



FORESTRY, WILDLIFE & FISHERIES UPDATE NEWSLETTER

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OUR DAILY WOOD - Adapted from *The Evergreen Foundation, Medford, OR*
Wayne Clatterbuck, Professor, Silviculture and Forest Management

Every day, each of Earth’s 7.0 billion inhabitants uses about ½ gallon (about 4 lbs) of wood on the average. However, the average American uses 3.5 times this much wood. Should Americans be using less wood?

- Steel, aluminum, plastic and concrete are often mentioned as substitutes for wood, but these resources are not renewable. Wood is the only natural resource on Earth that is renewable, recyclable and biodegradable.
- The energy required to grow a tree is the sun. As trees grow, they remove carbon dioxide from the air and give off oxygen.
- By weight, total US wood consumption exceeds combined consumption of steel and concrete.
- Wood manufacturing processes consume only 4 percent of the energy used by all primary industrial raw material manufactures.
- Steel and concrete manufacturers consume 56 percent of the energy used by all primary industrial raw material manufacturers.

If the energy required to manufacturer a four pound block of wood had been used to make aluminum, the resulting piece would weigh one ounce.

Global demand for wood will continue to increase. Estimates are wood consumption will double in the next 30 years. However, governments around the world are establishing more forest preserves where harvesting is prohibited. Forested land is increasingly being converted to other uses than remaining in forests. There is little incentive on remaining forests to grow trees sustainably for various wood products. Left unanswered is the critical question: Where will we get our daily wood?

The world should be using more wood, not less, because no other natural resource on Earth can match its environmental advantages. But first, nations must make a major global commitment to growing our daily wood, just as we do our daily bread.

LEED, GREEN BUILDING PROGRAMS AND WOOD: AN UPDATE

Adam Taylor, Associate Professor, Forest Products

Green building programs are meant to recognize and encourage building homes, offices and other structures that have less impact on the environment. Because wood is a renewable and energy efficient building material, it makes sense that green building programs would reward the use of wood in place of alternatives such as steel or concrete. Unfortunately, this logic hasn't made it into all of the building programs yet.

Green building programs are relatively recent and are constantly evolving. There are a number of programs in existence, including Green Globes, CalGreen and the ASHRAE Green Building Standard. However, by far the most well-known program is LEED, which stands for Leadership in Energy and Environmental Design. LEED was developed by the Green Building Council, which has put forth a strong and successful effort to educate and certify architects in the LEED program.

The LEED program awards points – or 'credits' – for various aspects of the building, for example energy and water efficiency. A total of 100 credits are available, and the higher the total the better the rating awarded. The highest rating is 'Platinum', which requires 80 or more points. Specific examples of credits include:

- Using low-emitting paints and coatings 1 point
- Using green power 2 points
- Water-efficient landscaping 2-4 points
- Having bicycle storage and changing rooms 1 point

Unfortunately, LEED offers relatively few points for using wood. One to two points are available for regional materials, which may apply to wood. One point is available for certified wood, but only for wood certified by the Forest Stewardship Council (FSC).

Many people believe that green building programs should be based on life cycle assessment (LCA). LCA is a science-based, standardized and peer-reviewed process that quantifies the total environmental impacts of products over their lifespan. LCA of building materials has consistently shown that wood is a preferable material, and that using wood in place of other materials significantly reduces the total impact on the environment. LEED has no provision for LCA in its current standard. There is some discussion ongoing to incorporate LCA into LEED in the future but it is likely to be optional and limited to a few interior products. Thus it is likely that the LEED program will continue to undervalue the potential role of wood products to contribute to green building.

The current FSC-only limitation on the LEED credit for certified wood is also likely to remain in place. Although there is no evidence that the FSC program results in better forest management practices than programs such as SFI and Tree Farm, the FSC has recently called on LEED to reaffirm its FSC-only policy.

Although LEED is the best-known green building program, there are many options. And many of these alternative programs do a better job of recognizing the important potential of wood. For example, the Green Globes program takes a LCA-type approach to evaluating buildings. The International Green Construction Code developed by the International Code Council has an LCA option.

In summary, wood is the greenest building material option but the still-evolving green building programs are struggling to recognize and reward this fact. In the short term, it appears that LEED will continue to undervalue wood in general, and to limit wood credit to FSC-certification only. We can hope that in the longer term, LEED and the other green programs will take advantage of the growing body of scientific data that shows that *Wood is Good!*

LYING, CHEATING, AND STEALING IN THE WOOD BUSINESS

David Mercker, Extension Specialist, Forestry

The following article appeared in the July/August edition of the Tree Farmer Magazine and is being reprinted with permission of the author, Tom Kazez, Registered Forester, Woodland Security, Inc., Orange Park, Fl.

Most people are honest. You might live and work a long time with no experience with financial crimes, but this can create too much comfort among people who tend to think the best of people anyway. There is a fundamental problem when it comes to financial crimes and internal controls: We can never see into the heart of another person.

As an auditor, I recommend that you spot-check the work of all those conducting business on your behalf - a forester, a logger, a road maintenance contractor, or your CPA - regardless of whether you have very long-term and very positive relationships with them. I list here my five rules to prevent financial crimes.

Rule #1: Spot check everyone's work. Relationships, reputations, and feelings alone are not sufficient for the creation of good internal controls. A person who has been honest for many years can get into trouble in a variety of ways. We have seen chief executives of major corporations go to jail. The same principle applies at your local level.

Two kinds of people will cheat you: crooks and honest people. Crooks will cheat you any time they can. Honest people cheat you when they are desperate. They might be desperate because of circumstances beyond their control. Most often, however, other forms of corruption will be part of the problem. Addictions to alcohol, drugs, and gambling are common "sidebars" to financial crimes. A person with a too active social life, a lavish lifestyle, and too much pride can become desperate to maintain his or her facade,

Rule #2: It can be easy to catch an honest person in a lie; you might never catch a crook telling a lie. Owners and managers, on some rare occasions, have told me they don't need auditors because they only work with honest people. I do hesitate to be critical, but this is misguided. An honest person will lie to you when they have to (out of desperation) and they aren't very good at it. They will be uncomfortable and symptoms may appear. They may not look you in the eye. They may be shuffling their feet, perspiring, in a hurry to be somewhere else, and hesitant. They might get their stories mixed up. These are things investigators look for when they are pulling the truth from reluctant witnesses. A crook is likely to have no similar symptoms. They are practiced at the art of telling lies. They will not be uncomfortable because they have no anxiety or guilt. They can rationalize any misdeeds they have created. And they have experience at keeping their stories straight. You can make an honest person sweat, but a crook will look you square in the eye and tell one lie after another.

It is absolutely appropriate to work with people you trust. Our work is much more efficient when we can spot-check their work, instead of standing over their shoulder and watching each move they make! But you become very vulnerable when comfort becomes complacency. If you trust folks so much you never check their work, they will catch on to this pretty quickly. If you develop predictable patterns and get lazy, you will give up control over your transactions.

Years ago, in a rare case, we found a young forester who drove out to logging jobs and stopped at the loading deck, but never got out of his truck. He would wave at the crew and they gave him a "thumbs up," then he was on his way again. He never walked the woods; never made any measurements or close observations at the woodpile. The forester was negligent and the crew took full advantage.

Rules #3 and #4: Educate yourself and spot-check everyone. If you don't know what you are looking at, you can't control your business. If you don't make your own physical inspections, then you only know what someone else reports to you.

Rule #5: All manner of transactions are subject to financial crimes. It isn't just timber sales and harvesting; Road maintenance, reforestation, chemical applications, land sales, physical security, and all aspects of your woodland operations should be subject to good, cost-effective scrutiny. ~

Tree Farmer - July/August 2011

HARDWOOD ANALYSIS AND TRENDS (HAT), SEPT. 2011

David Mercker, Extension Specialist, Forestry

It is highly unusual to pull excerpts from one **HAT** article and plug it right back into another, but with this issue, that is exactly what **HAT** has chosen to do. Very little has changed; hence very little that's new can be reported. Consider the following from the February and June editions of **HAT**:

Reported in February

It is a reach to find any optimistic news for hardwood lumber, logs or stumpage. There is ample supply, perhaps even excess capacity, to meet consumer demand both in the domestic and international markets. . . . Simply put, lumber production continues to outpace demand. With current existing home inventory (nationally) exceeding 3 million units (a 7 – 8 month supply), it could be 2 – 3 years before hardwood lumber price increases are once again driven by demand. The excess home capacity must first be pressed through the system.

Reported in June

The hardwood industry has operated at an unusually slow pace during the first part of 2011. As such, **HAT** has been short on news to report. The recession and lackluster recovery caused some sawmills to close, while those remaining have curtailed production to remain in-line with demand. The housing market is in a precarious situation. Sales of new homes have continued to decline since the expiration of the federal tax credit last year. Home values are declining. As this happens, homeowner equity drops, further accelerating the number of homeowners becoming "upside down" on their mortgage. More foreclosures result, in turn perpetuating the problem. Creditors are then forced to sell foreclosed homes even lower, forcing the value of nearby properties to drop again. The cycle continues and a bottom is desperately needed.

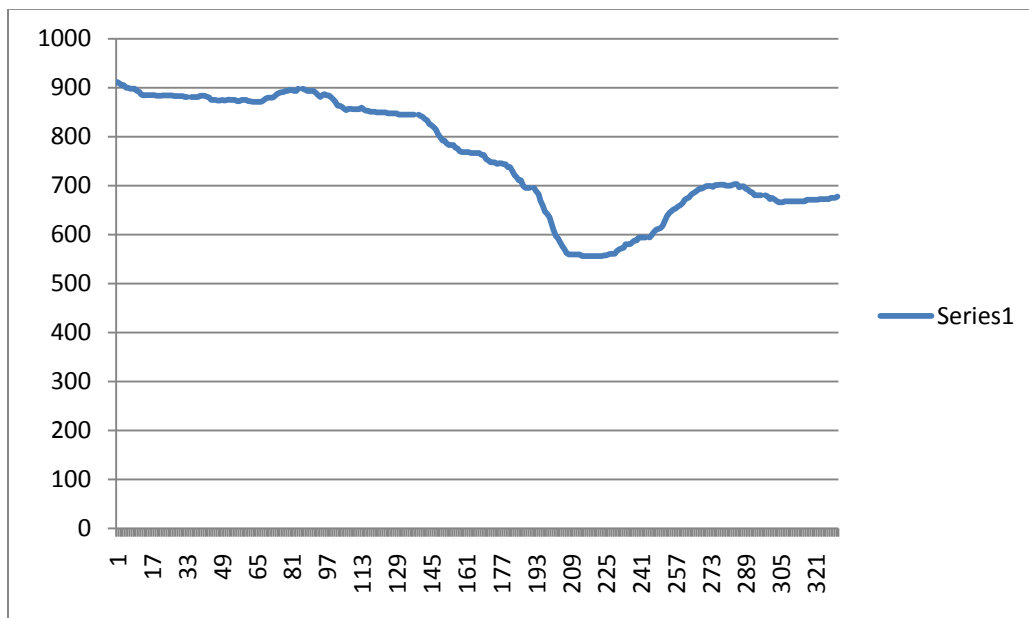
Marshall Thomas (August 2001), president of F & W Forestry Services, Inc., sums up the housing situation this way:

"The best supported forecast of a return to normal housing starts that I have seen pegs 2015 as the year the markets return to some semblance of "normal" – maybe 1.3 to 1.5 million starts per year. So it may be a while before we start to see a market upturn."

The good news is, for now anyway, stumpage prices are stable and there is sufficient interest among buyers to purchase standing timber. However, buyers are not willing to “go out on a limb” with exorbitant prices. To that end, landowners should feel settled in selling into this market, although if it is possible to wait, things likely will be more favorable when housing starts resume to more traditional levels.

HAT began tracking hardwood lumber prices the week of April 5, 2005. Six species have been followed, including: red and white oaks, tulip poplar, black walnut, cherry and hard maple. Specifically, #1 common 4/4 lumber is observed. Recently **HAT** developed a table that summarizes the average price for these species, i.e., a compilation of the six. The intent was to develop a “hardwood lumber barometer” to better measure a composite of prices. The table is below. The Y axis is lumber price in MBF; the X axis indicates number of weeks since inception (April 5, 2005). In studying the table, readers will note: the onset of the recession, a gradual rebound, another minor downturn, and more recently a slight nudge up (due to marginal increases in hard maple).

Table 1. Hardwood Lumber Barometer: average value of six species (\$/MBF)



The direction of the market is unclear. Uncertainty and risk are holding economic activity back. If the economists can’t agree on where business is headed, **HAT** can’t either. A follow-up report will come in December.

summarized with permission of the Hardwood Market Report, Memphis, TN.

REMOVING TREE-OF-HEAVEN FROM HARDWOOD STANDS

Wayne Clatterbuck, Professor, Silviculture and Forest Management

Hardwood stands, particularly those that have been recently regenerated, easily can be invaded by tree-of-heaven (*Ailanthus altissima*). This fast growing, exotic tree from Asia has spread throughout the U.S. and is common in the South. It produces abundant wind-blown seed at an early age that can germinate readily and within a few years grow into a large seed-producing tree competing with native hardwoods for growing space. Tree-of-heaven is highly invasive where the ground has been disturbed, such as haul roads, skid trails, and landings associated with a timber harvest, as well as forested areas where the duff layer has been disturbed.

Tree-of-heaven is a gray smooth-barked tree that can grow to be 100 feet tall. The leaves are pinnately compound and produces yellow or pinkish flower clusters that mature to form dry gray or brown clusters of winged seed. Breaking a twig or branch of the tree produces a pungent, distasteful odor. Tree-of heaven leaves are often confused with walnut, but the bark, seeds (samaras), and twigs are quite different.

Tree-of-heaven generally occurs as scattered trees or in small groups. In both cases, controlling this species in hardwood forests requires the use of individual tree treatments. Because tree-of-heaven produces seedlings from root suckers, simply cutting the trees is not an effective means of control. Thus, application of herbicides is necessary to control and kill the tree.

Small trees less than head high can be treated using foliar applications at recommended rates of common chemicals. An example is glyphosate at one to two percent active ingredient, wetting leaf surfaces until runoff. Basal bark treatments that encircle the entire stem are recommended for trees up to 4 inches in diameter. Thinline or streamline treatments where only one side of the stem has contact with the applied herbicide are not as successful because the portion of the stem not in direct contact of the herbicide may continue to live. Trees of all sizes can be killed using a cut stump treatment applying full or nearly full strength herbicide to the cut stump. Also, hack and squirt treatments are effective using recommended rates of appropriate herbicides. Usually hack and squirt and cut stump treatments are applied in late winter and early spring before the sap begins to flow in the spring prior to leaf out. Herbicides commonly used to control tree-of-heaven are listed in the table.

Research has been mixed when using capsule tree injection (usually glyphosate) in controlling tree-of-heaven. The small amount of herbicide in the capsule apparently does not translocate well-enough within and around the tree to affect or impact all the lateral roots and thus the root sprouting. However, foliar, full basal bark, hack and squirt, and cut stump treatments have proven successful when label instructions for herbicide application are followed.

Check your forest for tree-of-heaven seedlings especially after a disturbance. Control the new seedlings quickly before the tree grows, produces seed (usually 3 to 5 years) and becomes more difficult to control. A foliar application of herbicide on young seedlings is the most cost-effective control method.

Table 1. Herbicides commonly used for tree-of-heaven control. Other brands can be used for tree-of-heaven control according to label instructions. Those listed are wide spread and commonly used.

Active Ingredient	Common Names	Treatment
Glyphosate	Accord*and others	Foliar, cut stump (fresh), hack and squirt
Tricolpyr (amine)	Garlon 3a	Foliar, cut stump (fresh), hack and squirt
Tryclopypyr (ester)	Garlon 4	Basal bark, cut stump (fresh and dry)
Picloram / 2-4,D	Pathway	Foliar, cut stump (fresh), hack and squirt
Imazapyr	Arsenal	Foliar, cut stump (fresh), hack and squirt

*A large number of glyphosate herbicides can be used for tree-of-heaven control, follow labels for appropriate used in forested areas. Accord is labeled for forest use.

TAX TIPS FOR FOREST LANDOWNERS – 2011 TAX YEAR

Larry Tankersley, Extension Associate, Forestry

The following article is a reprint of U.S. Department of Agriculture Forest Service Management Bulletin R8-MB 139. Tax Tips for Forest Landowners for the 2011 Tax Year written by Linda Wang, National Timber Tax Specialist and John L. Greene, Research Forester, Southern Research Station.

This bulletin summarizes Federal income tax provisions related to woodland property, for use by woodland owners in preparing their 2011 individual tax return. It is current as of Sept. 15, 2011, and supersedes Management Bulletin R8-MB 136. It is for educational use only. Consult your tax advisor for more information.

Personal Use, Investment or Business Property

The tax rules vary depending on whether your woodland is personal use, investment, or business property. You must make this determination each tax year. If you do not have a clear profit motive, your woodland may be personal use property, which provides limited opportunities for deductions. But profit motive includes the expectation of future profit from appreciation in value due to growth and enhanced quality, as with timber. If you have a profit motive, your woodland may be investment property, or it may be business property if your management activity is more regular and intensive than required for an investment. A written forest management plan is an excellent place to document a profit motive. You must determine whether you *materially participate* in the management of woodland held for business use, in order to establish whether you face restrictions (called the *passive loss rules*) on the deduction of business costs. Investment property is not subject to the passive loss rules.

Example 1: You grow timber for profit from appreciation in value but do not conduct it as a business. Your woodland is investment property.

Timber Basis and Depletion

Timber basis. Your basis in purchased property is the total amount you paid for it (purchase price, survey, legal fees, etc.). Your basis in inherited property generally is its fair market value (FMV) on the donor's date of death, but your basis in gifted property is the lower of its FMV or the donor's basis. Your basis in land and timber acquired together should be divided in proportion to their FMV and posted to separate accounts. If you didn't allocate basis when you acquired your woodland, a professional forester can determine it retroactively, but you should weigh the cost of establishing the basis against the potential tax savings.

Example 2: You bought forest property for a total cost of \$30,000. The FMV of the bare land is 64% of total FMV and the timber (300 thousand board feet (MBF)) 36%. Your basis in the timber is \$10,800 (36% x \$30,000).

Timber depletion. This is a deduction against timber sale proceeds (below). It is calculated by dividing your timber basis by the total volume of timber (the *depletion unit*), then multiplying by the units of timber sold.

Example 3: Continuing with example 2, say you sold 200 MBF of the timber. Your depletion unit is \$36/MBF ($\$10,800 \div 300 \text{ MBF}$) and your depletion deduction is \$7,200 ($\$36/\text{MBF} \times 200 \text{ MBF}$).

Timber Sales

Sale of standing timber. Only the net sale amount, after deducting timber depletion and expenses of the sale, is taxed. You may need to report the sale of timber held as an investment (sec. 1221) on the new Form 8949 as well as Schedule D (final versions and instructions for these forms were not available as of this writing). Use Part II of each form to report a long-term capital gain from timber held over 1 year. Report the sale of timber held for business use (sec. 631(b)) on Form 4797 and Schedule D, whether you sold it outright (lump-sum) or pay-as-cut. Use Part I of Form 4797 to report a long-term capital gain. If you sell timber outright under sec. 631(b) you also must file Form T, Part II.

Example 4: You sold standing timber held as investment for over 1 year for \$8,000, incurring \$800 in sale expenses. Assuming your basis in the timber is zero, your net long-term capital gain is \$7,200 ($\$8,000 - \800). You may need to report the sale on Form 8949 and Schedule D. Use Part II of each form.

Sale of cut timber. If you cut your own timber or have it cut by a contractor working at your direction, either for sale or for use in your business (sec. 631(a)), the income is taxed in two parts. If you make an election on Form T, Part II, the difference between the FMV of the standing timber on the first day of your tax year and its basis is taxed as a capital gain. The difference between the proceeds from sale of the wood products and the sum of the FMV of the standing timber and the costs of converting it into products for sale (cutting, hauling, etc.) is ordinary income.

Example 5: You paid a contractor \$2,000 to cut standing timber held for business use for over 1 year into logs and sold the cut logs to a mill for \$30,000. The FMV of the standing timber was \$23,000 on Jan. 1 and your basis in it was \$1,000. If you make the sec. 631(a) election on Form T, Part II, you may report a long-term capital gain of \$22,000 ($\$23,000 - \$1,000$) on Form 4797 and Schedule D, and \$5,000 ($\$30,000 - \$23,000 - \$2,000$) in ordinary income on Schedule C. If you fail to make the sec. 631(a) election, all \$27,000 is ordinary income.

For 2011, the maximum rate for long-term capital gains is 15% (0% for amounts which, if added to your ordinary income, fit under the ceiling for the 15% tax bracket: \$34,500 for single taxpayers, \$69,000 for married taxpayers filing jointly).

Installment Sales

An installment sale involves receiving one or more payments after the year of sale. Interest is charged on deferred payments. The advantage of an installment sale is that it allows you to defer tax by spreading your gain over 2 or more years.

Example 6: You sold timber for \$10,000 (\$8,000 after deducting timber depletion and sale expenses) in 2011. The buyer paid you \$5,000 in 2011 and \$5,000 plus interest in 2012. Your gross profit percentage is 80% ($\$8,000 \div \$10,000$). Report a \$4,000 gain for 2011 ($\$5,000 \times 80\%$), using Form 6252.

Timber Management Expenses

If you hold your woodland for profit you can deduct ordinary and necessary timber management expenses, such as the cost to protect the woodland from insects, disease or fire, control brush, do a pre-commercial thinning or mid-rotation fertilization, maintain firebreaks, etc. Expenses for woodland held as an investment are subject to a 2% of adjusted gross income reduction on Schedule A, but in years the property produces no income, you may elect to add expenses subject to the 2% reduction to your timber basis and recover them when you sell timber. Deduct expenses for wood-land held for business use on Schedule C.

Reforestation Costs

You may take a tax deduction for reforesting after a harvest or afforesting open land (sec. 194). Costs for both artificial and natural regeneration qualify. You may deduct the first \$10,000 (\$5,000 for married couples filing separately) per year of such expenses per qualified timber property. Any additional amount may be de-ducted over 84 months (*amortized*).

Example 7: You spent \$17,000 to reforest after a harvest. Deduct \$10,000, plus 1/14th of the remaining \$7,000 (\$500) on your 2011 tax return. Deduct 1/7th of the \$7,000 (\$1,000) on your returns for 2012–2017 and the last 1/14th (\$500) on your 2018 return. Elect to amortize on Form 4562, Part VI. If you hold your woodland as an investment, take the deduction as an adjustment to gross in-come on the front of Form 1040; if you hold your woodland as a business, take it on Form 1040, Schedule C (or F if you qualify as a farmer).

Depreciation, Bonus Depreciation, and Sec. 179 Expensing

Capital expenditures, such as for logging equipment, bridges, culverts, fences, temporary roads, or the surfaces of permanent roads, may be deducted (*depreciated*) over a set number of years. For example light-duty trucks and logging equipment are depreciated over 5 years. You also may take bonus depreciation equal to 100% of the cost of qualified property placed in service in 2011. If you hold your woodland for business use, you can expense up to \$500,000 in qualifying property (generally tangible personal property, but not improvements to land, buildings, or components of buildings) placed in service in 2011, subject to a \$2 million phase-out and business taxable income limitations (*sec. 179 expensing*).

Cost-share Payments

If you receive a cost-share payment from an approved program, you may exclude all or part of the payment from your income (sec. 126). Approved federal programs include the Forest Health Protection Program (for southern pine beetle and mountain pine beetle), the Conservation Reserve Program, Environmental Quality Incentives Program, Wildlife Habitat Incentives Program, and Wetlands Reserve Program. Several state programs also are approved. The excludable amount is the present value of the greater of \$2.50 per acre or 10% of the average annual income from the affected acres over the last 3 years. You generally may not exclude a payment if the cost can be expensed. Neither can you claim a deduction for an expense reimbursed with a cost-share payment and also exclude the payment from your income.

Example 8: You received a \$4,000 cost-share payment from the Conservation Reserve Program for your 100-acre woodland. If you had no income from the property in the last 3 years, you could exclude \$3,275 ($(\$2.50 \times 100 \text{ acres}) \div 7.63\%$). The interest rate is from the Farm Credit System Bank. If you had \$9,600 in income, you could exclude the entire payment: $(10\% \times (\$9,600 \div 3)) \div 7.63\% = \$4,194 > \$4,000$. Attach a statement to your tax return describing the cost-share program and your calculations.

Casualty and Theft Losses

Loss of timber from a casualty—a sudden, unexpected, and un-usual event such as a fire or severe storm—may result in a tax deduction. The deduction is limited to the lesser of the decrease in FMV caused by the casualty or your basis in the timber block (the area or unit you use to keep track of your basis in the damaged timber). Similarly, a theft loss deduction is limited to the lesser of the decrease in FMV or your basis in the stolen timber. A competent appraisal usually is required.

Example 9: A fire caused \$5,000 in damage to your timber (\$9,000 before-fire FMV – \$4,000 after-fire FMV). Your basis in the affected block is \$2,000. Your loss deduction is the lesser amount, or \$2,000. Report the loss on Form 4684, Section B, and adjust your timber basis (reduce it to zero) on Form T, Part II.

Example 10: Continuing with example 9, you sell the damaged timber for \$2,000 in a salvage sale. You have a taxable gain of \$2,000 (\$2,000 – \$0 basis), but you can defer tax on the gain by using it to acquire qualified replacement property (e.g., reforestation) within the allowable replacement period (generally 2 years).

Filing Form T

You must file Form T, Forest Activities Schedule, if you claim a timber depletion deduction, sell cut products under sec. 631(a), or sell timber held for business use lump-sum (sec. 631(b)).

Disclaimer: This material is not legal, tax and accounting advice. Pursuant to the IRS Circular 230 rules, any U.S. federal tax advice contained here is not intended or written to be used for the purpose of avoiding penalties under federal tax laws, or promoting, marketing or recommending to another party any transaction or matter addressed herein.

WILDLIFE MANAGEMENT CALENDAR FOR OCTOBER

Craig Harper, Professor, Wildlife Management

Wildlife Notes

Groundhogs are preparing for winter hibernation
 Black bears are feeding heavily in preparation for denning
 Wild turkeys begin forming flocks
 Juvenile ruffed grouse are dispersing
 Woodcock begin migration
 Crows begin to congregate in roosts
 Chimney swifts may begin congregating in chimneys

Habitat Management

Spray perennial cool-season grasses (such as tall fescue and orchardgrass)

- October through mid-November is the optimum time to kill these grasses!
- spray in preparation to plant native warm-season grasses and/or to release the seedbank; also spray in preparation to plant food plots next spring or to control these grasses in existing food plots
- use 1.5 – 2 quarts per acre of a glyphosate herbicide (such as Roundup) if spraying to release the seedbank or in preparation to plant native grasses or a food plot; use a grass-selective herbicide if controlling these grasses in a clover/chicory forage plot
- refer to *Native Warm-Season Grasses: Identification, Establishment, and Management for Wildlife and Forage Production in the Mid-South*, PB 1752 for additional information on eradicating perennial cool-season grasses

Burn and disk old-fields and other early successional habitat

- will stimulate forb growth next spring, which will provide brooding cover for wild turkeys and bobwhite, and will improve forage availability for white-tailed deer
- will reduce grass dominance where nwsgr have become too dense
- will reduce woody encroachment by sweetgum, elms, and other undesirable woody saplings in the field
- don't be afraid to burn; prepare adequate firebreaks by disking around the perimeter of the field and burn against the wind
- Smokey Bear actually likes for you to burn – it provides him with more food!
- refer to *Native Warm-Season Grasses: Identification, Establishment, and Management for Wildlife and Forage Production in the Mid-South*, PB 1752 for additional information on managing early successional habitat for wildlife

Prepare firebreaks this fall/winter if you plan to burn old-fields next March/April

- disking now will stimulate forbs next spring
- firebreaks can be planted to cool-season food plots if desired

Plant firebreaks and other disked strips not left for natural vegetation

- annual cool-season grains (especially wheat) with annual legumes (crimson and arrowleaf clover) are excellent choices
- refer to *A Guide to Successful Wildlife Food Plots*, PB 1769 for additional information

Finish planting cool-season food plots

- refer to *A Guide to Successful Wildlife Food Plots*, PB 1769 for additional information on seeding rates and management recommendations

Spray perennial forage food plots for weed control if necessary

- refer to *A Guide to Successful Wildlife Food Plots*, PB 1769 for specific information

Continue to silage-chop or strip-mow dove fields to provide seed and hunting opportunities

- strips can be disked and top-sown with winter wheat (2 bushels per acre) to provide additional forage opportunities

Continue watching and identifying good acorn producers

- one-third of the oak trees produce roughly 75% of all the acorns
- if you are interested in improving acorn availability in your woods, distinguishing good producers from poor producers will help you identify which trees to favor
- once acorns begin to fall, walk through the woods and mark trees with good acorn crops with aluminum tags or tree marking paint near the bottom of the tree
- continue this for at least 3 years and a pattern will begin to develop identifying those trees that do not ever produce many acorns (even in a good acorn year)
- good producers can be released by killing or removing unwanted adjacent competitors, allowing the crowns of favored trees to expand and produce more acorns

Continue timber stand improvement (TSI) work

- October is a great time to kill unwanted trees; herbicides applied via girdle-and-squirt or hack-and-squirt are readily transported to the root system as trees prepare for winter senescence
- stimulate growth among oaks, beech, blackgum, cherry, persimmon, and other mast producers by killing surrounding competitors
- girdle unwanted trees and spray wound with a 50% mixture of Garlon 3-A and water or a 20% solution of Arsenal AC and water; refer to herbicide labels for efficacy on various tree species

Burn upland forested areas where adequate sunlight is sufficient to stimulate understory groundcover for wildlife

- burning during late growing season (Aug – Oct) helps reduce dominance of woody species in the understory and encourages more herbaceous groundcover
- burning in closed-canopy woods does little to stimulate understory; 20 – 40% sunlight entering canopy is adequate and achievable through TSI

Build brushpiles from thinned trees and pruned limbs

- put large limbs on bottom and small limbs on top for crevice space and overhead protection
- this is best done and the effect greatest along the edges of and within high-quality early successional habitat (native forbs and grasses with scattered brambles and shrubs) where good cover already exists
- building brushpiles along a woods edge adjacent to a tall fescue pasture or hayfield may do more harm than good because all rabbits present will then be isolated for predation

Sow winter wheat along edges of flooded fields to provide important forage for migrating Canada geese and American wigeon later this winter

Clean out bluebird boxes to allow more room for roosting bluebirds when cool weather arrives

- 10 or more bluebirds may roost in a single box on cold nights

Clean out wood duck boxes and replace old wood shavings with fresh shavings

- screech owls and squirrels may use the boxes through fall and winter
- repair/install predator shields if necessary

Put up bird feeders

- it's not too early
- refer to *Improving Your Backyard Wildlife Habitat*, PB 1633, for information on specific feeders and seed for birds

Wildlife damage/population management

Close crawl spaces under the house and check for openings in the attic

- helps keep snakes, skunks, and squirrels from getting into places where they are not welcome
- rodents are beginning to cache food for the coming winter; take action now to keep them out of your house

Bats are leaving summer hang-outs for winter hibernacula

- allow bats to leave attics before closing crevices, then make sure all openings are closed so they can't get back in next spring/summer

Blackbirds and starlings are gathering into large winter flocks

- don't allow them to roost in your trees; if they start, they'll form a habit
- repel them with noise makers (shotguns, firecrackers, banging metal pans together)
- be persistent

Deer hunting season is underway

- allow hunters access to your land if you have a problem with too many deer
- shoot the females (does); concentrating on bucks does nothing to control overpopulation
- in areas that are highly overpopulated, it may be necessary to kill 1 doe per 10 acres (sometimes more) before the population is reduced to acceptable levels
- where Quality Deer Management is desirable, reduce the population so plenty of forage is available, shoot does to even the sex ratio, and allow bucks to reach 3 years of age before shooting them
- refer to *Quality Deer Management: Guidelines for Implementation*, PB 1643, for additional information

Refer to *Managing Nuisance Animals and Associated Damage Around the Home*, PB 1624 for additional information on wildlife damage management.



Dr. Harper:

I have a white clover (Durana, ladino) and chicory plot I planted about a year ago. It looks pretty good now after the cover (wheat, rye) has run its course. My question is **how often do I need to "clip" the plot to stimulate growth?** I read some information that said maintaining a height between 8-14" will keep optimum nutrient value for deer. This is mainly for deer. I have clipped this plot once this summer and would like to do so one more time. How much "clipping" in trying to control weeds and stimulate growth would be too much? I was thinking of putting some 5-20-20 fertilizer on the plot now to allow good root development into winter. Are there any downsides to this?

I'd appreciate any quick information you could provide. Matt

Matt:

This is a fairly common topic that comes up when I give presentations on food plots. Yes, after reading magazine articles and websites, you can be led to think you need to mow your perennial forage (clovers, chicory, alfalfa, etc.) plots about as regularly as your yard. I have a different perspective and my graduate students and I have plenty of data to support our recommendations. I have often asked an audience, " why would they want to mow a lush clover plot that is 12 inches tall?". It doesn't make sense. I recommend mowing perennial forage plots after the plots have flowered and produced seed, and if/when the weed population has grown beyond chemical control. Other than that, there is no reason to mow. I like to allow my perennial plots to produce seed before mowing. That provides "seed insurance" when a prolonged dry spell during summer thins out the stand (which is fairly common). When desirable conditions return, you have a seedbank present that will help reestablish the plot. Too many people mow regularly because they haven't controlled weeds with the appropriate herbicide applications. Perennial forages must be sprayed usually twice per year (spring and fall) with selective herbicides to control weeds. If this is done, plots do not need to be mowed more than once or, at most, twice per summer, and perhaps once in late winter/early spring.

The thought that mowing helps maintain nutrient value for deer is somewhat complex. Yes, as plots are mowed and new growth is produced, the young new growth is more digestible than the "old" growth. However, that is related and influenced by several factors. Old plants contain more lignin and structural carbohydrates than young plants, especially in the stems. However, the leaf tissue of clovers and chicory remain highly digestible, and that is what deer are eating. So, even when flowering and producing seed, there is still plenty of digestible forage available, plus you have the added benefit of getting seed added to the plot. Red clover and (especially) alfalfa have relatively large stems that can be tough. However, once again, deer are eating the leaves, and they remain highly digestible. So, let your perennial forages flower and produce seed. When the plants have produced seed, then mow. By not mowing so often, you also make the plots more attractive to a number of birds, including turkey poults and bobwhite chicks.

All that being said; you won't hurt your perennial forage plots by mowing. But you can waste a lot of time by mowing excessively, and this can come at the expense of decreasing forage availability and decreasing the attractiveness of plots for some species. Concerning fertilization, always lime and fertilize according to soil test. We generally lime and fertilize in late summer and/or in mid- to late winter. Applying amendments at these times does not damage the stand as perennial forages are growing little at these times of year. Soil pH should be maintained between 6.0 and 7.0. Hope this helps. Good luck with your efforts — *Craig Harper, Professor, Wildlife Management*

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