



EXTENSION'S Successful Gardener

NC STATE UNIVERSITY NORTH CAROLINA COOPERATIVE EXTENSION

Helping
Carolinians
Increase Their
Knowledge of
Gardening,
Manage Their
Landscape
Investment &
Protect the
Environment

JC Raulston Arboretum Plant Focus

Hardy Palms Create a Tropical Feel

When people think of palm trees, they envision tropical beaches and sultry climates laden with towering plants. There are some palms that grow quite well in North Carolina's coastal plain and piedmont. With a little effort, you may just be able to grow a few palms of your own.

The windmill palm, *Trachycarpus fortunei*, which is native to the Himalayan region, has a reputation for being one of the world's hardiest palms. It has an amazing ability to survive, even when completely defoliated. It grows to about 40 feet tall and develops a solitary trunk covered with matted fiber. The palmate leaves of the windmill palm can grow to 4 feet wide and are deeply divided with drooping tips. It should be planted on a well-drained site that is protected from winds. It performs best when planted in partial shade as an understory plant or where it receives afternoon shade. It is not hardy in North Carolina's mountains. The JC Raulston Arboretum has several cultivars of *Trachycarpus fortunei*, including 'Bulgaria', 'Norfolk', and 'Taylor's Hardy' on display in Raleigh.

Another hardy palm native to the Himalayans is very new to the landscape trade and quite difficult to find: the windamere palm, *Trachycarpus latisectus*. This palm grows fast once it develops a trunk and can attain heights of 40 feet with a trunk diameter of 6 inches to 1 foot. The light-gray trunk shows faint rings. This palm has large, leathery leaves with very wide leaflets.

Our own native dwarf palmetto palm, *Sabel minor*, is easier to find at local nurseries. This evergreen palm has a slow growth rate and reaches 10 feet tall at maturity. It prefers light shade and moist to wet soil, but tolerates considerable drought. *Sabel minor* produces small white flowers on large branched clusters in summer. *Sabel* 'Birmingham', commonly accepted to be a hybrid of *Sabel minor*, makes a nice show in the landscape as well.

No matter what your travel schedule looks like, by including a couple of hardy palms in the landscape, you can have that tropical feel year-round.

Will Strader

Trachycarpus fortunei
JC Raulston Arboretum ©

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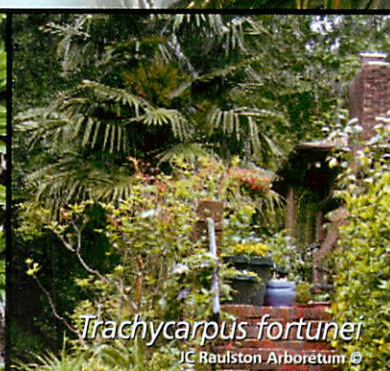
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Sabel minor
Antonie van den Bos ©



Trachycarpus latisectus
JC Raulston Arboretum ©



Trachycarpus fortunei
JC Raulston Arboretum ©



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Sample each garden area.



JC Raulston Arboretum ©



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Take separate samples for flowers, vegetables and turf.



USDA/ARS

Soil testing depends on the sample.

Soil Testing Saves Time and Resources

The N.C. Department of Agriculture and Consumer Services' soil testing service is one of the best services our state tax dollars provide. In other states, a similar soil test costs as much as \$50. Here we pay only for the postage to mail a test to the Raleigh lab. The Agronomic Division analyzes soil for its nutrient content and other properties that affect plant growth, such as cation exchange capacity and pH. This test is much more accurate and complete than any home test kit you can buy at a garden center.

Your soil test report will provide recommendations for lime and fertilizer. Using only as much fertilizer as needed minimizes nutrient runoff into surface and groundwater. And it saves money, time and natural resources.

A soil test is only as good as the sample you send. Be sure the sample represents the garden area. Take a soil sample a few months before planting a new lawn or starting a new flower or vegetable garden. If your test results recommend lime, you will have enough time to apply it and adjust the soil pH before planting. Sample the soil in an established landscape or garden once every three or four years.

Take soil samples any time of the year with a garden trowel, spade or shovel. Do not use brass, bronze or galvanized tools; they can contaminate your sample with copper and zinc.

Separate samples should be taken for vegetable gardens, lawns and flower gardens. At least six to eight cores of soil should be taken from an area and combined to make one sample. Mix soil cores for each sample in a clean plastic bucket. If the bucket has been used for fertilizer or other chemicals, make sure you wash it before using it for soil samples.

Soil samples for lawns should be taken at a depth of 4 inches and should not include any turf thatch. For vegetable and shrubbery beds, sample 4 to 6 inches deep.

After mixing all the cores of each sample together, fill a soil test box to the line indicated on the side. Boxes and forms are available at your Cooperative Extension center and many garden centers or from regional agronomists and the Agronomic Division laboratory in Raleigh. Use permanent ink or pencil to fill out forms and label boxes.

Each sample should be given a unique code that combines up to five letters, numbers, or both. Put this code on the form and the sample box. Use a code that will help you remember the area the sample corresponds to, such as FYARD, ROSES, VEGIS, or GRASS. Be sure to list the plants you will grow in the sampled area by selecting a crop code for each sample. The codes are listed on the back of the form.

Package your soil sample properly. Do not tape the box or put soil in a plastic bag. If you are sending the samples in the mail, pack them carefully in a sturdy container. Soil samples are usually analyzed within a week. In late fall through early spring, processing may take several weeks due to the sample influx from farmers.

When your test is complete, a report will be mailed to you and posted at <http://agronomy.agr.state.nc.us/>. A cover sheet and a crop-specific note will be sent with your report. If you need help interpreting your soil test report, contact your local Extension center. **Amy-Lynn Albertson**

Dealing with Water Restrictions

The drought that began in spring 2007 brought to light just how careful we all need to be with water and its use.

Landscapers and gardeners should consider using drought-tolerant plants and select landscape sites that will require fewer resources to prepare. Proper soil preparation, plant selection and quick plant establishment will reduce long-term water, nutrient and pest management needs.

Extension centers around the state have received calls about the status of water restric-

tions at municipalities in their counties. The status changes based on several factors. Visit the N.C. Drought Management Advisory Council Web site at www.ncdrought.org for the current advisory level by county. The Council uses drought classifications ranging from DO (abnormally dry) to D4 (exceptional drought).

Talk to local municipal officials about the Water Shortage Response Plan (WSRP)

see Water Restrictions on page 3 ▶

Q&A

How Do I Control Fire Ants?

First, determine if you are in the quarantined area. The North Carolina Department of Agriculture and Consumer Services has a map on its Web site: <http://www.ncagr.com/plantindustry/Plant/entomology/IFA/pdfs/FireantMap2008.pdf>.

If you are outside the quarantine area, contact your local Extension agent for advice. Within the quarantine area, controlling fire ants will be your responsibility. You will not be able to totally rid the world of fire ants, but it is possible to treat areas with high potential for human contact.

When the fire ants first show up, only one or two mounds may appear. You can treat the individual mound. Use a pesticide drench that gets the pesticide down to the queen. Be sure the pesticide is labeled for the area in which you plan to use it. If

the queen gets away, a new mound will pop up several feet away, so recheck the area and treat again.

Between queens occasionally getting away and new queens migrating into the area, many homeowners are not happy with the results from mound treatments. The other option is to broadcast a bait. Several baits are available. Put the bait out on a dry day when the ants are actively foraging. If the bait gets wet and turns rancid, the ants will not take it into their mounds.

Plan on a treatment once it warms up in April or May plus a treatment during the last warm spell in the fall. For more information about suitable control methods for fire ants, see this Web page: <http://www.ces.ncsu.edu/depts/ent/notes/Urban/ifa.htm#chemical>. **David Goforth**

Water Restrictions

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guidelines that are in place or being considered. Recently adopted rules governing water use during droughts and water emergencies stipulate the issues that must be included in this plan.

A WSRP has three levels: Voluntary Conservation (level 1), Mandatory Restriction (level 2), and Emergency Response (level 3). Each level has different trigger points that initiate it. The WSRP specifies the type of water supply your community has, which can include a reservoir, lake, stream or river, and groundwater via wells.

Stephen Greer

ENVIRO-TIP

Rain Gardens Capture Runoff

A little rain on most soils in North Carolina, and you begin to see the runoff flow to a low spot in your landscape. Runoff often carries sediment and pollution from driveways to nearby streams, which affects water quality. A rain garden offers a solution.

In a rain garden, plants and soil work together to absorb and filter pollutants and return cleaner water through the ground to nearby streams. Rain gardens also reduce flooding by absorbing runoff. And they can provide habitat for beneficial insects and wildlife.

Size your rain garden to accommodate a 1-inch rainfall by measuring the roof and any parking area draining to the site. Divide the area in square feet by 20 to determine the square footage of your garden. Dig the garden 4 to 6 inches deep with a slight depression in the center. Use the removed soil to create a berm on one side that will retain water during a storm. If the garden is on a slope, locate the berm on the

downhill side. To prevent erosion, cover the berm with mulch or grass.

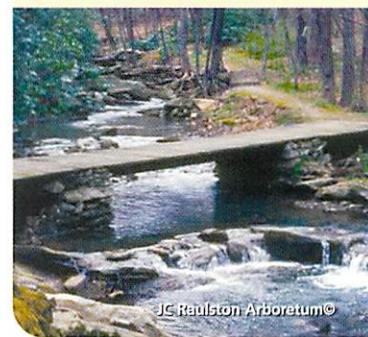
Use plants that tolerate fluctuating soil wetness. To help plants survive extended wet periods, plant on the edge of the rain garden or on mounds within it to elevate roots above the pooled water level. Planting several species can create a long flowering season and add depth and dimension.

A rain garden has different wetness zones. In the deepest part, place plants that can withstand a few days of flooding at a time. In the shallow parts and on the edges, you can use more typical landscape plants.

Using little or no fertilizer or pesticide helps to protect water quality. Add mulch 2 inches deep, but avoid burying new plants. Hardwood mulch is best because it will not float away. For complete instructions, sizing recommendations and a plant list, visit <http://www.bae.ncsu.edu/topic/raingarden/>. **Carl Matyac**



Echinacea purpurea



JC Raulston Arboretum©

gardentalk

"In June, as many as a dozen species may burst their buds on a single day.

No man can heed all of these anniversaries; no man can ignore all of them."

Aldo Leopold
A Sand County Almanac (1949)



Gardening in June and July

June

- Thin strawberry plants to 12 inches apart. Remove runners. Fertilize and water. Keep plants weed-free.
- Brown patch arrives in cool-season lawns. Mow when the grass is dry. Avoid fertilizing.
- Woolly aphids arrive. They are a problem for gardeners with silver maples. Using pesticides is not practical, so these pests must be tolerated.
- Japanese beetles hatch. Apply Sevin dust for control.
- Regular watering can control blossom-end rot on tomatoes.
- Daylilies peak at the end of June.
- Test your soil if you plan to reseed a lawn so soil can be amended before planting in the fall.
 - Extra mulch around vegetables helps conserve water and reduce weeds.

- Plant pumpkins early in June. Most take between 110-120 days to mature.

- Apply insecticides carefully late in the evening to avoid bee kills.
 - Continue to pinch back herbs and deadhead flowers.

July

- The summer vegetable harvest peaks around July 4th. Visit a farmers market for fresh produce.
 - Yellow jackets can ruin outings until frost. Aerosol sprays that control wasps and hornets work well to control yellow jackets. Carefully locate the nest, and use these sprays at dusk or after dark.
 - Crepe myrtles show their color. Some have problems with powdery mildew. Using a labeled pesticide for mildew control can improve blooms.
 - Take 6-inch long tip cuttings of evergreen shrubs and dip in rooting powder. Place in a mix of half sand and half Canadian peat, and keep moist for about 6 weeks.
 - Bermudagrass can be killed in July and August. Use Roundup[®] at 2 ounces per gallon. Make sure the grass is actively growing before spraying.

Darrell Blackwelder

The Elizabethan Gardens

Located near the site of the first English Colony in the New World, the gardens invite you to fantasize about what it may have been like for the early settlers. The gardens are a memorial to the colonists created by the Garden Club of North Carolina Inc. in 1951.

Open year-round, the gardens feature masses of blooms from azaleas, dogwoods, rhododendrons, vines, herbs, bulbs and spring annuals. Sweetly scented gardenias, roses, magnolias, crape myrtles, lilies, hydrangeas and summer annuals yield to blooms of chrysanthemums and camellias in the fall.

The site has a unique appeal to horticulturists with its many varieties of plants; to nature lovers with its wildflowers and indigenous shrubs and trees, including an ancient live oak; and to history buffs with its historic setting. The gardens are on Roanoke Island adjacent to the Fort Raleigh National Historic Site. For more information, visit <http://www.elizabethangardens.org/>.

David Barkley

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