberry bushes are excellent for small gardens, as they stay much smaller than most fruit trees. Recommended cultivars include Tifblue, Woodard, Climax, Premier and Choice. Southern highbush blueberry cultivars, such as Cooper, Gulfcrest, Blue Ridge and Cape Fear, can also be planted. Blueberries are self-fruitful, but planting more than one cultivar improves production and quality.

Blackberries -- or brambles -- are relatively carefree to grow, with the major task being annual pruning after harvest. Trailing types, such as boysenberries, dewberries and youngberries, must be trained to trellises or other supports. Erect types include Navaho and Arapaho (these two are thornless), as well as Brazos, Shawnee and Rosborough. Blackberries are self-fruitful.

Satsuma is a citrus tree commonly grown in northwest Florida that is self-fruiting and easily grown. There are many varieties available, but you will find that Kimbrough, Browns Select, and Owari tend to be the most popular available. While citrus have a variety of pest problems, none are generally too bad.

Muscadine grapes are native to our area and require a moderate amount of maintenance. Support must be
provided for the vines, and the annual pruning, in which up to 90 percent of the previous year’s growth is removed, can be quite a chore. Self-fertile types can be planted individually and include Carlos, Cowart (considered one of the best), Dearing, Magnolia and Southland. Pistillate (female) cultivars, such as Fry, Higgins, Scuppernong, Hunt and Jumbo, must be planted with a self-fertile cultivar close by for pollination.

For more information on growing fruits in Florida please visit, http://edis.ifas.ufl.edu/topic_hs_fruits.

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Self-Watering Container

While surfing the internet, perhaps you have read about and seen images of homemade “self-watering containers”. For the most part, these are devices with a built-in water reservoir. It utilizes wicking to move water against gravity from the reservoir to the container soil environment, a phenomena known as capillary action. Soil pore space provides the means for movement, in this case, rise of water. Self-watering containers are great for the busy or forgetful gardeners. They can also help you manage your water usage, garden indoors during winter and reduce the number of times one has to bend down to water ground level plants. An extension client provided me with all of the pre-cut materials to build a self-watering container system. We have put it together and are growing sweet potato vines in one, lettuce in another and a mix of ornamentals in a 3rd container.

The main component of the system is a plastic storage tub with a lid (see top illustration). Alterations to the lid were made to create a container rim with the remaining interior-lid material used as a screen to divide the soil compartment from the water reservoir below. The screen/divider, also known as an aeration screen, is supported by 4-4” perforated PVC under-drain pipe pieces that were ~6” long. Two of the 4” under-drain pipe openings were left exposed to enhance wicking. The screen/divider was also constructed with a 1” opening to accommodate a 1x18” PVC pipe. This pipe serves as a vertical reservoir fill tube.

To finalize the screen/divider assembly, it was fitted with a layer of landscape weed barrier fabric. The fabric has micro-pores, which also allows water to move through it. Openings were cut over the wicking tubes to allow water-to-soil contact. Lastly, two ½” holes were drilled on each side of the container opposite to one another and just above the screen/divider. A ½” PVC pipe was inserted into each ½” opening, from end-to-end. The pipe should be as long as the width of the container allowing for 1” on each end to fit a PVC end-cap (see center illustration). The ½” pipes
with end-caps are used to prevent the container walls from expanding against the weight of the container soil, thus giving the container walls more rigidity. Potting media was added right up to the brim of the container, a layer of landscape weed barrier fabric was placed over the soil surface and secured with the lid-rim, holes were cut in the fabric for planting (x marks the spot), plants were installed and the water reservoir was filled using the fill-tube opening (a ½” hole should be made just below the screen/divider to prevent overfilling of reservoir), and you are done!

The materials needed to create your own self watering container can be found in most home improvement stores. Detailed instructions for this and other similar systems can be found by visiting [http://www.postoilsolutions.org/documents/Earthbox.pdf](http://www.postoilsolutions.org/documents/Earthbox.pdf).

**Upcoming Events**

**Florida Arbor Day Event**

Come learn how to correctly plant trees and get a tree seedling to plant on your property.

January 21

John McMahon Environmental Education Center, 132 Butler Avenue in Crestview.

For starting time and more info, contact the Okaloosa County Extension Office at 689-5850 or the Florida Division of Forestry in Okaloosa County at 689-7838.

**Integrated Pest Management Update via Polycom**

Learn how to distinguish landscape disease and insect problems from environmental stresses, how to utilize the web based diagnostic system, what is needed to develop a plant diagnostic toolbox, and how to use biorational products for landscape and turf management.

January 25, 2011 - 11:30 am - 3:30 pm (Central Time)
### Northwest District Extension Offices

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