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SOUTH CAROLINA URBAN & COMMUNITY FORESTRY COUNCIL

The Acorn

South Carolina's HERITAGE TREES

SOUTH CAROLINA URBAN & COMMUNITY FORESTRY COUNCIL

South Carolina is a state rich in diversities of climate, terrain, and flora. It is our devotion to communities, history, and landmarks that help to make us South Carolinians.

The South Carolina's Heritage Trees program, announced at the 2004 Annual Conference, is a way to identify, celebrate, and recognize special trees in South Carolina.

Trees may be nominated as an individual or collection. The nomination may be a tree or grove/avenue of trees recognized by virtue of its age, its association with or contribution to a historic structure or district, or its association with a noted person or historic event. Anyone may nominate a tree.

All nominations must be made with the land pro-

prietor's permission. The tree must be located on public property or on a public easement within South Carolina and the land proprietor's approval is needed.

Since SCUCFC is a non-profit organization and not a legislative arm of the state, the Heritage Tree Program has no legal authority over nominations or protection for named Heritage Trees. Legal protection by the land proprietor for the trees is voluntary and optional. The Council feels that the formal recognition and educational value of the plaques and listings may encourage future conservation of trees.

Heritage Tree Dedications will be held at the location of the tree, if possible, and coordinated with the land proprietor, with the local press invited to attend. The owner will be invited to attend an awards luncheon at the annual SCUCFC conference.

Nomination forms are available by writing, calling, or by visiting our website, www.scurbanforestry.org.




The Acorn Partners

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from the Chair's Corner

I stopped counting the felled trees. There were too many tree corpses lying on the ground. "Where are the ordinances?" I wondered. These trees were on the edge of the property, not in any building footprint. Then I went to England, on an international study tour grant, and saw an entire country engaged in greenspace preservation and tree protection. People who violated planning laws received huge fines or jail time. I felt, at times, like I'd died and gone to heaven.

So we wrote another grant, and brought an articulate arborist and a thoughtful landscape architect over to South Carolina for a series of statewide conversations about the acclaimed English system. I thought maybe no one would listen and that I would hear "That's fine for England, but this is South Carolina". But I didn't. People apparently skipped the doubting stage and instead began to wonder how and what could be done here to change the atmosphere. The municipal planners were intrigued and asked for more. The planning students at Clemson were curious and stimulated. The mayors and nonprofits were inspired. Finally, I felt a path had opened. The old "What can we do?" feeling was being replaced by something new, fresh, and alive.

Urban and Community Forestry is a bold swath in a field full of old thoughts. The Council Board of Directors, a talented group of twenty-one, is answering the question of "What can we do?"

Fresh from retreat at Santee State Park in January, the Board has smartly refined its mission and focused its programs for 2005: Target audiences include consumer groups (tree boards, garden clubs, homeowners associations, etc.); policymakers; and green industry professionals (particularly planners).

Programs for 2005 include: **Heritage Trees**, an annual celebration of a tree or grove of trees with strong

heritage, high community value, and receiving exemplary maintenance; The **Golden Acorn Awards** program that recognizes the individual and the organization in the state that demonstrates extraordinary stewardship of the urban forest; The **Myerscough Scholarship** program supporting urban and community forestry study for South Carolina students in England where tree protection and land preservation are the international model; and The **Annual Conference** which will be a one-day event this year with additional one-day workshops developed to keep education flowing year round.

As the new, and unexpected chair, I wish to thank Bob Vecchio, the intended chair for 2005, for his clear and thoughtful vision for 2005, and wish for his speedy recovery from upcoming surgery. I wish to thank Jeff Lane for his leadership in 2004 and for his eloquent speech at the joint conference of SCAPA and SCUCFC. I am also grateful that Mary Leverette has joined our team as Executive Coordinator. Leverette brings experience, organization, and fresh thinking to the Council. I applaud the entire talented Board of Directors for their commitment to this work and also the Membership for your support of the Council and for your willingness to unite under a common cause. I also invite Members to join a program committee. Simply contact Mary Leverette and she will guide you to the proper person and place so you can contribute.



Ellen Vincent, 2005 Chair

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The Acorn is a quarterly newsletter produced by SCUCFC. We welcome your articles, news items, and photographs that may be of interest to our readers. Items may be sent to SCUCFC, PO Box 21707, Columbia, SC 29221 or info@scurbanforestry.org.

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2004—A Year in Review

By Jeff Lane, Past Chair

Since 1990, the volunteers and staff that have been the South Carolina Urban and Community Forestry Council have worked hard to fulfill their stated mission - to foster good stewardship of the urban and community forests of South Carolina. In my view, to foster means to cultivate; to nurture; and to promote. Stewardship refers to the actions that we all take to vouchsafe the resources that we have been entrusted with for our benefit and for the benefit of generations that will follow.

Michael Katakis, editor of *Sacred Trusts: Essays on Stewardship and Responsibility*, offers his view of stewardship: "Stewardship is never as easy as signing a check to your favorite cause but is rather a way of seeing, thinking, and acting on this planet. It is not a static view; its definitions and actions are continually redefined by wider experiences and more knowledge."

The work of the Council over the last 14 years has essentially been *to educate, to inform, and to celebrate* in pursuit of the wider experiences and increased knowledge that, according to Katakis, give character and meaning to our understanding and application of stewardship.

In 2004, I believe the Council made great strides in fulfilling its mission. And I believe that in the years ahead we will achieve even more.

To educate, to inform, and to celebrate.

The annual conference has always stood out as one of the more successful education projects that the Council has delivered, year after year. Because of the diverse nature of urban and community forestry, each conference is unique in focus, but one thing that never changes is the opportunity to broaden our knowledge and connect with each other in ways that newsletters, websites, and emails can only partially do.

Another form of education is the outreach educational programs that the Council supports through financial contributions. Each summer, Clemson horticulture and forestry students attend a

four week course of study at Myerscough College near Liverpool, England, to learn how Britain has made tree care central to urban planning and economic revitalization. The Council is happy to lend a hand to these students as they broaden their experiences and gain valuable knowledge.

The Council also supports the SC Teacher's Tour, sponsored by the SC Forestry Commission, the SC Forestry Foundation, and the USDA Forest Service. The tour provides teachers with an unbiased look at the impact forests have on our state's environment, economy, and quality of life, and to familiarize teachers with the Sustainable Forestry Initiative, a land stewardship program practiced by the forest industry and landowners.

To educate, to inform, and to celebrate.

Information-sharing is achieved through three key outlets: *The Acorn*, our website, and through advocacy.

In January 2004, as the Board gathered for its annual planning retreat at Santee State Park, we became aware of the Governor's plans for budget reductions and government restructuring. The budget plan called for the elimination of funds for urban forestry and other forestry programs; and the restructuring bill would have dismantled the SC Forestry Commission. The Council responded by contacting friends and allied organizations to urge them to contact their legislators. We also wrote directly to House and Senate Committees telling why urban forestry funding is vital and asking that they support the retention of the Forestry Commission as a stand alone agency. Although ours was a small voice in a much larger

chorus, the result was that the budget cuts and restructuring didn't happen. This experience has shown us that the Council needs to be ready to respond appropriately to issues that affect urban and community forestry when they arise.

To educate, to inform, and to celebrate.

How the Council celebrates is primarily embodied in three programs; one that has been in place for a few years and two that are brand new initiatives. The first is the Golden Acorn Awards. This awards program was established to recognize individuals and groups

who are engaged in outstanding work in urban and community forestry.

One of the new initiatives is the SC Arbor Day Poster Contest. Although we have been involved with this project in the past, in 2004, the Council assume lead sponsorship. The other new initiative is SC's Heritage Trees. It is the brainchild of Mary

Leverette and has been developed by the Public Awareness Committee, chaired by Ellen Vincent. The program is intended to identify, celebrate, and recognize special trees in South Carolina.

In 2005 our chairperson will be Ellen Vincent. I think we have a lot to look forward to and I encourage you to jump in and lend Ellen a hand in what ever way you can.

I'd like to encourage our members to consider the something that you can do in 2005. We have a variety of projects in place and no matter what level of participation you can offer, please know that it is needed and much appreciated. We definitely need your help and talents to strengthen this organization and see that we continue to grow.

*I am only one,
But still I am one.
I cannot do everything,
But still I can do something.
And because I cannot do everything
I will not refuse to do
The something that I can do.*

Edward Everett Hale

The Economic Value of Living Trees

By Betty Nash, Federal Reserve Bank of Richmond

Engineered efficiently by nature to produce a superb building material, a felled tree's worth has been well documented — the US produces \$230 billion in wood products annually. But it has taken awhile for the silent contributions of living trees to be quantified.

Trees are now recognized for performing all sorts of environmental services. They trap carbon dioxide, a chief culprit in global warming. They absorb and filter water. And, they clean the air we breathe, trapping particles believed to cause respiratory diseases. That's especially useful in states with high mortality rates from pollution-related respiratory ailments.

As the boundaries between urban and rural areas blur, the economic benefits of living trees are coming into sharper focus.

"Urban dwellers have different values towards nature," says Ed Macie, a regional urban forester for the USDA Forest Service's Southern Region. "Timbering might become less acceptable and air and water quality might become more important."

American Forests, a Washington, DC, nonprofit group established in 1875, is working to quantify these economic benefits. "We're trying to find ways to incorporate [them] into daily decision making," says Gary Moll, vice president of urban forestry. This would be a big improvement from what Moll saw while working as a state forester 20 years ago. Local officials made policy decisions without realizing how nature contributes to air and water quality.

The Carbon Sink

Trees collect carbon for a living. Some companies are picking up on this process and planting forests to combat global warming.

Trees absorb carbon dioxide from the atmosphere and convert it into carbon-based compounds through photosynthesis. Some of the carbon is used for food and the rest is stored. The amount of carbon retained depends on a forest's health and age, among other factors. An acre of mature trees can store from 150 tons to more than 400 tons of carbon each year.

"Many utilities are looking for ways to offset the carbon they produce," notes Macie. And planting trees is a good way to do it — carbon remains in wood until fire or decomposition releases it.

"If you shade your house, you use less air conditioning. Even the cows know that, but as humans we have to remind ourselves."

The US hasn't approved the Kyoto Protocol, a 1997 international agreement to reduce atmospheric carbon dioxide. Still, companies have decided to start offsetting carbon emissions now because they see some sort of regulatory requirement as inevitable, explains John Rogers of the Conservation Fund, an Arlington, Va.-based nonprofit.

Energy companies have been among the first to come to the table. "Their overt motivation is recognizing their contribution to greenhouse gases, and that there's a high scientific likelihood it is causing global warming," says Rogers.

In Mississippi, Entergy Corp. helped the Conservation Fund buy

600 acres for the new Red River National Wildlife Refuge. The firm hired Atlanta-based Environmental Synergy Inc. to plant bottomland hardwoods that will absorb an estimated 275,000 tons of carbon dioxide over the next 70 years. In Louisiana, the Conservation Fund bought 700 acres near the Tensas River with Chevron/Texaco's money. The land was reforested and then turned over to the US Fish and Wildlife Service as a National Wildlife Refuge. A similar deal reforested 1,800 acres in Louisiana using funds from American Electric Power Company.

Reforestation is a long-term proposition, says Joe Wisniewski, who heads Environmental Synergy. In its five-year history, his company has planted 18 million trees over 60,000 acres in the South.

Wisniewski believes a carbon trading mechanism in the United States is looming as countries across the globe adhere to the Kyoto agreement and states like North Carolina ponder the possibility of limiting carbon emissions. Global energy companies want to play by one set of rules, and that creates incentives for them to act. Storing carbon today could pay off for companies tomorrow if Congress provides them with pollution credits in return. Such credits could be used to meet pollution goals or be sold to other companies.

Carbon storage is already becoming useful to some landowners. For example, the USDA has said it will consider carbon storage when evaluating applications for incentive programs and conservation initiatives.

While companies plant forests to absorb carbon dioxide, the uprooting

of trees elsewhere adds to the global warming problem. An estimated 25 percent of the increase in atmospheric carbon dioxide is blamed on tree losses due to changing land-use patterns, notes Rogers. Metropolitan areas, especially those in the fast-growing Southeast, continue to bulldoze forests and lay down pavement. Northern Virginia, for example, loses 28 acres a day to development.

Pollution Prevention

Replacing lost forestland can have another benefit as well — a tree behaves like an elaborate pollution control device. Its leaves absorb and filter rainwater, while its roots cleanse stormwater runoff before it reaches waterways and reservoirs, the source of most peoples' drinking water.

Forests usually produce cleaner water than developed land, so cities throughout the United States are defining watershed areas and acquiring forested land or conservation easements to protect their water supplies. New York City, for example, has maintained the largest, unfiltered water supply in the world by protecting its source high in the Catskill Mountains. Similarly, Asheville, NC, has used easements with property owners to protect over 17,000 acres surrounding its water supply.

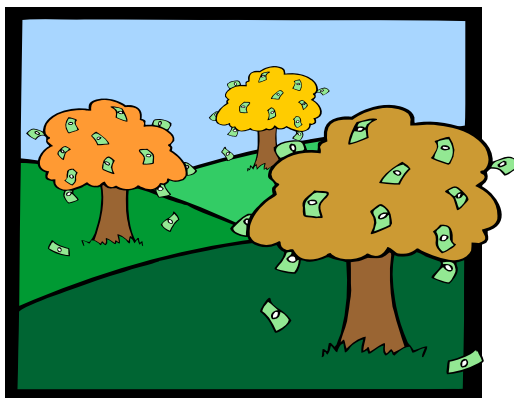
Protecting source water by preserving the surrounding forestland may be more cost effective than removing pollutants after the fact, according to Doug Ryan, a forest service analyst. Until about 1990, water treatment was regarded as an engineering problem, focused on removing impurities instead of preventing pollution at the source.

"What we're discovering now is that more rigorous treatment can leave more residues in the water that are harmful to people ...," Ryan

noted in a 2002 Forest Service publication. "New methods of treatment are also becoming more expensive, and passing those costs on to consumers is not a popular move."

In an effort to quantify the pollution control benefits of forests for policy-makers, American Forests used satellite data to document tree cover in urban areas. Then, the group analyzed the effects of tree cover on stormwater runoff, air quality, carbon storage, and other factors.

For example, 46 percent of the Washington, DC, area is covered in trees, while 27 percent of the land is under impervious surfaces that accelerate runoff and boost temperatures during hot weather. The metro area's tree cover is estimated to kick in \$49 million in air pollution services and \$4.7 billion in stormwater retention



benefits each year.

American Forests calculated the value of a tree's air pollution removal by estimating the amount of certain pollutants deposited on tree canopies, then multiplying by the dollar values assigned by state public service commissions to those pollutants. The group derived stormwater control amounts by calculating runoff volume in varying land covers.

American Forests also analyzed the 351,000 acres that comprise the Charlotte, NC, metropolitan area. In Mecklenburg County, which encompasses Charlotte and a few small towns, 22

percent of urban forest disappeared between 1984 and 2001. The county has grown by 72 percent since 1980 and is one of the 10 fastest growing areas in the nation.

Still, the county's tree canopy provides \$1.9 billion dollars annually in stormwater retention services, money that would otherwise have been necessary for infrastructure to handle runoff. It also absorbs about 17.5 million pounds of air pollutants each year, a value estimated at \$43.8 million, plus nearly 62,000 tons of carbon.

"The more forest cover in an urban environment, the less water runs off and the more money you save," says Macie of the US Forest Service. It's not rocket science. "What happens is ... we have three inches of rain, it fills our creeks and we have flooding. To compensate for that, we widen the creeks and pave them with concrete. That has a cost."

That's why Charlotte paid \$150,000 from state, city, and private funds to assess its tree cover, says Rick Roti, chairman of Charlotte's tree commission. The information will allow planners to consider tree canopy as a "green layer" in decision making.

"There's also a huge benefit from a water quality perspective," adds Roti. The rapidly growing Southeast faces water quality issues in a big way because of excessive sedimentation caused by land clearing.

Leveraging Mother Nature to save money is still in its infancy. Businesses will likely find other ways to extract economic value from trees. For example, shade trees next to a building reduce the need for climate control in the summer, cutting electricity demand and carbon dioxide emissions from power plants.

"If you shade your house, you use less air conditioning," says Macie. "Even the cows know that, but as humans we have to remind ourselves."

SC Arbor Day Poster Contest Winners

During an Arbor Day Celebration at Caughman Road Elementary in Columbia, Miss Alison Poston of Hampton Elementary was named the winner of the South Carolina Arbor Day Poster Contest sponsored by the South Carolina Urban and Community Forestry Council. Miss Poston's poster best depicted the theme of "Trees are Terrific....and Energy Wise!". Her poster will now compete in the National Arbor Day Foundation contest. As the South Carolina Winner, she received a \$200 US Savings Bond and \$50 in cash from SCUCFC, an Audubon Tree Identification Guide and T-shirt featuring her winning design from the SC Forestry Commission, and framed certificates.



As the winning school, Miss Poston's teacher, Bonnie Smiley, received a \$100 gift certificate from the Garden Clubs of South Carolina, Inc. to purchase classroom supplies and Hampton Elementary received a \$100 certificate for a tree to plant at the school from the SC Nursery and Landscape Association.



1st place - Alison Poston, Hampton Elementary School, Hampton



2nd place - Courtney Williams, Ellen Woodside Elementary School, Pelzer



3rd Place - Tyler McKenzie, Marion Intermediate School, Marion

Show your pride in Urban and Community Forestry with the new SCUCFC logo shirt!



The 100% cotton shirt (left) pays close attention to detail with double needle stitching, horn tone buttons, welt collar and cuffs, side vents, and locker patch. In seafoam green, the shirt has been garment washed to reduce shrinkage. The heavyweight pique knit was chosen for durability and long-term wear; and the spun yard combed cotton gives the shirt a very soft hand. Sizes range from XS to 6XL.

This flattering and fashionable ladies shirt (right) is perfect for showing your support and pride in SCUCFC! With a touch of stretch (5% spandex), this 95% cotton tee offers a great fit and holds its shape. Styling is slim-cut and fitted. In a light blue, this V-neck shirt has 3/4 length sleeves. Sizes range from XS to 2X.



These shirts are a great wardrobe addition. You'll want to order several for yourself and friends! Each shirt is \$25.00 + \$3.00 shipping. Order forms are available online at www.scurbanforestry.org or by calling 803-781-9817. Get your shirts today!

Urban Forestry News

New ISA Certification

The ISA is pleased to announce an exciting new credential, Municipal Specialist. Developed by ISA and the Society of Municipal Arboriculture it is designed for those involved in managing the complex aspect of trees in an urban environment.

To sit for the Municipal Specialist exam, you must be an ISA Certified Arborist in good standing with a minimum of 3 years additional experience in a management position of urban trees.

There are six domains on the exam: Communication Skills 10%; Public Relations/Education 20%; Administration 20%; Risk Management 10%; Arboricultural Practices 25%; Policy/Planning 15%.

The cost of the exam will depend on how long you have been an ISA Certified Arborist. 0-12 months \$30, 13-24 months \$50, 25-36 months \$75.

Successful participants will receive a certificate, patch, and decal. Municipal Specialists will be required to earn 12 municipal CEU's over a three year period with a minimum of 3 from professional conferences. You must also maintain your ISA Certified Arborist credential.

For more information, visit www.isa-arbor.com or call SC ISA Director, Lois Edwards, 843-365-8140.



Golden Acorn Awards Presented

The Golden Acorn Awards for Distinguished Service and Outstanding Urban Forestry Program were presented at the Annual Conference to Debbie Price, Supt. of Columbia's Forestry and Beautification Department and The Town of Hilton Head.



Ms. Price was recognized for the establishment of the Columbia Tree and Appearance Commission and her work with ISA as well as many other groups.



Sally Krebs, Natural Resources Administrator, accepted the award for the Town of Hilton Head Island. The Town was recognized for its tree protection ordinance, the use of CITYgreen modeling software, and its designation as a Tree City.

As an additional way to honor our recipients, make a tax-deductible donation to SCUCFC. Enclose a personal note of congratulations, thanks, or well wishes to your honoree. Your notes will be presented to the recipients. Support SCUCFC today!

*But I may be one who does not care,
ever to have tree bloom or bear.
Leaves for smooth and bark for rough,
leaves and bark may be tree enough.
Leaves and bark, leaves and bark.
To lean against and hear in the dark.*

Robert Frost, excerpt from "Leaves Compared with Flowers"



Mark Buscaino presents a 2003 Tree City USA award to Jenny Lee of Florence.

Tree City USA

During the Annual Conference, Mr. Mark Buscaino, Director of Urban & Community Forestry for the USDA Forest Service presented thirty-seven South Carolina towns and cities certification as a Tree City USA for 2003. These communities spent more than \$7.2 million on municipal tree care. Currently, close to one-fourth of the state's population lives in a Tree City USA.

Aiken
Anderson County
Beaufort
Camden
Charleston
Charleston Air Force Base
Charleston Naval Weapons Station
Cheraw
Chesterfield
Clemson

Columbia
Conway
Darlington
Dillon
Florence
Georgetown
Greenville
Hartsville
Hilton Head Island
Iva
Lancaster
Lexington
Manning
Marion
McClellanville
Mount Pleasant
Mullins
Myrtle Beach
Patrick
Rock Hill
Shaw Air Force Base
Spartanburg
Summerville
Sumter
Tega Cay
Turbeville
Winnsboro

Tree City USA is sponsored by The National Arbor Day Foundation in cooperation with the US Conference of Mayors, the National League of Cities, the US Forest Service, and the SC Forestry Commission. This national awards program is designed to recognize a town's commitment to managing its municipal tree resources. In order to qualify, a community must meet four standards: establish a tree commission or department responsible for public trees; pass a municipal tree care ordinance; proclaim and observe Arbor Day; and spend \$2 per capita on community forest management. For more information, contact Liz Gilland, Urban Forestry Coordinator, SCFC, 803-896-8864, lgilland@forestry.state.sc.us.



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Trees for Urban Landscapes: Vitex - The Chaste Tree

By: James E. Arnold, South Carolina Botanical Garden Manager/Senior Horticulturist

Belonging to the family *Verbenaceae*, there are approximately 250 species of *Vitex* (Chasteberry). Most are found growing as shrubs or small trees in tropical or subtropical regions of the world. The species cited here are those the Garden has collected and proven to do very well.

The *Vitex* that is probably the most familiar in our southern region is the *Vitex agnus-castus*. In late June or early July the plant becomes very noticeable as it is blanketed with 6-to-12" panicles of fragrant, tiny, lavender flowers lasting up to four weeks. It is a deciduous shrub with an upright habit but is often pruned to form a small tree. Considered as a fast grower, this *Vitex* will obtain a height of 12 feet with a greater spread in just in a few years. In terms of cold hardiness, zone 7 is its northern limits.

The plant's soft, lacy texture is attributed to its compound leaves that are actually lanceolated leaflets arranged to give the appearance of a deeply divided palmate (palm shaped) leaf. The leaf color is a grayish-green and very aromatic when crushed or bruised.

'Alba' and 'Blushing Spires' are two cultivars that the Garden has ob-

tained. 'Alba' has panicles of white flowers while 'Blushing Spires' has a slight tint of pink to the white.

Vitex negundo is a similar species but reaches a larger height of 15 feet and it is somewhat more cold hardy, growing in the warmer areas of zone 6. *Vitex negundo* has the same lavender flower color as *Vitex agnus-castus* but the flowers themselves are not as showy. The flowers usually appear in mid-July to early August. A beautiful cultivar of *Vitex negundo* that the Garden has been growing is called 'Heterophylla'. Its fernlike leaves give it an exceptionally fine textured appearance. It also has the greatest cold tolerance of any the *Vitex* recorded. In her book, *The Year in Trees*, Dr. Kim Trippe cites 'Heterophylla' as being exposed to temperatures down to -10F without any damage.

Vitex prefer, although adaptable, full sun and moist, well-drained soils with a pH of 7 or neutral. There does not appear to be any problems with disease or insect, although the Garden did have several plants collapse due to waterlogged soils. Since the flowers are borne on new wood, the best time to prune is late winter or

early spring. When growing as a small tree it is necessary to continually prune the side branches until the desired shape is obtained. If plants become too large or overgrown they can be pruned back within one foot of the soil line.

Propagation is easy with softwood cuttings in the spring with a little help from some rooting hormone. *Vitex agnus-castus* can also be propagated very easily from seed without any pre-treatment to the seed for germination.

Whether as a graceful shrub or an airy small tree or even as a ground cover, *Vitex* offers color and interest as well as the ease of care.



Vitex agnus-castus