



TREE Cookies Etc.

Fall 2007

Volume 3, Issue 2



tree cookie (trē' kookē) n. a cross sectional slice of a trunk or branch. The concentric rings tell not only the age of that part of the tree, but also a story about the environmental conditions, history, and dynamics of that tree, in that place.

TREE Cookies Etc. n. 1. a free electronic newsletter dedicated to tell the story of forest stewardship, tree care, and natural resource management. 2. to help people make best decisions regarding the resources entrusted to them.

Calendar

- Sept 24 & Monthly last Monday evening: **Piedmont Landowners Association Meeting** Madison, VA
- Oct. 3, 2007: **Chainsaw Safety for Loggers** Albemarle County, VA
- Oct. 12, 2007: [Fall Foliage Forestry & Wildlife Bus Tour](#) Albemarle County, VA
- **Timber Selling Workshop for Landowners** Louisa – Nov. 5 Orange – Nov. 7
- [Woodland GPS Training](#) Keedysville, MD – October 9 or 10 Queenstown, MD October 22
- November 16, 2007: [Northern Virginia Urban Forestry Conference](#) Sterling, VA

Virginia Cooperative Extension



VIRGINIA STATE UNIVERSITY

Virginia Tech
Invent the Future

www.ext.vt.edu

ANR-59

Dear Reader,

With the onset of cooler weather and the anticipation of a fine fall foliage season, it's a great time to be outside. As the chlorophyll, which gives leaves their green color, loses its strength to mask the other colors, we'll see the yellows in hickory and tulip poplar, the reds in red maple and black gum, and the browns in oak. You might wonder what the projection is for the fall color... I have it on good authority that it's going to be a great display this year... have you ever seen a bad one? Enjoy! -AKD

POSTED: Help Needed with Deer Herd

By: Nelson Lafon and Matt Knox, Deer Project Coordinators - VDGIF

With over 90% of the Commonwealth's land in private ownership, landowners need little convincing that their management decisions have significant consequences for our natural resources. But how many realize that they are often the missing link in successful white-tailed deer management? Landowners not only impact the habitat of the white-tailed deer, but they also hold the key to controlling deer populations.

For the foreseeable future, regulated hunting will continue to be the only practical and effective tool for controlling free-ranging deer populations. The [Virginia Department of Game and Inland Fisheries](#) (VDGIF) adjusts hunting seasons to address public desire for more or fewer deer over a county area, but it is ultimately up to hunters to kill the deer. Hunting is voluntary, and participation has been declining. In addition, liberal hunting opportunities are meaningless without access to land and the deer population. Landowners control access, so their decisions whether or not to allow hunting affect the application of our only tool to manage deer populations.

It is not the intent of this article to chastise landowners who prohibit hunting. There are certainly legitimate reasons for not allowing hunting on some properties. However, it is important for property owners to understand how their decisions impact the success or failure of deer population control efforts. All properties contribute to the problems or solutions of deer management, regardless of their size.

Continued pg. 3...



Acorns

By: James Finley, Ph.D. Professor of Forestry, Penn State. From: *Forest Stewardship News Release* of the Pennsylvania Forest Stewardship Program



White oak acorn (above) have a warty and bowl-shaped cap that covers 1/4 of the fruit and cap always detaches at maturity.



Red Oak acorns (below) have a shallower cap covering about 1/4 or less of the acorn, resembling a beret



Photos Citation: Paul Wray, Iowa State University, www.forestryimages.org

“Great oaks from little acorns grow.” When it comes to acorns, this may be about as much as most of us know. But acorns, the fruit of oaks, are an important bounty provided by our woodlands.

In the fall, hunters begin to scout the landscape for acorns, one of Virginia’s most common types of *mast*. Literally *mast* means *forest food* and is used to refer to all hard tree nuts such as hickory, acorns, and walnut. Acorns are critically important to many wildlife species. Every squirrel, turkey, deer, and bear hunter and many bird watchers know that finding acorns may increase their chances of finding wildlife.

Every year, as the acorns begin to fall, some folks complain of the litter they leave on streets, drives, and sidewalks. The annoying clank, thud, and ping as the solid “oak nuts” strike cars, roofs, and porches, drive some to distraction. Maybe, some think, we should cut-down that “dirty” tree. Extension agents, horticulturalists, nursery owners, and foresters, often hear the query “how can I stop my trees from having acorns?”

Acorns are really quite interesting as they vary in their maturation rate, size, and shape. Oak trees are classified into two general groups: red and white. Trees in the red oak group take two growing seasons to produce a mature acorn. The white oak group trees produce a fully grown nut in one growing season. These asynchronous fruit producing characteristics, along with the season when acorns germinate, are quite useful for meeting wildlife mast needs.

The red oak group species, identifiable by the presence of sharp points or bristles on the ends of the leaf lobes, flower in the spring. The red oak flowers fertilized

Continued on page 4

Deal with your non-native neighbors!

Invasive species have become the scourge of land managers, natural resource professionals, land owners and native plant enthusiasts across the country. Most invasive plants are non-native and have been introduced accidentally such as in packing material or for ornamental purposes. Whatever the origin and history, these plants cause a great deal of economic and ecologic damage.

Whether you volunteer with a local group to improve a park or attack problem pockets on your own property, all citizens should be educated about the most common invasive plant species in Virginia and work toward ways to control the spread of these invaders.

For more information download a new & growing series of invasive plant publications from: www.ext.vt.edu/resources/ <[ANR publications](#)> <[Forestry](#)> or call your local extension office.



Invading non-indigenous species in the United States cause major environmental damages and losses adding up to more than \$138 billion per year. There are approximately 50,000 foreign species and the number is increasing. About 42% of the species on the Threatened or Endangered species lists are at risk primarily because of non-indigenous species.
[1999 Report from Cornell](#)

Deer Control - Continued

Since deer may roam over a square mile (640 acres), it is true that larger properties are more critical for deer control. Intensive hunting on a 5 acre parcel next to 1,000 acres of un hunted land will have a negligible impact on the overall population size. However, “under-hunting” 1,000 acres (e.g., harvesting one deer per season) has little impact, as well. Furthermore, division of large parcels is occurring at an alarming rate across the Commonwealth, increasing the need for landowners and hunters to cooperate in management of deer and other wildlife resources across property boundaries.

Although decreasing hunter participation and access to land are barriers to controlling deer populations, a bigger problem in many areas is that deer hunters are not shooting the “right” deer. Most hunters, given the choice, prefer to shoot an antlered buck instead of a doe. But female deer control the deer population. No one has ever controlled a deer population by shooting antlered bucks. Deer hunters in areas needing populations reduced must begin shooting more does if we are to be successful in addressing deer damage to crops, gardens, forests, and vehicles. In the long run, reducing the deer population in these areas will benefit the deer herd and deer hunters themselves. Fewer deer result in bigger, healthier deer and healthier habitat.

To address the need for deer population reduction in Northern Virginia and the Southwestern Piedmont, the VDGIF Board of Directors has advertised several hunting regulation changes. If adopted by the Board at their October meeting, these regulations will take July 1, 2008. To review and comment on these proposals, please visit

<http://www.dgif.virginia.gov/regulations/comment/display.asp> by September 24.

Even without regulation changes, there are a number of strategies landowners and hunters can use to alleviate their own conflicts with deer and assist the Commonwealth with deer population management in their area.

Strategies for Landowners:

1. If conceivable, permit deer hunting that promotes harvest of does.
2. Only allow deer hunters who agree to assist in reducing the deer herd.
3. Favor hunters who hunt during all seasons (i.e., archery, muzzle-loading, and modern firearms).
4. Adopt an “earn a buck” program and require that at least two does be killed for every antlered buck killed.

Strategies for Deer Hunters:

1. First of all, be safe.
2. Shoot a big doe instead of a small buck. In fact, shoot two and tell your deer hunting friends to do the same.
3. Support Virginia’s Hunters For The Hungry Program (donate deer and money). Besides supplying food for the needy, this program enables hunters to take more deer than they can use, thereby aiding deer control.

For more information on VDGIF deer management programs, please visit www.dgif.virginia.gov or contact Nelson Lafon at nelson.lafon@dgif.virginia.gov or 540-248-9295. 



Acorns - continued

in spring 2007 are visible to the careful observer. Look for these tiny immature acorns on last year's twigs. They will stand out in groups of two to five acorns on their little stalks attached near where the leaves join the twig. On the current year's twig growth, you should see normal buds. Next year, when the tree again flowers, the acorns started in 2007 will begin to grow again, and if all goes well, the 2008 flowers will turn into the 2009 acorn crop. Sometimes red oaks will miss one or more years, as frost can kill the flowers or drought or insect damage stress the tree and it aborts fruit.

Species in the white oak group, which lack the bristle tipped leaf lobes complete their seed cycle in one growing season. For example, the 2007 flowers that bloomed on white oak type trees are now completing their growth and will soon be full-sized mature acorns. Look for them forming on the current year's twigs.

Besides maturing at different rates, red and white oak group species have different strategies for trying to ensure that their potential offspring have a chance of survival. Species in the white oak group germinate in the fall. That is, when they fall, they quickly extend a root from the acorn's point. This allows them to move some of their nutrients into a more protected place – under the ground. This strategy is really important, as these white oaks produce seeds lower in bitter tannic acid and, although slightly less nutritious than red oaks, much preferred by wildlife. This is their strategy to ensure some of their seed escape the hungry acorn eaters.

Acorns from species in the red oak group on the other hand spend the winter lying on the forest floor, often under the leaves that the parent tree scattered over them after they dropped. These acorns are generally more nutritious compared to their white oak cousins, but have much more tannic acid, and therefore are not as preferred by some wildlife. Only after the white oak acorns are eaten will species go looking for red oaks. You will frequently see heavy scratching and searching through the snow as various species search for these acorns later in the year.

As the saying goes, acorns do produce mighty oaks. However, across the oak's range, fewer mighty oaks are growing from acorns. USDA Forest Service periodic inventories document the decline in oak as a forest component in its traditional range. At one time, chestnut was the mast species of choice, but with its loss, oak took on an increasingly important role as the leading forest food producer. The decline in oak, if significant, would be a biologic catastrophe.

There are many reasons for declining oak regeneration. Research finds that deer browsing is important in that fewer acorns survive to germinate. Management strategies that reduce fire occurrence have given the advantage to plant species that fire would normally kill and oaks, which are fire adapted, cannot compete. Poorly planned harvesting decisions often focus on cutting oak, thus removing the seed source. Additionally, acid rain and introduced pests also threaten the future oak forests.

To help you learn to identify oak species and to separate them into the red and white groups. Go online to www.cnr.vt.edu/DENDRO or the new [Common Trees of Virginia Book](#) from the Virginia Department of Forestry highlighted elsewhere in this issue. These two resources will help you learn about your forest and help you become a better steward of our forest resources. 



Old-fashioned Bio-fuel

Adapted From: [Branching Out](#) – Vol. 14, No. 3 Fall 2006 Maryland Cooperative Extension

Terms come and go but good ideas tend to stick around. Burning wood is one of those. Known as the fuel that heats you twice (once when cutting & splitting, again when burning) it is also a fuel that comes from a renewable natural resource.

It may surprise some, but burning firewood can be less expensive than many other heating alternatives. There are many heating options currently available, each with its own benefits and drawbacks. When considering your options, it is important to note that costs vary by region, and the efficiency of the heating appliance will greatly change the annual heating cost. The table at right (from [VCE publication # 420-003](#)) compares the cost of firewood with other common fuels and heating methods in Virginia assuming a standard cord of air dried mixed oak.

Fuel/Heater	Cost Equivalent to Cord of Firewood
natural gas/furnace	\$59.91
no. 2 fuel oil/furnace	\$89.69
baseboard electric	\$164.77
propane/furnace	\$130.86
standard heat pump	\$74.89
high-efficiency heat pump	\$68.66
geothermal heat pump	\$54.92

Two good publications to get started with more decision making information are:

- For general information on burning & buying firewood, download or request from your local extension office: [Firewood for Home Heating](#), publication # 420-003.
- *Heating with Wood and Coal* describes how to choose a fuel and heating appliance for your home. This book can be ordered from www.nraes.org.

New Virginia Tree Book



The [Virginia Department of Forestry](#) has published a new *Common Native Trees of Virginia* book. This revised edition has the added feature of an identification key, a great tool to help you figure out what kind of tree you are looking at.

The 120 page book includes descriptions, drawings & range maps for each of the 78 most common tree species in Virginia. A list of other species found in Virginia includes common non-native tree species. Lastly, information is also provided on Holiday Lake Forestry Camp, the 17 State Forests and States' two nurseries.

The 120 page book is available for purchase through the Agency's website for \$1.00 per book.



Virginia Cooperative Extension

A partnership of Virginia Tech and Virginia State University

 **VirginiaTech**
College of Agriculture
and Life Sciences



School of Agriculture
Virginia State University

Madison County

P. O. Box 10

Madison, VA 22727

540/948-6881 Fax: 540/948-6883

E-mail: adowning@vt.edu

<http://www.ext.vt.edu/offices/madison>

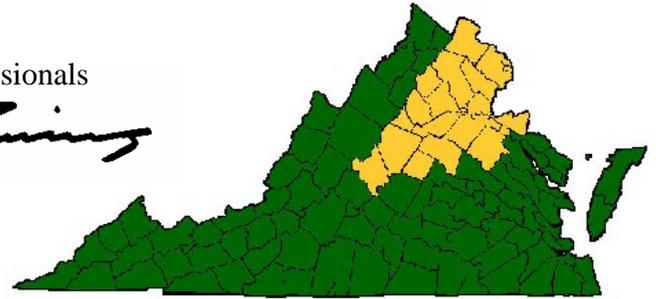
Date: September 21, 2007

To: Citizens, Landowners, and Natural resource professionals

From: Adam K. Downing

Extension Agent, Forestry & Natural Resources

Northern District



www.ext.vt.edu

Extension is a joint program of Virginia Tech, Virginia State University, the U.S. Department of Agriculture, and state and local governments.

Virginia Cooperative Extension programs and employment are open to all, regardless of race, color, national origin, sex, religion, age, disability, political beliefs, sexual orientation, or marital or family status. An equal opportunity/affirmative action employer.

To receive this newsletter, you must join the "Tree_Cookies_Etc" Listserv by sending an e-mail to: LISTSERV@LISTSERV.VT.EDU with SUBSCRIBE Tree_Cookies_Etc in the body (and nothing else). Leave the subject line blank and be sure to turn off any automatic signatures.

The electronic distribution of this newsletter has been set up with the tightest possible controls. Only the list owner (Adam Downing) can send to this listserv and replies cannot be sent to the list.

If you do not have ready, or suitable, access to E-mail, a hard copy mailing will be sent upon request. Call 540-948-6881 and ask to be put on the hard-copy mail list for *TREE Cookies Etc.*

