Forestry Workshop Series

The Chatham County Center, North Carolina Cooperative Extension, is conducting a series of forestry workshops for forestry landowners and forestry professionals. We are applying for continuing forestry education credits for these workshops. If approved, qualified participants would receive credits toward the Society of American Foresters Continuing Forestry Education Certificate. The workshops will be held in the auditorium of the County Agriculture Building, Pittsboro. The registration fee for each workshop is $5.00 per person in advance or at the door. Please call Jane Tripp, Extension Secretary, at 919-542-8202 to pre-register. The fee includes workshop materials, advertising, and refreshments. Make checks payable to: Chatham County Cooperative Extension. Mail to: Cooperative Extension, PO Box 279, Pittsboro, NC 27312-0279. You can also register at the Chatham County Extension Center at the County Agriculture Building in Pittsboro. Office hours are Monday-Friday 8:00 a.m. to 5:00 p.m. For more details, call Glenn Woolard, County Extension Director, at 919-542-8202, email to glenn_woolard@ncsu.edu, or visit our web site at http://chatham.ces.ncsu.edu.

Pine and Hardwood Management Workshop
January 29, Thursday, 7:00 to 9:00 p.m
• Dr. Robert Bardon, Extension Forestry Department Leader, North Carolina State University
• Dennis Hazel, Extension Forestry Specialist, North Carolina State University
Workshop description: Part One -- Pine Management – Characteristics of quality pine sites, successful establishment of pine stands, practices that enhance vigor and growth of pine stands
Part Two -- Hardwood Management – Crop tree management for hardwoods, crop tree release and its benefits, sites best suited for crop tree release, advantages and disadvantages of mixed pine / hardwood stands

Timber Taxes and Forestry Land Use Tax Program Workshop
February 5, Thursday, 7:00 to 9:00 p.m.
• Mark Megalos, Extension Forestry Specialist – North Carolina State University
Workshop description: Timber taxation and capital gains treatments, estate tax updates, present use valuation for forest landowners, update on proposed wildlife tax reductions

How to Sell Your Timber Workshop
February 12, Thursday, 7:00 to 9:00 p.m.
• Dr. Robert Bardon, Extension Forestry Department Leader, North Carolina State University

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Forestry Workshop Series

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Workshop description: Learning from experience can be very expensive when it comes to timber sales, many of which are once- or twice-in-a-lifetime occurrences. Years of growth and value are accumulated in a mature timber stand, and the combined annual income from all those years is frequently marketed in a single transaction. When and how you sell your timber can influence how much money you make, your overall financial plans, the cost of forest regeneration, and other management objectives. Too much is at stake for you to sell timber without an understanding of the timber selling process. Before you sell your timber you should consider these questions:
- How is timber bought and sold?
- What is fair market value?
- Who/where are the appropriate timber buyers?
- What is the current timber market price trend?
- What trees should one sell and why?
- How can I get advice from a professional?

Using GIS in Timber Management Workshop
February 19, Thursday, 7:00 to 9:00 p.m.
- James Jeuck, Extension Forestry Associate, North Carolina State University

Workshop description: Forest landowners can benefit from computerized mapping. Topics: How GIS works, what to expect from a forestry consultant using GIS, simple GIS any landowner can use (County Mapping Office, Google Map, & Web Soil Survey), GPS technology and use (hands-on use of GPS units).

Global and Local Timber Markets
February 26, Thursday, 7:00 to 9:00 p.m.
- Dr. Robert Bardon, Extension Forestry Department Leader, North Carolina State University
- Dan Edwards, Registered Forester, Edwards & Randolph Forest Management Group, P.A.

Workshop description: By understanding the factors that impact the global markets and how local markets are responding, landowners are better informed to make decisions about selling timber and obtaining fair market value for their trees. Participants will learn about the factors that impact global markets and how local markets are responding.

Timber Industry: Value, Products, and Trends Workshop
March 5, Thursday, 7:00 to 9:00 p.m.
- David L. Ashcraft, Executive Director of Development and College Relations, College of Natural Resources, North Carolina State University
- Dr. Philip H. Mitchell, Associate Professor, Department of Wood & Paper Science, North Carolina State University
- Dennis Hazel, Extension Forestry Specialist, North Carolina State University

Workshop description: Part One: Forest Products industry is undergoing fundamental change not only in NC but throughout the world. The techno-energy-enviro era that we are in is favorable to Natural Resources. There will be new companies, fewer companies and new financial structures for the companies in the new era. As with any change, those who learn the new rules of engagement will profit the most. Part Two: A guide to forecasting the future demand for wood products. A look at relevant economic, demographic, sociologic trends and their projected impact on the future demand for solid and engineered wood products.

Forest Herbicides Workshop
Thursday, April 2, 6:30 to 9:00 p.m. (includes dinner)
- James Jeuck, Extension Forestry Associate, North Carolina State University
- Alan “Bo” Burns, BASF Vegetation Specialist, BASF Chemical Company

Workshop description: Part One: Steps to Better Forest Health. Understanding site productivity and forest (Continued on page 3)
Forestry Workshop Series

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competition, and vegetative control in forest operations; pine versus hardwood management; invasives and weed species in the Piedmont (trees, shrubs, vines, grasses, herbs). **Part Two:** Forest Herbicides - Herbicide Strategies for Private Landowners. Where and when should I use herbicides, types of applications, herbicides and habitat management, general vegetation management, products.

**Chatham County Forestry Tour**

May 1, Friday, 8:30 a.m. to 4:30 p.m. – Forest Landowner Sites
- Dan Edwards, Registered Forester, Edwards and Randolph Forest Management Group, P.A.
Registration fee $10.00 per person. Transportation provided. Does not include lunch.

**Extension Forestry Publications**

For a copy of the publications, call 919-542-8202 or on the internet go to http://www.ces.ncsu.edu/nreos/forest/

**Reforestation Publications**
- Reforestation as an Investment: Does it pay? (WON-8)
- Reforestation of NC’s Pines (WON-9)
- Planting Your New Stewardship Forest (WON-37)
- Site Preparation Methods and Contracts (WON-15)
- Steps to Successful Pine Plantings (WON-16)

**Forest Health, Diseases, and Pest Publications**
- Maintaining the Forestry Exemption Under the Sedimentation Pollution Control Act (WON-22)
- Minimizing Wildfire Risk - A Forest Landowner’s Guide (AG-616)
- 1997 Natural Resources Inventory of North Carolina

**Economics and Taxes Publications**
- Federal and State Gift and Estate Taxes (AG688-03)
- Federal Income Taxes for Timber Growers (was AG296)
- Financial Incentives for Forest Management (WON-4)
- Forests and the NC Economy

**Marketing Timber and Alternative Use Publications**
- Before You Sell Your timber (WON-19)
- Estimating the Volume of a Standing Tree Using a Scale (Biltmore) Stick (WON-5)
- Producing Longleaf Pine Straw (WON-18)
- Nutrient Management for Longleaf Pinestraw (WON-30)
- Producing Firewood from your Woodlot (WON-14)
- Producing Shiitake Mushrooms: A Guide for Small-Scale Outdoor Cultivation on Logs (WON-20)
- Selling Your Timber? Don’t Make an Uninformed Decision! (AG-186)
- Timber Sales: A Planning Guide for Landowners (AG-640)

**NC Woody Biomass -- Nature’s renewable energy!**
- A Biomass and Bioenergy Glossary for Forest landowners (WB0001)
- The NC Biomass Roadmap: Recommendations for Fossil Fuel Displacement through Biomass Utilization (WB0002)
- The NC Renewable Energy Portfolio Standard and its Significance for NC Forest Landowners (WB0003)
- Community Economic Profile: Buncombe and Orange County Examples (WB0004)
- Sustainable Woody Biomass Harvesting: Minimizing Impacts (WB0005)
- Economic Impacts of using Woody Biofuels in NC (WB0006)
- Managing Forests for Biomass Potential (WB0007)
- Conversion Factors for Bioenergy (WBA0008)
- Minimizing Wildfire Risk with Biomass Harvesting (WB0009)

**Forestry Websites**

National Timber Tax Website
http://www.timbertax.org

Federal Income Taxes for Timber Growers
www.ces.ncsu.edu/forestry/pdf/TaxRevision_06.pdf

Chatham Extension Center Forestry Website
http://chatham.ces.ncsu.edu/content/Forestryindex

Extension Forestry, NC State University
http://www.ces.ncsu.edu/nreos/forest/
Timber Sales - A Planning Guide for Landowners

Introduction
Learning from experience can be very expensive when it comes to timber sales, many of which are once- or twice-in-a-lifetime occurrences. Years of growth and value are accumulated in a mature timber stand, and the combined annual income from all those years is frequently marketed in a single transaction. When and how you sell your timber can influence how much money you make, your overall financial plans, the cost of forest regeneration, and other management objectives.

Too much is at stake for you to sell timber without an understanding of the markets and of the quality and quantity of your timber. There are no daily market price reports for standing timber (stumpage), nor are there any government support prices. Demand and price for many timber products fluctuate widely. Size, quality, and type of timber are also highly variable. Specialized knowledge is required to identify tree species and to estimate volume and value within standards accepted by local markets.

This publication offers tips on marketing and selling, timber terminology, examples of timber sale agreements, and advice on seeking professional help from a consulting forester. By using this information, you can make your next (or first) timber sale both a pleasant and a profitable experience.

Timber buying process
Before you sell your timber
Before you sell your timber you should consider these questions:
- How is timber bought and sold?
- What trees should I sell, and why?
- How soon must I market them?
- Are property and cutting boundaries well marked?
- What is the timber volume? (And which of three “log rules”—Doyle, Scribner, or International—will be used to estimate the board-foot content of trees?)
- What is the growth rate?
- What is the fair market value of my timber?
- What is the current timber market price trend?
- Are the trees financially mature?
- Who and where are the appropriate timber buyers?
- What sale method should I use?
- Do I know my basis?
- How will the income be taxed?
- How should I reforest harvested areas?
- How can I get advice from a professional?

How timber is bought and sold
Timber buying process. The timber buying process involves a timber owner, a timber buyer, a logger, and a mill (manufacturer). The raw materials that supply the manufacturer are obtained through a network of buyers who purchase timber from private forest landowners. Buyers can work directly for a mill, for wood suppliers, for loggers, or for timber brokers. Buyers may be paid a salary or a commission, or they may receive part of the profits. Timber brokers buy and resell timber, making their income from profits.

Timber selling methods. Timber is sold either “per-unit” or “lump sum.” A per-unit sale is one in which the buyer and the seller negotiate a price per unit of harvested wood, and the buyer pays for the timber after it is cut and the volume is determined. Per-unit timber is sold either by product class or at a blended average price for all products. Product classes include poles and pilings, veneer or ply-logs, sawtimber, chip-n-saw, and pulpwood.

Landowners own per-unit timber until it is harvested and payment is received. Landowners continue to assume most of the risks associated with owning timber, including timber destruction, damage caused by acts of nature, and theft. A lump sum sale is one in which the buyer and seller agree on a total price for the timber within a defined area of sale, and the seller receives payment before the harvest begins. In this method the buyer, upon purchasing the standing timber, assumes the ownership risks.

How timber is measured
Timber owners should have a basic understanding of how standing timber volume is customarily estimated. A timber “cruise” is an inspection of the timber stand made to estimate the volume of marketable or merchantable timber present. In a stand of large or high-value timber, the cruise may involve measuring all merchantable trees. More commonly, the cruise is based on a systematic sample of trees on plots or strips representative of the entire stand; it is carried out with statistical design to give confidence in the estimates. Two measurements are usually needed on each tree to determine volume: the diameter at a height of 4.5 feet above the ground line (DBH or diameter at breast height), and the merchantable height. The height of sawtimber is generally recorded in terms of the number of “logs” (usually 16 feet long) to some “merchantable top” (usually a small-end diameter of 8 inches on the outside of the bark). Pulpwood tree height may be measured as the number of pulpwood “sticks” or feet to a merchantable top diameter (usually 3 inches on the outside of the bark), or total tree height may be recorded.

Tree measurements can be made using a timber scale stick or other forestry measuring devices (see Woodland Owner Note No. 5, Estimating the Volume of a Standing Tree Using a Scale (Biltmore) Stick, www.ces.ncsu.edu/forestry/). Once the trees’ diameters and heights are known, their volumes can be determined from various log rules. A log rule is a table or formula used to estimate volumes for various log diameters and lengths. Log rules often measure volume in board feet.

The quality or grade of trees is also important, particularly for hardwoods; excessive limbs and crooked or otherwise defective stems have less value.

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Over the past century, at least 100 log rules have been developed, with the International 1/4-inch, Doyle, and Scribner log rules being the most widely adopted in the eastern and southern United States. In North Carolina, the Scribner rule is most frequently used for southern yellow pines and the Doyle rule more commonly for hardwoods. The legal rule for settling disputes is the International rule, which is the most accurate.

The choice of log rule can significantly change the volume estimate of timber in a stand (Figure 1). If both buyer and seller are aware of this and if price is adjusted accordingly (Table 1), any log rule may be used because the total value of the timber (price multiplied by quantity) will remain the same (Figure 2). For example, a tree 14 inches DBH containing two 16-foot logs might be estimated to contain 130 board feet by the International log rule, 115 board feet by the Scribner rule, but only 75 board feet by the Doyle rule. A price of $115 per thousand board feet (MBF) by the International ¼-inch rule would result in a $15 stumpage value for the tree by the Doyle rule. A price of $200 per MBF by the Doyle rule would yield 75 board feet by the International ¼-inch rule, but only 52 board feet by the Scribner rule. Table 1 includes more price conversions for various log rules.

For example: You know that pine sawtimber is selling for $300 per 1,000 board feet (Scribner log rule). What is the price equivalent for the International ¼-inch log rule?

Table 1. Price conversions between various log rules.

<table>
<thead>
<tr>
<th>Log Rule Conversions (Dollar Values)</th>
<th>International ¼-inch to Scribner</th>
<th>0.83 Scribner to International ¼-inch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doyle to Scribner (26% difference)</td>
<td>0.75 Doyle to Scribner</td>
<td>1.33 Scribner to Doyle</td>
</tr>
<tr>
<td>International ¼-inch to Doyle (39% difference)</td>
<td>0.62 Doyle to International ¼-inch</td>
<td>1.60 International ¼-inch to Doyle</td>
</tr>
<tr>
<td>Scribner to International ¼-inch (20% difference)</td>
<td>0.83 Scribner to International ¼-inch</td>
<td>0.62 Doyle to International ¼-inch</td>
</tr>
<tr>
<td>International ¼-inch to Scribner</td>
<td>0.12 International ¼-inch to Scribner</td>
<td>0.83 Scribner to International ¼-inch</td>
</tr>
</tbody>
</table>

Factors affecting timber stumpage prices

Species, tree quality and size, product type, acreage, location, site conditions, markets, and contract provisions all affect the price paid for standing timber.

Species. In the Southeast, most pine timber brings higher stumpage prices than sweetgum or mixed hardwoods. High-quality black cherry, northern red oak, cherrybark oak, white oak, and yellow poplar can bring premium prices. Species price varies widely with location and with changing market demand.

Quality and size. Large, sound trees with clear logs (logs without knots or veneer, or export products generally bring the highest prices. Beware of high grading! High grading is the removal of the most commercially valuable trees from the stand, often leaving a residual stand composed of trees of poor quality and/or poor species composition. A high -graded stand often has little or no future economic value with regard to timber.

Product type. Major products that can be produced from pine trees include pulpwood, chip-n-saw, sawlogs, veneer logs (also known as plylogs), and pilings or poles. Major products produced from hardwood trees include pulpwood, sawlogs, and veneer logs (also known as grade or export logs). Each of these products must meet certain minimum size requirements (Table 2), and each varies in value based on the product, tree quality, and markets.

Acreage and volume. Logging operations require high capital investments in equipment. Low volumes of timber on small acreages usually cannot be logged profitably by highly mechanized and efficient contractors, so the relative stumpage values generally increase with both volume and acreage. Acreage and volume become less of a concern as tree quality (grade) increases.

Location. The distance to the mill, accessibility to good roads, and ease of

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logging are important factors affecting the price paid for stumpage. Most logging contractors would like all of their operations to be clear-cuts, located beside paved roads, near mills, on well-drained soils, and without contractual restrictions, simply because these conditions reduce logging costs. Consequently, when logging conditions are more difficult and the distance to the mill is greater, the price that the buyer is willing to pay for stumpage will be lower.

Competitive markets. Competitive bidding by timber buyers in the local area tends to assure that fair market value for timber is offered. A buyer, whose sole purpose is to avoid competition, often offers the unsolicited bid. The number of bidders and their interest in a sale can be influenced by advertising, which contributes to competition and positively affects the price paid. Some situations involving specialized products, unusual harvesting conditions, poor quality timber, or poor markets may be better handled by negotiating with a single appropriate buyer.

Do you know what products your forest contains?

<table>
<thead>
<tr>
<th>Pine</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Pulpwood</td>
<td>≥ 6” DBH</td>
<td>to a minimum 3” top diameter</td>
</tr>
<tr>
<td>Chip-n-saw</td>
<td>9-14” DBH</td>
<td>to a minimum 6” top diameter</td>
</tr>
<tr>
<td>Sawtimber</td>
<td>≥ 14” DBH</td>
<td>to a minimum 8” top diameter</td>
</tr>
<tr>
<td>Veneer log</td>
<td>≥ 16” DBH</td>
<td>clear/straight first log</td>
</tr>
<tr>
<td>Pilings</td>
<td></td>
<td>based on local markets</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hardwood</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Pulpwood</td>
<td>≥ 6” DBH</td>
<td>to a minimum 3” top diameter</td>
</tr>
<tr>
<td>Sawtimber</td>
<td>≥ 16” DBH</td>
<td>to a minimum 10” top diameter</td>
</tr>
<tr>
<td>Veneer log</td>
<td>≥ 18” DBH</td>
<td>clear/straight first log</td>
</tr>
</tbody>
</table>

Contract provisions. Restrictions placed upon the harvest of timber can protect the site, the residual trees, and/or the landowner, but they may reduce the price paid for stumpage. Contract provisions that address important considerations should be included in a timber sale contract or deed (see page 9, “Basic contract and deed provisions”).
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information from state agencies, universities, and businesses that provide price report information. In North Carolina, you can obtain general market trends and price information through the cooperative extension service, either by calling your local extension agent or by visiting www.ces.ncsu.edu/forestry/price.htm.

Have a reforestation plan. Landowners should begin planning reforestation well in advance of the harvest cut. Having a well-planned timber sale that includes a reforestation plan will minimize regeneration costs and assure that the desired species regenerate on the harvested area.

Mark the sale boundaries clearly. A legal timber sale requires that harvest boundaries be marked clearly. Resurveying the boundaries is often the biggest expense of conducting a timber sale, but the cost can be deducted as a cost of the sale. Establishing well-marked boundaries can protect the seller from increased liability and litigation.

Use a registered, consulting forester. Have a registered consulting forester cruise the timber to estimate its volume, quality, and value. Consulting foresters are available and prepared for this work. Following the harvest, these professionals can also help establish a new timber crop that will have maximum value in the future (see "A consumer’s guide to consulting foresters,” page 9). Do not rely on the timber buyer to assure you fair market value; their interests are not your interests.

Inform neighbors. Inform adjoining landowners of any proposed timber sales to make certain that boundary and access road locations are acceptable. Also, you may find that your neighbor wishes to sell his timber, too. Combining sales among neighboring tracts can sometimes increase volume without substantially increasing logging costs, which could result in higher prices to the sellers.

Have access to the land. If the land on which the timber is for sale has no rea-
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property. By law, the conveyance of an interest in real property, for example, standing timber, must be by written document. Deeds and contracts provide the means of conveying rights to an interest in timber. Timber deeds are used most often when payment is made for standing timber; contracts are used when payment is for severed timber.

Contracts. A contract establishes both the conditions to which buyer and seller agree and their rights and duties under these conditions. Timber sales contracts or cutting contracts are commonly used in transactions where timber is not sold in a lump-sum timber sale. Payment is made periodically as the timber is delivered to a mill or loading site, although title to the trees passes to the buyer once timber is severed.

Contracts are suitable for unit sales such as pulpwood, chip-n-saw, selective timber cuts, poles and piling, and other specialty product sales. However, because sample contracts (see “Basic contract and deed provisions,” page 9) seldom include provisions appropriate or desirable for particular sales, many buyers prefer not to accept them.

Deeds. Deeds are most often used with lump-sum timber sales, especially with purchasers of standing timber who require a deed upon payment. Most timber buyers prefer a timber deed prepared by their legal department. In many ways, deeds are usually less complicated than contracts. They contain the standard provisions (see “Basic contract and deed provisions,” page 9) for roads, fences, ditches, fields, and boundary trees. The legal description of the property is the only additional information needed. Before the deed can be executed, an essential point is to have the seller’s signature notarized. Even though it contains occasional changes that most landowners accept, title to the timber passes to the buyer once a properly drawn deed has been delivered.

Finally, the sellers should practice their rights to control logging through the wording of the contract or deed, but without making the document long and complicated. Such complicated documents might discourage timber buyers, cause them to submit lower bids, or be impossible to administer. Similarly, too many constraints on logging will increase logging costs, in which case, the seller should be prepared to accept a lower stumpage price. But some important constraints include limiting wet weather logging and placing a limit on the time the buyer has to remove the timber. In most cases a time limit of not more than two years should be established.

Closing the sale. Ideally, there should be mutual confidence and understanding between buyer and seller. Any important paper, contract, or conveyance should have notarized signatures and should be registered or recorded immediately upon execution at the courthouse of the county where the property is located. Timber sales are conducted as real estate transactions with the seller often paying for deed preparation, revenue stamp, and commission of the consulting forester. The buyer often pays for the title search and any documents required for securing the funds. Before closing the sale, both parties should understand who will cover the various costs of the sale. For a good relationship on which to build future sales, you should conduct and conclude the sale in a cordial and businesslike manner.

What is a consulting forester? A consulting forester is a full-time professional. He or she represents, for a fee, the interests of his or her clients in all matters concerning the forest. A consulting forester can improve the quality of the forest environment and increase the production of marketable products. When the trees become merchantable, the consulting forester can find buyers and supervise the timber sale. The fee charged by the consultant may be based on an hourly or daily rate or on forest acreage, or it may be a contract price based on a percentage of gross revenues from the sale of the forest products. The cost of these services usually will be recouped by the timber owner through the higher prices received for timber that is marketed correctly and through faster tree growth after the timber is cut and sold.

What are the qualifications? As in all professions, the knowledge and experience of consulting foresters vary widely. In North Carolina, registered foresters generally hold a bachelor of science or higher degree in forestry or have shown equivalent knowledge by passing an examination given by the state Board of Registration for Foresters. They must also meet continuing education requirements set forth by the state Board of Registration for Foresters. Many qualified consultants are certified members of the Association of Consulting Foresters of America, Inc.—an organization that promotes the service, practice, and standards of consulting forestry and seeks to strengthen its ethical and professional standards.

A list of forestry consultants may be obtained from county Cooperative Extension Centers (www.ces.ncsu.edu), from the NCDFR (www.dfr.state.nc.us/), or from the Association of Consulting Foresters of America, Inc. (www.aclf-foresters.org). A landowner may also obtain names from a telephone directory or a woodland-owning friend or neighbor.

How do you select a consultant? The landowner should request information from several consulting foresters before selecting one. Be sure to obtain the forester’s specific qualifications, references from previous clients, and fee estimates. Ask to see a recent job so you can see the consultant’s work for yourself. To prevent a potential conflict of interest, avoid those who are buyers for forest products companies.

Once a professionally qualified consulting forester has been selected, a contract or written agreement should be signed. It (continued on page 9)
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should include a list of services to be performed, who will perform them, and the agreed-upon cost of services. The consultant should welcome any questions and clarifications that the landowner may seek. Good communication between the landowner and consultant is essential.

What services does a consultant provide?
Services offered by consulting foresters vary considerably according to the fee and the landowner’s desires. The following is a list of services the landowner should expect from a fully qualified professional. The landowner should be sure that the contract or written agreement clearly itemizes the services he or she expects.

Timber sales. When a stand of timber is to be harvested by the clearcut method, the consultant marks the boundaries of the area. When using the selection method, the consultant marks the boundaries and may or may not mark the specific trees to be harvested, depending on the selection method. The trees to be harvested are marked by painting the stumps as well as the trunks to make sure unmarked trees are not cut. Sometimes the trees to be left are marked instead of the trees to be cut. If the boundary of the timber sale area corresponds with a property boundary, then a survey of the property boundary by a registered surveyor may be required. The consultant will inventory the stand, recording species, diameter, height, and quality. With this information, the consultant will calculate the volume of the sale and prepare a contract or deed for the owner’s approval. The consultant also may mark where the skid trails will go and where the trees will be skidded for delimbing, cutting to length, and loading on the log truck.

For a sealed-bid sale, the consulting forester will send potential buyers an “invitation to bid on standing timber,” which includes location and tract maps, legal description of the property and how the boundaries are marked, location of any buffers or areas excluded from the sale, and a description of the volumes, species, size classes, and tree quality. The invitation to bid also may include dates for woodlot inspection, the payment schedule, dates for beginning and completing logging operations, the performance deposit required, if any, and any other conditions of the sale that will protect the landowner’s property and interests.

The forester will show the woodlot to potential buyers and supervise the opening of bids. After the landowner chooses the buyer, the sale will often be closed through an attorney who will have the buyer sign the deed, then collect the performance bond and all or part of the sale price. Upon closing of the sale, the forester will arrange the details of the logging operation. The consultant will check the logging operation on a periodic basis to ensure that the terms of the agreement are honored.

If a negotiated sale (similar to a sealed-bid sale) is decided upon, the consultant may personally contact buyers in an attempt to receive the best price for the stumpage.

Management plans. The management plan is based on the landowner’s goals and objectives. Information in the management plan usually describes the goals and objectives, current condition of the forest, stand history, the species present, and the size, volume, and quality of the timber. The plan should list for each forest stand a recommended sequence of operations necessary to achieve the objectives outlined for the management period. Management plans vary in sophistication from a short report based on a brief walk through the woods to a detailed financial analysis with computer simulations of forest growth and suggested treatments. The cost will reflect the time and effort required to collect the data and prepare the report.

To create a management plan, the consulting forester must locate the boundaries of the managed area and conduct an inventory, or timber cruise, of the trees and forest products. Age, stocking, and growth rates are estimated. These data are processed, and a forest-type map is drawn. The forester then develops a management plan that will promote the landowner’s objectives.

Basic Contract and Deed Provisions

No two timber-cutting contracts are exactly alike, but all contracts should include basic provisions such as:
1. Guarantee of title and description of the land and boundary lines.
2. Specific description of timber being conveyed; method of designating trees to cut; and when, where, and how to determine volume.
3. Terms of payment.
4. Starting date and duration of agreement.
5. Clauses to cover damages to nondesignated trees, fences, ditches, streams, roads, bridges, fields, and buildings.
6. Clauses to cover fire damage where harvesting crew is negligent and to protect seller from liability that may arise in the course of harvesting.
7. Clause limiting wet weather logging to include repairing damage to the site if any rutting occurs.
8. A standard to completely utilize the merchantable portion of trees.
9. Clauses for arbitration in case of disagreement.

Deed. A basic timber deed may contain provisions such as:
1. Specification of parties, both seller and buyer.
2. Terms of payment.
3. Legal description of the property.
4. Guarantee of title against third party claims.
5. Special conditions under which timberland should be logged. These will vary, depending on the sale.

Possible conditions include:
a. A clause covering length of time to conduct the harvest.
b. A map of the sale area designating the location of access, decks, skid trails, etc.
c. A clause covering what condition roads, skid trails, decks, etc., must be left in upon completion of harvest

Basic Contract and Deed Provisions

No two timber-cutting contracts are exactly alike, but all contracts should include basic provisions such as:
1. Guarantee of title and description of the land and boundary lines.
2. Specific description of timber being conveyed; method of designating trees to cut; and when, where, and how to determine volume.
3. Terms of payment.
4. Starting date and duration of agreement.
5. Clauses to cover damages to non-designated trees, fences, ditches, streams, roads, bridges, fields, and buildings.
6. Clauses to cover damage to nondesignated trees; therefore, they vary considerably. Some of the more common provisions include:

(Continued on page 11)
Invitation to Bid
On 30 +/- Acres of Timber Owned by Joe Pine, Tupelo County, NC
November 29, 2007, at 10:00 AM

Description of timber. Joe Pine is offering all timber within the sale area for sale through his agent, Selling Timber Enterprises (hereafter referred to as “S.T.E.”). The timber sale area supports predominately mature loblolly pine sawtimber, with some mixed pine and hardwood pulpwood, and will be reforested following harvest.

Summary of timber volumes: Volume estimates are for information only and are not construed as implying or guaranteeing any specific amount of timber by the owner. For information on timber cruise, contact S.T.E., (III) 222-3333.

Estimated sawtimber: (6” top) Scribner 78 Pine - 212 MBF /1389 Tons
Pine C-N-S-II MBF /100 Tons (10” top) Doyle 78 Misc Hdwd - 2 MBF /18 Tons

Estimated pulpwood (includes topwood) Pine - II Tons
Hardwood - 70 Tons

Sale area, property lines, and boundary marking. The timber sale area is bounded by Reedy creek forming the west boundary, center line of state road NCSR 2007 forming the north boundary, and lines described in deed book 8-J page 401 forming the south and east boundaries back to the creek (west boundary). Please see the attached map for better identification. The sale has good access with average logging conditions. The tract is located 22.5 miles east of the town of Red Oak in Tupelo County, NC. Logging access will be provided from NCSR 2007. Tract boundaries are marked with blue paint. Streamside Management Zones (SMZ) are marked in red, and no trees are to be taken from inside SMZs.

Method of sale. Timber will be sold by sealed bid, lump-sum sale on November 29, 2007, from 10 a.m. to 2 p.m. Bids will be accepted at S.T.E.’s office, 100 Ash Avenue, Red Oak, NC. Only those bids submitted in person at the sale location will be accepted. The seller reserves the right to refuse any and all bids. A 10 percent deposit may be due at the time of the sale, at the sole discretion of the seller’s agent, S.T.E. At the time of closing the full accepted bid amount will be due. Closing will occur within 10 days of the timber sale. A performance deposit of one thousand dollars will also be required at the time of closing.

Conditions of sale. Sale of the previously described timber tract is subject, but not limited, to the following conditions:
(Conditions for harvest will be spelled out in a separate contract and must be signed by both parties.)
1. Term. Timber offered under the terms of the sale must be cut and removed within 24 months of execution of the timber deed.
2. Assignment of Contract. The buyer may not assign this contract to a third party without consent of the seller or seller’s agent. In the event of such assignment, the buyer is not relieved of said duties under the sale contract unless the seller has granted such release. The buyer may subcontract cutting, logging, hauling, and removal of timber without written consent of the seller but will not be relieved of any obligation under the timber sale contract.
3. Notification. Seller’s agent must be notified at least 24 hours prior to the beginning of logging operations and 24 hours prior to expected harvest completion.
4. Decking/skidding/loading. All decking, skidding, and loading shall be done within the designated timber sale areas.
5. Ditches. Any ditches on site shall be left free of all logging debris. All ditches will be left in better or equal condition to that prior to logging.
6. Logging Debris. No logging debris is to be left outside designated sale areas. Logging debris at decking areas is to be scattered throughout sale areas such that no piles are more than 36 inches in height from ground level.
7. Boundary Lines and Reserved Areas. Boundary line trees are not to be cut. A fee of two hundred dollars per tree will be assessed for damages to boundary line trees in addition to the value of the trees as assessed by the agent. The buyer shall be responsible for damage to corner markers and boundary trees. All areas within marked boundaries may be harvested with the exception of SMZs.
8. Trash/Wildfire. The buyer of the timber will be responsible for keeping his trash off the tract during logging operations, which includes maintaining a trash barrel on site. The buyer is to use reasonable care in preventing wildfires due to his actions.
9. Indemnity Clause. The buyer of the timber shall indemnify and hold harmless the seller from any and all liability and any and all loss, including attorney fees and other reasonable expenses incurred, arising from the operations, activities, or omissions of the buyer’s employees, contractors, subcontractors, and invitees, and whether such liability or losses be to an adjoining property, licensees of the buyer, or to any others for property damage, personal injury, death, or otherwise. The buyer must agree to maintain workers’ compensation insurance for his agents and employees.
10. Title. The seller warrants his title to said timber and agrees to defend said title against any and all claims. Title to said timber passes title to byproducts such as tops, slabs, and sawdust, but only if the purchaser removes these during the time of the timber sale contract. The buyer of the timber will not be permitted to conduct direct firewood sales to the general public from the tract.
11. Statutes. It is the responsibility of the buyer to abide by any and all federal, state, and local laws applicable to timber harvesting, such as NC General Statutes 77-13, 77-14, and §§ 113A-50 through 82, relating to timber harvesting, water quality, and stream sedimentation as they affect this property and further, that the buyer shall be solely responsible for any violations of such regulations. It is the responsibility of the buyer to follow best management practices in accordance with the Forest Practice Guidelines (15A NCAC 11 .0100 -.0209).
12. Wet Weather Clause. In the event of wet weather, the seller’s agent has the right to temporarily suspend harvesting activities if site damage is excessive or probable due to weather conditions. The cutting period will be extended for an equal period that the agent halted harvesting operations.
13. Performance Bond. The buyer shall post a one-thousand-dollar performance bond with seller’s agent at closing. The bond shall be forfeitable by the buyer to the agent upon failure to perform as per cutting contract, subject to a final logging inspection by the agent. The bond does not limit liability for damages incurred as determined by the agent
14. Ingress and Egress. Roads on the timber sale map may be used for ingress and egress. Roads must be maintained in a condition comparable to that found prior to beginning of logging. Gate keys will be provided.
15. Stream Crossings. No stream crossings are anticipated. Ditches and streams must be kept clear of all logging debris. The buyer will be responsible for seeding and mulching any stream or ditch crossing that may be encountered during logging.
Timber Sales - A Planning Guide for Landowners

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Appraisal. A buyer or seller of timber may want to know the quantity or value of the timber on the tract for any of several reasons: a timber sale, financial planning, tax planning, establishment of basis, or determination of a casualty loss. The consultant can provide this information by performing a timber cruise and a site analysis. This involves measuring a representative sample of trees, preparing forest-type maps from aerial photographs and ground surveys, and calculating the volume and value of the timber. If a more comprehensive appraisal is desired or required, a forest landowner can have a comparative market analysis conducted by a real estate appraiser or a formal appraisal conducted by a state-certified appraiser.

Boundary marking. Boundary marking requires the forester to check the deed registry, locate the most recent survey, consult with adjacent landowners, and identify boundaries on the ground. Boundaries are flagged, blazed, or painted, and a map showing their bearing and length is drawn and given to the landowner. The consultant may recommend a registered surveyor in case of contested boundaries, litigation, relocation of corners and lines, or establishment of new lines. The consultant cannot provide bona fide surveying services unless he or she is licensed by the state as a registered land surveyor.

Regeneration. The establishment of a new forest crop is encouraged by providing growing space through harvesting, killing, or removing all or part of the preceding crop. Prescribed burning and/or mechanical site preparation is sometimes necessary to create the appropriate environmental conditions for natural or artificial regeneration.

A prescribed burn removes unwanted vegetation or logging residues before the establishment of the new forest. It is a low-cost, low-impact alternative if done correctly. The consultant will assist the landowner in the selection of a contractor or certified burner to conduct the burn. Upon completion, the consultant will inspect the area to determine whether the desired results were achieved. Landowners interested in conducting prescribed burns on their property should contact the NCDFR about the certified burner program. Mechanical site preparation, often more costly than prescribed burning, typically requires a bulldozer. It is used first to knock down unwanted vegetation and then to chop or pile the vegetation and logging residues. The consulting forester should begin this operation by notifying third-party contractors and accepting bids on the job. The consultant can assist in the selection of a contractor and will inspect the area upon completion. After the site has been prepared, the consultant or contract crews may plant seeds or seedlings.

Fire protection. A consultant forester’s role in fire protection is to assist the landowner in reducing the risk of wildfire. Two common methods of forest fire protection include firelane construction and maintenance and prescribed burning. Firelanes are barriers built to stop the spread of fire, or they may be created by prescribed burning to reduce fuel. The consultant’s role in fire protection is often the role of selecting a contractor who will perform the work.

Timber stand improvement. Timber stand improvement may include any combination of silvicultural (forest care) operations designed to improve the vigor, health, growth, and quality of the trees. Removing undesirable trees that compete with the crop trees can accelerate the growth of the desired trees. Undesirable trees may be removed for fuel wood, killed by chemicals, cut down, or girdled (have a ring of bark several inches to several feet wide cut from around the stem of the tree to cause its death).

Other services. Consultants also may offer advice on wildlife and recreation management, state and federal cost-share programs, tax issues, estate planning, and road construction.

For further information concerning forest land management and choosing a consulting forester, contact your local Cooperative Extension Center, NCDFR, or the Association of Consulting Foresters of America, Inc.

Attention Homeowners

The following workshops will be held in the auditorium of the County Agriculture Building in Pittsboro. The registration fee for each workshop is $5.00 per person in advance or at the door. Please call Jane Tripp, Extension Secretary, at 919-542-8202 to pre-register. The fee includes workshop materials, advertising, and refreshments. Make checks payable to: Chatham County Cooperative Extension. Mail to: Cooperative Extension, PO Box 279, Pittsboro, NC 27312-0279. You can also register at the Chatham County Extension Center at the County Agriculture Building in Pittsboro. Office hours are Monday-Friday, 8:00 a.m. to 5:00 p.m. For more details, call Glenn Woolard, County Extension Director, at 919-542-8202, email to glenn_woolard@ncsu.edu, or visit our web site at http://chatham.ces.ncsu.edu.

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<tr>
<th>Homeowner Septic Maintenance Workshop</th>
<th>Homeowner Well Workshop</th>
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<tr>
<td>January 27, Tuesday, 7:00 p.m.</td>
<td>March 17, Tuesday, 7:00 p.m.</td>
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<td>$5.00 registration fee</td>
<td>$5.00 registration fee</td>
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4-H Forestry Wildlife Day Camp

The 2009 4-H Forestry Wildlife Day Camp will be held June 11-12 (Thursday-Friday) at Jordan Lake Educational State Forest.

Volunteers are needed to serve as leaders for groups with about ten boys and girls in each group. Group leaders rotate the groups to the various educational stations throughout the day. The camp operates from 8:00 a.m. to 5:00 p.m.