



The Cutting Edge

Master Gardener Vision “to be the most trusted resource for horticultural education in Florida”

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C'mon Rain!

What a beautiful spring we are having! Cool mornings, breezy, sunny days...a little rain and it would be perfect! I am, as always, far behind in my spring gardening, but I'm determined to set up my grow boxes—better late than never! This is the best weather to garden, so if you are wondering what to do in the garden the next few months, check out our planting calendars on pages 2, 3 and 4. We had a terrific turnout this year for our annual plant sale, the Spring Fling. We tried blueberries, succulents and native plants for the first time, and they were all a hit! In fact, the blueberries were the first to sell out! If you bought some rabbiteye blueberries at our Spring Fling you may be wondering what to do with them. Check out the Florida Blueberries article on page one, and for more in-depth information read about Rabbiteye Blueberries on pages 6 and 7. Stop in the Extension office and get a copy of the University of Florida's publication “The Blueberry Gardeners Guide” or find it online at <http://edis.ifas.ufl.edu/mg359>. To round out the blueberry theme, we have an article from Pat Caren on our native bees, including the Southeastern blueberry bee. Last, but by no means least, the Bradford County Master Gardeners were recently asked to help on a landscape renovation project at Shands Hospital, Starke. Check out page 8 to see the results! Laurie

Florida Blueberries

Two types of blueberries grow well in Florida: rabbiteye (*Vaccinium virgatum*) and southern highbush (interspecific hybrids of *V. darrowii*, *V. virgatum*, and *V. corymbosum*). However, only the low-chill cultivars of each are adapted to Florida. Generally, rabbiteye blueberries grow well in areas of Florida that have winters as cold as or colder than winters in Ocala. The rabbiteye is often the best choice for homeowners. The southern highbush cultivars that are commonly grown in Florida are well adapted to areas south of Ocala and north of Sebring, although they will grow reasonably well in Alachua County. The southern limits of southern highbush adaptation in Florida have not been fully determined. Both rabbiteye and southern highbush thrive on acidic soils, which contain more organic matter than is usually found in Florida soils. Peat moss or pine bark is commonly used to increase soil organic matter in blueberry plantings. Peat moss or pine bark can be incorporated into the soil at or prior to planting. For more information on growing rabbiteye blueberries, see pages 6 and 7. Laurie



Southern Highbush
'Emerald'

What to Plant in April

Spring is definitely here— it’s time to get planting! If you didn’t do it in March, plant poinsettias you got for Christmas in the landscape or in large containers. Remember this about poinsettias: plant in a sunny area, no artificial light at night, add organic matter to the soil. Fertilize every month until September, pinching out the growing tips monthly to generate more blooms. Discontinue pinching September 10 because buds are forming. To all the annuals you planted in March (see The Cutting Edge, January 2017 issue) you can add coleus, portulaca, and Sweet William. Bulbs to try in April include blood lily, buttercup (ranunculus), lily, marica (walking iris), African lily and spider lily. There are lots of vegetables that can be planted now. Try collards, mustard, turnips, beans, sweetcorn, cucumbers, eggplant, okra, southern peas, peppers, sweet potatoes, pumpkin, squash, tomatoes and watermelon.



Portulaca

What to Do in April

If you didn’t get your clean-up done in March, now is the time! Rake up old blooms and leaves from around camellias and azaleas to reduce the risk of disease on next years flowers. Start fertilizing blueberries using an acid-forming fertilizer like an azalea/gardenia blend. Young plants benefit from frequent but light applications starting in February or March and continuing every other month with the last application in October. Remove fruit from newly planted trees to help them get established. Putting energy into producing fruit will reduce the ability of the plant to establish a strong framework (roots & shoots). Fertilize lawns when they begin to grow. Mid April is a safe time.



Rabbiteye blueberries

Wildlife Calendar April

- Bobwhite quail nest now through September.
- Black bears begin moving after winter's inactivity.
- Beginning of sea turtle nesting season on Florida beaches.
- Plant extra parsley for black swallowtail butterfly larvae to eat.

: http://www.wec.ufl.edu/extension/wildlife_info/happenings/april.php

Did You Know? As bears become "food-conditioned"

(dependent on a food source) they are more likely to frequent residential areas and cause property damage to get these unnatural food sources. Over time, they become “habituated”, gradually losing their fear of humans and will return frequently to locations with accessible food. It can take several weeks after preventative methods have been implemented before a bear will understand that the food source is no longer available. Source: <http://edis.ifas.ufl.edu/uw250>



Black bear

Laurie

What to Plant in May

Plants that can take summer heat include salvia, angelonia, wax begonia, and ornamental pepper. Planting early, mid, and late blooming varieties of bulbs like daylily ensures months of color from these low maintenance plants. Continue to plant heat loving herbs, including basil, oregano, sage, Mexican tarragon, and rosemary. Southern vegetable favorites to plant now include okra, southern pea, and sweet potato.



Sweet potatoes

What to Do in May

Harmful insects become more active as the weather warms. Watch for thrips, scale, and mites on ornamental plants. While some yellowing of older gardenia leaves is normal, yellowing of new growth usually indicates a micronutrient deficiency. Chewed or ragged leaves on oleander indicate oleander caterpillars at work. Watch for damage from chinch bugs in St. Augustine lawns and begin scouting for newly hatched mole crickets in Bahia lawns. If not done last month, apply a fertilizer to your lawn (not a weed & feed) without phosphorus unless soil test indicates the need for it. A fertilizer containing controlled-release nitrogen will give longer lasting results. Discourage insects, weeds, and disease in lawns by mowing correctly. Watch for pests, disease, and nutritional disorders on tomato plants. Now is also a good time to produce more plants by air layering, grafting, division, or cuttings. Hurricane season starts in June, so prepare by checking trees for damaged or weak branches and prune if needed. Hire an ISA (International Society of Arboriculture) certified arborist.



Tomatoes showing both radial and concentric cracking.

Wildlife Calendar May

- Painted buntings nest through summer in northeast Florida.
- Breeding begins for many resident and summer songbirds.
- Alligators begin to court and make loud resounding 'bellows'.
- Redbreast sunfish and spotted sunfish begin spawning in rivers.
- American lotus bloom at Paynes Prairie State Preserve
- Redbreast sunfish and spotted sunfish begin spawning in rivers.



Painted Bunting

Did You Know? With their vivid fusion of blue, green, yellow, and red, male Painted Buntings seem to have flown straight out of a child's coloring book. Females and immatures are a distinctive bright green with a pale eye ring. These fairly common finches breed in the coastal Southeast and in the south-central U.S., where they often come to feeders. They are often caught and sold illegally as cage birds, particularly in Mexico and the Caribbean, a practice that puts pressure on their breeding populations.

What to Plant in June

Annuals that can take full sun during hot summer months include celosia, portulaca, vinca, and some coleus. Add bright color to the landscape with a variety of perennials like salvias including blue sage, 'Hot Lips' salvia, Mexican sage, and rose leaf sage. Summer's warm, rainy weather is the perfect time to plant palms. Make sure to not cover the trunk with soil. Plant heat loving herbs, including basil, Mexican tarragon, and rosemary. Pinch back regularly to prevent flowering and enhance branching. Plant okra, southern pea, lima bean, and sweet potato. It's too late to plant tomatoes.



Sabal or Cabbage Palm

What to Do in June

Monitor the landscape weekly for harmful insects. Knowing which insects commonly attack a plant can aid in identification and treatment. June is normally the start of the rainy season, but if rainfall has been spotty, watch for drought stress and water as needed. Watch for nutrient deficiencies or environmental problems with palms and correct using an appropriate treatment. Keep lawn fertilizers away from the rootzone of palms. Many summer flowering shrubs, like hibiscus, oleander, and crapemyrtle, benefit from frequent light pruning during the warmer months to encourage further blooming. Azaleas can still be pruned in June without harming next spring's buds. If you have areas in your lawn where grass doesn't grow well, try replacing it with versatile ground covers. Yellow and brown lawn patches can be caused by chinch bugs, disease, or lack of water. Take time to determine the cause so your remedy is effective.



Southern Chinch bug

Wildlife Calendar June

- Mockingbirds may attack pedestrians who wander too close to nesting sites.
- The southern flying squirrel is starting its breeding season.
- Red bats and Seminole bats give birth.
- Cicadas emerge from their underground growth period to begin making their classic summer sound.
- Tarflowers bloom in flatwoods.



Southern Flying squirrel

Did You Know? The flying squirrel is the only nocturnal member of the squirrel family in North America. They can sometimes be seen on bright moonlit nights as they glide from tree to tree, and they often reveal their presence by distinctive, high-pitched squeaks. Flying squirrels are only capable of gliding—not true flight. They can be found throughout Florida except in the Keys. They reach their highest densities in mature pine-oak woodlands and oak hammocks. They are also common in wooded urban parks and urban areas. In all habitats they need snags, or tree cavities for den sites. They will use birdhouses, or nest boxes, and sometimes move into attics.

Laurie

Native Bees Are Your Friends

All pollinators, are important, but bees may be the most important pollinators of native plants. Many of our crops are dependent on bees and other wild pollinators. Whenever you eat blueberries, think about what you owe to the Southeastern blueberry bee, which resembles a small bumblebee. A single blueberry bee may pollinate 50,000 blueberry blossoms in her lifetime. The economic value for a bees pollination service is estimated at \$3 billion per year in the U. S. Unfortunately many bees, including some in Florida, are rare and a few are endangered. Recently the U.S. Fish and Wildlife Service listed the Rusty Patched Bumblebee as endangered. The population of this bee has declined 90% since the 1990's! That's dangerously close to becoming extinct. There are about 40 species of bumblebee in this country. They are some of the most important pollinators of crops such as blueberries, cranberries, and clover and almost the only insect pollinator of tomatoes.



Adult miner bee



Squash bee

Bumblebees nest in the ground. Like honeybees, they live in colonies of a queen and worker bees, but the population is smaller, only a few hundred bees. You've probably noticed little holes in the ground in sunny, dry areas where the soil is bare. These are made by ground nesters or miner bees, which look like honeybees. Squash bees often nest under squash vines, so they are there early in the morning when the squash blossoms are at their prime. Sweat bees, or halictid bees, are some of the prettiest, coming in iridescent colors, including green. When they hover around you, they are attracted to the salt in your sweat. Halictid bees are valuable pollinators of wildflowers and some

crops, including stone fruits, alfalfa, and sunflowers.

Some bees are hole nesters and make a series of chambers in holes in trees (made by beetles) or hollow stems. Orchard mason bees are so called because they seal the chambers with clay. If you have noticed perfectly round holes cut out of leaves of your ornamental plants, it could be a leafcutter bee. She does no other harm to your garden and is another super pollinator. Carpenter bees in your yard look like oversized bumblebees and drill holes in any unpainted wood they can find, leaving piles of sawdust behind. Those holes are nests for their young. You can discourage them from making holes in your house by painting or treating exposed wood. Leave patches of bare soil where ground dwellers can make their nests. Make a few stumps and logs available for wood bores. Some wildflowers to plant for the bees are Gail-



Southeastern blueberry bee

lardia (blanket flower), beach sunflower, salvias, mints, Echinacea (purple coneflower), and spotted bee balm. Saw palmetto, sea grape and Walter's viburnum are also great bee attractors. Since different native bees are active in different seasons, you'll want a variety of plants that bloom different times of the year. If you are already planting for butterflies, it takes little effort to plant for the bees as well. Who knows—you may even help a few honeybees.

Pat Caren

Rabbiteye Blueberries for Florida

Blueberries are native to eastern North America and are one of the few crop plants that originated here. The rabbiteye blueberry (*Vaccinium ashei*) occurs mostly in some river valleys in northern Florida and southeastern Georgia. The highbush blueberry (*Vaccinium corymbosum*) is native in the eastern third of the United States and southeastern Canada. Florida is rich in other native *Vaccinium* species. The woods and swamps of Florida are populated with at least eight wild blueberry species. Today, over half of the total Florida acreage and virtually all plantings established during the last 8 years for commercial shipping are southern highbush. Though most commercial growers use the southern highbush varieties, the rabbit eye is generally easier for the homeowner to grow, so we will concentrate on those.



Brightwell

Rabbiteye blueberries: Rabbiteye cultivars are more tolerant to drought and less susceptible to Phytophthora root rot than southern highbush cultivars. They flower later in the spring, making them less susceptible to late winter/early spring freezes. They require less organic matter and less mulching, and they are generally more vigorous. Rabbiteye fruit has a slightly tougher skin and slightly larger seed than southern highbush fruit and usually stores better than southern highbush fruit.



Climax

Rabbiteyes require cross-pollination from another rabbiteye cultivar. The harvest season for rabbiteye blueberries extends from May to July, depending on the cultivar. Rabbiteyes are best adapted to areas of Florida north of Ocala.

Site Requirements: One of the most important things you can do to insure good quality blueberries is have your soil pH tested! Both rabbiteye and southern highbush thrive on acidic soils, which contain more organic matter than is usually found in Florida soils. Blueberries require a soil pH of 4.0 to 5.5. At higher soil pH values, tissue levels

of microelements such as iron and zinc become deficient. Peat moss or pine bark is commonly used to increase soil organic matter and soil acidity in blueberry plantings. Both can be incorporated into the soil at or prior to planting. Pine bark, when applied as mulch, will eventually decompose and add organic matter to the soil. Some fertilizers are acid-forming and will gradually lower the soil pH. Blueberries require a well-drained soil. If water drainage is poor (within 18 inches of the soil surface for prolonged periods during the rainy season), blueberries should be planted on raised beds. If blueberry roots are exposed to water-saturated soil for more than a few days, damage from Phytophthora root rot may become severe. Generally, blueberries will grow well where azaleas, camellias, and other "acid-loving" plants are proven performers. Blueberries need at least 4 to 5 hours of full sun per day. Set them away from the roots of trees except pines and at least 20 feet away from any building foundation. A mature rabbiteye blueberry plant can reach 12–15 feet in height with canes sprouting over an area of 8–10 feet in diameter. Plant size can be controlled to some degree by pruning. However, severe pruning will reduce yields the following spring. Allow at least a 7' x 7' area for rabbiteyes. Rabbiteye plants may be set 5 feet apart for a hedgerow effect.

Cultivars

Aside from site selection, choosing the proper blueberry cultivars may be the most important decision a homeowner can make. Most blueberry cultivars grown in Florida require cross-pollination from another cultivar of the same type (southern highbush with southern highbush and rabbiteye with rabbiteye). Another requirement for good fruit set is that pollen vectors (usually bees) are present and working the flowers during bloom. With good pollination, berry yields of 2 to 5 pounds per plant may be expected by the third or fourth year. Some of the major rabbiteye blueberry cultivars commonly grown in Florida are described below.



Tifblue



Austin

Rabbiteye cultivars. 'Beckyblue',

'Bonita', and 'Climax' are three early-season rabbiteye cultivars that are widely grown in Florida. These cultivars usually ripen in late May and early June in Gainesville. For best pollination, plant 'Climax' with either 'Beckyblue' or 'Bonita'. 'Austin' is a newer early-season rabbiteye cultivar that appears to grow well where 'Climax' is adapted and should cross-pollinate with other early-season rabbiteye cultivars.

Most mid- to late-season rabbiteye cultivars are more productive than the early-season rabbiteyes discussed above and are therefore better suited for home gardeners. 'Brightwell', 'Powderblue', 'Tifblue', and 'Woodard' have performed very well in north Florida and in the pan-

handle. These cultivars bloom later than the early-season rabbiteyes, and the flowers and young fruit are much less susceptible to late winter freezes.

Fertilization: Blueberries respond best to frequent, light fertilization. They can be killed or damaged by over-fertilization. Do not put fertilizer in the planting hole. After planting, when the soil is well settled from irrigation or rainfall, give un-mulched plants 1 ounce per plant of 12-4-8 with 2% magnesium (Mg). A special formulation called "blueberry special" is available in Florida and meets these requirements. Another possibility is "camellia-azalea" fertilizers. Spread fertilizer evenly over a circle 2 feet in diameter with the plant in the center. Repeat in April, June, August, and October. If plants are heavily mulched, use 1.5 ounces per plant per application rather than 1 ounce. In the second year, use 2 ounces of 12-4-8 per plant per application and spread it evenly over a 3-foot diameter circle. In the third year and beyond, use 3 ounces of fertilizer per plant per application spread evenly over a 4-foot diameter circle, or broadcast in a continuous band 3–4 feet wide, centered on the plant row. Slightly more fertilizer may be required if plants are heavily mulched. However, more often than not, cultivated blueberries suffer more from over-fertilization than from lack of fertilization

In conclusion, blueberries can be grown successfully for the home garden in Florida. Rabbiteye, southern highbush, or both may be used depending on geographic location, site characteristics, and anticipated harvest season.

Laurie

Source: <http://edis.ifas.ufl.edu/mg359>

Master Gardeners at Work!

Bradford Master Gardeners partnered with Shands of Starke, the Hospital Auxiliary, Bradford High School FFA students, and Jarmons Ornamental Concrete on a hospital landscape renovation project. Stemming from a request for help in designing and installing several landscape beds at the hospital, the agent obtained a landscape plan from University of Florida Yards and Neighborhoods personnel. The project was funded by a grant obtained by the FFA instructor and the hospital auxiliary. On February 24, during FFA week, 21 students and 10 Master Gardeners removed the old landscape and installed new plants and mulch. The project served as a community service project for the students and the landscape will be used to demonstrate landscaping in the shade to the community.



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