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Department of Agriculture and Consumer Services, Adam H. Putnam, Commissioner
Between the Lines
By Jeff Doran

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Federal Grant to Help Foresters and Landowners Adapt To Climate Change
Submitted by IFAS, University of Florida

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By R. Neil Sampson

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Between the Lines

Clean Up As You Cook

An accomplished chef has one simple rule – clean up as you cook. I can think of no better advice for our friends in Washington and Tallahassee. The recipe for political success and economic recovery is to exercise a little discipline and common sense – don’t make a mess in the first place!

As a result of serving up entrees that choked business and left us all with more than a little heartburn, there are several new chefs in the kitchen in Congress and the Legislature. One of the new cooks in Congress is already giving us the relief we have been looking for.

I had the opportunity to visit with Congressman Steve Southerland on March 2 in his D.C. office. Rep. Southerland is a new friend to our growers and users. Most of his district – from Okaloosa to Suwannee County – is timberland. Working as a partner in the family land and timber business, Congressman Southerland brings first-hand experience to both the House Agriculture and House Transportation Committees. He understands the importance of growing and using trees and good common-sense government policy that encourages the free market system.

Just from one meeting, I can assure you Florida’s forest community has a friend in Steve Southerland.

A new Republican governor and GOP controlled House and Senate is also a recipe for conservatism in the Florida Legislature. Creating awareness of our business is a tall order with a new Cabinet and over one-third of our legislators reporting to Tallahassee for the first time. March and April present a two-month opportunity to work with other agriculture, land and manufacturing interests to make the operating climate better for forests and forest industry. Experience will be key to getting things done, while being mindful of the deficit dishes that keep stacking up! Alan Shelby shares the Association’s legislative plan on page 8.

Finally, you can’t talk about kitchens and good cooks without featuring one. Ms. Patsy Nathe invites us inside her home to see what was hidden in the heart of old sinker cypress logs buried in a deserted sawmill holding pond. Meet the craftsman of her kitchen remodeling job and see for yourself how old wood became the key ingredient of this tasteful transformation. The feature story and complimentary photos starts on page 10.

Much like that sinker cypress, through the ages, the Florida Forestry Association has never lost its relevance. For nearly 90 years people have relied on a statewide forestry organization for a variety of reasons, but primarily because of the need to blend the key ingredients together. Landowners need loggers. Loggers need mills. Mills need trees.

A single voice for forestry speaking for many continues to renew its strength from its members. We are grateful for this opportunity to be the Florida voice for landowners, loggers and industry! We will continue to carry forward policy changes to emphasize what’s best for the forest and forest business. For us this is a continual process. Not something we just do when the dishes pile up in the sink!

Enjoy the magazine!
Legislature Prepares for Tough Decisions Ahead

By Alan Shelby
Director of Government Relations
Florida Forestry Association

The November elections resulted in many new faces in the halls of our state Capitol. The Executive Branch, Florida’s Cabinet, has four new faces: Governor Rick Scott (R); Attorney General Pam Bondi (R); Chief Financial Officer Jeff Atwater (R); and Commissioner of Agriculture & Consumer Services Adam Putnam (R). Of the 160 members in the Legislative branch, more than a third also are freshmen. For the first time in the history of Florida, the Republican Party has total control of the Cabinet and a supermajority in the Senate and House Chambers of the Legislature. It has been stated that the most fiscally conservative leaders in its history now lead Florida.

During his campaign, Governor Scott vowed to reduce state spending and hold government accountable. True to his word, faced with a budget deficit of $3.6 billion, Governor Scott has recommended a state spending plan that would reduce employee benefits and reduce the state workforce by 6,700 jobs. While we could all identify areas we would like to see scaled back, we have to remember that these sweeping reductions will likely impact areas of government on which we too depend and rely.

In preparation for the 2011 Legislative Session, which began March 8, your Government Relations Committee, chaired by Greg Driskell, met in January to discuss forestry related issues expected to surface and set our legislative agenda. The following issues have been identified as priorities of Florida’s working forests and will help guide your Association during the 60 days of session:

Trucking Weights – Though we were successful last year in getting an increase up to 88,000 pounds on non-Interstate highways, these efforts have now shifted to the federal level. We are working with multiple coalition groups from across the nation in support of legislation increasing the

Huge Landowner Victory!

Last year, our former Governor vetoed the Ag Industry bill, HB 7103. On March 23rd, the House and Senate considered and approved a veto override of this important legislation. Effective immediately, this bill makes the Ag Lands Practices Act retroactive, preventing the enforcement of any county ordinance adopted prior to 2003, which further regulates Ag or forestry practices beyond adopted BMPs, excluding wetlands protection ordinances; exempts ag and forestry lands from local government storm water fees or assessments if adopted BMPs are followed; exempts non-residential farm buildings & fences from permits or fees; and creates the Agricultural Land Acknowledgement Act, requiring those who develop land adjacent to agricultural land to sign an acknowledgment form and submit to prospective buyers.
truck weights on federal roadways, including the Interstate Highway System.

Duplication of Regulation – Though vetoed last year by our former governor, efforts are underway to again pass legislation that would prevent local governments from duplicating regulations of forestry and agricultural practices that are already regulated at the state or regional level.

Taxes, Fees and Exemptions – With the state budget deficit at record levels, we continue to closely monitor any legislative attempt to increase, repeal or alter any taxes, fees or exemptions that in any way would negatively impact forestry or agriculture operations.

Renewable Energy – Wood growers, forest industry and the energy sector came together this summer to develop guiding principles for using woody biomass as a feedstock option for renewable energy. It was agreed that forests can play an important role in Florida’s renewable energy future, provided it is done in an equitable and sustainable manner, wood waste and residues are utilized and regionalized forest inventory data is gathered and considered.

Forest Inventory Data – Current forest inventory data is compiled on a statewide basis and published on a five-year rolling average. As renewable energy continues to gain popularity, and more biomass fueled facilities are sited around the state, more timely forest inventory data is desired to provide improved decision making and planning by the forestry community. The Association will pursue state funding for the Department of Agriculture to contract with a third party to gather this regionalized forest inventory data on an annual basis.

Reforestation Incentives – Recent data shows an alarmingly low level of reforestation in our state, a level not seen since the 1950s. From a high in the mid 1980s of nearly 300,000, today’s reforestation rates have dipped to only 50,000 acres per year. The Association has identified the 2012 Federal Farm Bill as a possible vehicle to pursue the creation of a production-based reforestation incentive program to help reverse this downward trend.

Wildlife BMPs – A newly adopted rule of the Florida Fish and Wildlife Conservation Commission (FWC) related to the listing of Imperiled Species includes a section that directs the FWC to coordinate with the Florida Department of Agriculture (FDACS) on a set of BMPs for agriculture/forestry that further addresses the habitat needs of Imperiled Species. Stakeholder meetings related to BMP development are expected to begin this summer. Important considerations related to BMP adoption are still the subject of ongoing discussions between FWC and FDACS. The association will continue to closely monitor this process and any legislative efforts to codify this rule.

At this writing, efforts are underway to create an Agriculture Caucus within the Legislature.
Giving New Life to Old Wood  The Allure of Sinker Cypress  By Jeff Doran

The Nathe’s completed custom-built kitchen is a functional work of art.

A very large cypress gathering table was custom-built for the Nathes.
Patsy Nathe is a sophisticated modern woman with a passion for all things wood. She and her husband and five boys own and operate R.J. Nathe & Sons, a logging and cattle operation in Pasco County. When it came time to remodel their 1970s kitchen last summer, the only thing Patsy knew for sure was that she wanted custom cypress cabinetry and so did her husband, R.J.

With Patsy’s eye for function and fashion and R.J.’s rustic outdoors edge, the kitchen re-do was a collaboration from the get-go. The two focused on old sinker cypress lumber that had been hewn from waterlogged wood discovered in an abandoned sawmill holding pond. R.J. dug the logs from the pond’s sandy bottom. He knew this silted water had preserved the heartwood treasure that lived inside. For years the wood had been air-drying in the lumber shed. Now it was time to use it for a special purpose.

Because wood is truly the heart of the Nathe home, Patsy wanted a contractor who could integrate the home’s other natural finishes to do the work. The couple called on a local cabinet maker, David Johnson. The craftsman had already demonstrated his reputation for quality and personal trust when he built a giant cypress gathering table, a gift from the kids to commemorate the couple’s 50th wedding anniversary. The not-another-one-like-it anywhere piece of furniture spoke volumes about Dave’s design and building skills. They knew his style fit their lifestyle and they would be satisfied with the results.

Since the Nathe kitchen is the busiest room in the home, David and Patsy put much thought into planning and designing the workspace. “When all the family is here, we are busy in the kitchen and literally on top of each other. I wanted more open space than what we had and not to feel so closed off from the other rooms. I wanted the kitchen area to be warm and inviting, since it is the first thing you see when you come in the door,” Patsy said.

After a few conversations and visits to the Nathe home, the mental transformation began to unfold. David knew the Nathes wanted a subtle country feel. He also knew Bob Scharber, Patsy’s cousin and general contractor, was installing random-width tongue and groove pecky cypress from floor to ceiling in

> continued on page 12

Editor’s note:
When Patsy Nathe asked me to come and see her new kitchen, I didn’t hesitate to travel to Pasco County as soon as I could. I mean after all, she did miss our Annual Meeting at Sandestin, her first absence in 20 years, in order to be at home when the cabinets were installed. I accepted her offer to visit, but on one condition – I got to interview the woodworker who made it happen. This is a mental and visual journal of what I saw, heard, felt and tasted the day I spent learning about some of the most beautiful wood on this planet and the artist who transforms it. And not to mention, eating some of the best collard greens I have ever had!

David Johnson and Patsy Nathe admire the special features in her new sinker cypress kitchen.
the adjoining dining room, and he had to capture the wood panels in the overall design. This would entail replacing all doors, moldings and trim work and blending the mix to give it a tailored, custom look.

Dave knew Patsy wanted an enlarged space, but there was limited room to expand. “From the design phase to the finish phase I try to involve the client. I told Ms. Patsy this is going to be yours and I want it to be the way you want it,” he said. It was difficult for Patsy to visualize the final product, but she learned to trust the project manager and followed his lead to get the kitchen of her dreams.

The builder’s excitement for working with cypress and Patsy’s desire for a place for everything and everything in its place provided the perfect blend for a working kitchen that would be both beautiful and functional. David knew cypress works well with hand and power tools. He knew it would plane easily, sand easily and readily accept finishes.

As he does with all his clients, David builds it before he builds it. He examined the wood closely to discover the tightness of the grain and the variations of color shades that makes each piece of sinker cypress unique. The experienced craftsman identified the right “cut” to feature the prized grain before running the saw. Each board was carefully planed to truly bring the raw beauty to life.

From his Boy Scout days turning wood candles on his dad’s lathe to now, a bonafide woodworker, David finds immense satisfaction in building something from nothing. Patsy’s determination that the new kitchen must blend with the rest of the house, while incorporating the new random 4-inch to 22-inch-wide pecky panels being installed just across the bar, spawned a challenge this veteran craftsman knew could be achieved with the right finish. He listened to her ideas and exchanged them with some of his. It was his goal from the beginning to make Patsy’s kitchen her own.

David turned to the drawing board and with his polished computer drafting skills and design experience, created a plan that exudes the Nathe’s personality and style. Using a combination of natural elements – in this case, wood, stone and metal – he mixed things up a bit to capture the living environment both inside and out.

To connect the texture and color of the adjoining rooms, the base and wall cabinets feature the tight-grained sinker cypress with a warm reddish-brown finish. The stainless steel appliances add a surprise of unexpected sleekness. Polished off-white granite countertops have visible veins of caramel and gray with specks of black. The colors compliment the cabinet tones and pull the cypress panel finishes on the dining and den walls together. Black inset tiles provide a solid foundation for the stone backsplash.
**Why is it Called Sinkers Cypress?**

Throughout the late 1800s and early 1900s, logging companies used America's waterways to transport their lumber to the mills. These logs were tied into rafts and floated to the lumber mills for processing, where most were used to build the great cities of the Industrial Revolution. A few of these logs broke loose from the raft or eventually became waterlogged in the sawmill holding ponds. They settled to the bottom where they have been preserved in the silted waters and forgotten for more than 100 years. These old logs are first generation, river retrieved lumber that is also known as deadhead cypress, river reclaimed cypress, river recovered cypress, old growth cypress, and virgin cypress. These recovered "sinker logs" are now sawn into sinker cypress lumber for both historic restoration and new construction.

Five well-worn leather stools pull up to the dining side of the bar. All the moldings and trim work were cut and finished to match in Dave’s shop. The custom look came to life just as he had planned it.

"There is truly no other kitchen like it anywhere," exclaimed Patsy. "David gave real meaning to 'custom-built.'" The Nathe kitchen is full of special effects that only a seasoned woodworker could create. David took two pieces of wood with knot holes and made a unique design in the cabinet above the sink. He backlit the knot holes to project directly on some of Patsy’s prized crystal glassware. > continued on page 15

David Johnson selects the right pieces of wood to show off the natural grain of sinker cypress.

Tapping the kickplate reveals additional storage space. Not an inch of space was wasted in the design.
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Florida Forests 14 Spring/Summer 2011
David Johnson
Brings the Raw Beauty of Wood to Life

David Johnson is owner and manager of Craftsman Manufacturing Incorporated. Since 1984, Dave has operated the custom cabinet and woodworking company from his shop near Dade City. Over the past 25+ years, he has built a reputation for being honest, dependable and capable of creating high-quality cabinet and wood products. All of the cabinets he designs and builds embody the finest workmanship and materials. His eye for proper scale and proportion is surpassed only by his close attention to detail, which is evident in each piece he builds. From design phase to installation, Dave involves the client, so satisfaction is assured. A family owned business, the company brings the raw beauty of wood to life, and Dave takes personal pride in each creation.

To enhance the country look, he covered the open cabinet doors with rusty chicken wire. Throughout the kitchen he made the best use of the space so Patsy would have storage everywhere, even in the base. With a simple tap, the black kickplate opens to reveal drawers for storing those large trays and serving platters that never seem to fit anywhere. And don’t let the old wood fool you! The kitchen is totally modern with full extension drawer slides, soft-close features, lazy susan trays and pull-out shelves.

To create more counter space and give Patsy the openness she was craving, he removed the soffits and extended the cabinets to the ceiling. He moved the double built-in oven to the opposite wall and lengthened the dining and serving bar. The view to all the other adjoining rooms — especially the random-width pecky in the dining room — was achieved and the extra countertop space makes the kitchen feel much larger than before.

Patsy may be a modern woman, but she is proud that her place is in the kitchen, especially since the kitchen in her place has been so tastefully transformed. “I got the look and feel I wanted and R.J. got to use his wood. David gave us a special space that we are sure to enjoy for many years to come,” she said.

When Patsy invited David and me to lunch, we sat and admired her beautiful kitchen. I asked David what was the secret to his success as a craftsman of custom cabinetry. He said it was the excitement he gets when he planes a worn piece of wood and out pops the grain. “I know there are special things I can make from that old wood to give it new life,” he said. He summed it up as he rubbed the door on the top cabinet, “Isn’t that beautiful wood that God made?”
Federal Grant to Help Foresters and Landowners Adapt To Climate Change

Pine trees are one of the most important crops in the southeastern U.S., and a consortium led by University of Florida personnel has been awarded a five-year, $20 million federal grant to help landowners and foresters throughout the region adapt to and mitigate global climate change in coming decades. The award was announced February 28 in Washington, D.C., by the U.S. Department of Agriculture’s National Institute of Food and Agriculture. It was one of three awards funded by the institute as part of a program to encourage agriculture and forestry to increase their capacity to provide what’s called carbon sequestration – the practice of producing and storing durable materials that contain carbon – to slow the buildup of carbon dioxide in the atmosphere.

Besides UF, the consortium includes 10 southeastern land-grant universities, eight forestry research cooperatives, the U.S. Forest Service, state climate offices and the multistate Southeast Climate Consortium.

The grant is one of the largest ever associated with UF, said Jack Payne, senior vice president for agriculture and natural resources. “This is a tremendous achievement for all of the collaborators, and demonstrates the wisdom of taking a team approach to big challenges,” Payne said. “People throughout the Southeast should be proud that this team has attracted $20 million to improve the planted-pine industry, one of our region’s premier economic engines.”

The grant will fund efforts to develop and transfer better management practices for southern pine, notably loblolly pine, which accounts for 80 percent of planted forest in the Southeast. Loblolly pine grows naturally from Maryland to Texas, giving it great potential for carbon sequestration, said tree physiologist Tim Martin, a professor with UF’s School of Forest Resources and Conservation, who led efforts to obtain the grant.

“There hasn’t been much focus on climate change by forest managers and landowners, partly because little information is available on the best way forward to prepare for those changes,” Martin said. “This project provides an unprecedented opportunity to integrate forestry research, outreach and education in the region to address this important societal challenge.”

Changes brought about by climate change could include reduced summer rainfall, higher temperatures and increased disease and pest pressures, Martin said. Much of the work funded by the grant will focus on development of improved trees and management strategies. The grant will also support extensive measurements on field experiments already underway across the region to determine how soils, climate and management influence the loblolly’s carbon-sequestration potential. Researchers will try to make trees grow faster and larger, he said. They’ll also investigate ways to keep trees healthy and use fertilizer more efficiently.

Martin is the project director and one of four people overseeing efforts to integrate the project’s main divisions.

Gary Peter, an associate professor with the UF forestry school, will integrate efforts to help the industry and small landowners adapt to changing climate conditions and improve the resilience of southern forests.

Martha Monroe, a professor with the forestry school, will integrate outreach and education. “This project is possible because of the land-grant system,” Monroe said. “We do basic research, applied research and outreach. Our collective reach to private industry, forest consultants, minority forest landowners, teachers, planners and policymakers is significant.”

Tom Fox, a professor with Virginia Tech’s forest resources and environmental conservation department, is the project’s integrator for mitigation efforts. “This project will help maintain forests that are better able to withstand the droughts, intense storms and pests that are associated with climate variability,” Fox said.

Martin credited UF’s history of support for climate-change initiatives, such as the Florida Climate Institute, as an important factor in securing the grant.

Submitted by IFAS, University of Florida
When the topic of managing forests to affect the steady buildup of atmospheric greenhouse gases was raised in the early 1990s, an avalanche of scientific studies, policy proposals, and advocacy positions emerged that continues today. The result of two decades of effort, and hundreds of scientific and popular articles, appears to be that the disagreements over the value of forest management and forest product use in affecting the climate issue have grown more polarized and controversial rather than more settled.

One of the prime examples of misunderstanding and disagreement has emerged recently as people have questioned the value of using woody biomass to replace fossil fuels as an energy feedstock. For years, it has been agreed that biomass harvested from sustainably managed forests could be counted as “carbon neutral,” in other words, “as long as the wood used for fuel is replaced by new wood growth, a carbon cycle is created and there is no net increase in the amount of carbon dioxide released” to the atmosphere.

Consistent with this idea, international studies such as those by the Intergovernmental Panel on Climate Change (IPCC) and national policies in the United States have treated woody biomass as a “carbon neutral” fuel that could replace fossil sources and thus reduce net atmospheric carbon dioxide emissions. In the 2008 Farm Bill, the Biomass Crop Assistance Program (BCAP) proposed significant federal subsidies to encourage the production and use of biomass fuels, including forest biomass.

Other federal and state energy and tax policies have likewise encouraged the use of renewable energy sources, including forest biomass. It looked like the case was settled and new market opportunities for forestland owners and managers were on the horizon.

But wait! Nothing in this controversial climate issue could be settled that easily! At the international level, some IPCC scientists pointed out that wood used for energy was not always carbon neutral. If natural forests were destroyed, or converted to oil palms, or otherwise degraded in the process of producing energy, there were indirect land use effects and additional emissions that had to be considered. That wood might replace fossil fuels, but the increased carbon dioxide emissions from the land use change needed to be subtracted from the reduction in fossil emissions to calculate the net effect. Unfortunately, since there were places in the world where such forest impacts were taking place, one could not assume that all woody biomass used for energy was carbon neutral. The reality is more complex.

In June, 2010, a “Biomass Sustainability and Carbon Policy Study” done for the Massachusetts Department of Energy Resources by the Manomet Center for Conservation Sciences created an uproar when it was interpreted by the media. Newspaper headlines like “Mass Study: Wood Power Worse Polluter than Coal,” “Manomet: Biomass Isn’t Green” threw a shock into forest owners and scientists, including the study’s authors. Immediately, there were reactions ranging from “how could this be?” to “We told you so,” and the debate within the forestry, energy and environmental communities on the future of wood as an energy fuel was off and running.

So how do foresters and others interpret these new arguments? To address that question, I read the Manomet study fairly carefully. It was done by qualified scientists whom I respect, and their results are not to be ignored. They concluded that “the atmospheric greenhouse gas implications of...”
burning forest biomass for energy vary depending on the characteristics of the bioenergy combustion technology, the fossil fuel technology it replaces, and the biophysical and forest management characteristics of the forests from which the biomass is harvested.” So far, so good.

But there were sentences in the study that could be (and were) lifted out of context. One such was “forest biomass generally emits more greenhouse gases than fossil fuels per unit of energy produced.” That is common scientific knowledge. There are more heat units in a ton of coal than in a ton of wood, so it takes more than a ton of wood to produce the equivalent amount of energy. Those factors are well known, by species of trees as well as types of coal, and have always been part of a basic energy calculation. The media interpretation concluding that wood was more polluting than coal was misleading.

That does not, however, let the Manomet authors off the hook, since it appears that they overlooked an important phrase in the initial proposal that wood from sustainably managed forests was climate neutral when used for energy. Instead of modeling a sustainably managed forest to demonstrate the carbon dynamics of forest harvest and wood use, they modeled a single forest stand. That produces the familiar graph that we have all seen, and that mis-communicates what is happening in a forest situation. All foresters have seen this picture: A stand is planted, grows in a standard growth curve for a number of years, then is partially or completely harvested. At the time of partial harvest, a portion of the carbon is removed in products, and the stand begins to re-grow and replace the harvested portion. In a total harvest, the carbon in the stand is virtually all removed, and a longer replacement period begins. The conclusion, according to any study of a stand, is that when wood is harvested and used for energy, it will be a few years before that wood is re-grown and the atmosphere is improved compared to what would have occurred with fossil burning. During those years, while the wood is re-growing, there is a short-term “carbon debt” that must be counted.

In a sustainably managed forest, however, there are many stands of varying ages and compositions. While one is being harvested, others are growing. In many well-managed forests, the standing stock of carbon is increasing slowly but steadily over the years, while products are being harvested and moved into processing each year. The carbon implications of such a forest are always positive, with each year seeing added net growth as well as the value of the wood products being placed in use or burned for energy. There is no “time lag” in replacing harvested wood carbon when the analysis is done on a sustainably managed forest. That time lag was the result of modeling stand dynamics instead of forest dynamics.

There was another point where I felt the Manomet study missed the mark. It seemed to suggest (or I didn’t find anywhere where it directly refuted) the idea that woody biomass for energy would come from the harvest of merchantable green trees. In fact, the authors made clear that the study did not consider non-forest wood sources such as tree care and landscaping, mill residues, or construction debris. What was not said was whether the study considered only the non-merchantable portions of a forest harvest, or whether it considered all the wood in the harvest. It appeared to be the latter, and that flies in the face of simple economics and common sense.

The biomass power and combined heat and power industries have been the “garbage men” of the forest industry, cleaning up the scraps after the higher-value products were removed. That seems likely to continue. The price that power producers pay for wood must compete with available fossil fuels such as coal or natural gas, less any tax or other financial incentives from government. Up to this point, that has meant that woody biomass for energy brought prices that usually only paid for logging, chipping and hauling. Biomass wood was treated in most forest harvest operations as a least-cost waste treatment rather than a profit center.

Where a logging operation could cut and skid trees of all sizes and qualities to the deck, then sort out and appropriately route saw timber, pulpwood, and woody biomass to their different buyers, selling biomass was a welcome addition to the merchandizing of the forest products. Its logging cost was averaged across all the products, and the more profitable saw timber and pulpwood made the operation feasible. In those cases, selling higher-value wood for energy chips makes no economic sense, and going through the forest picking out the low-value and small wood while leaving the more valuable wood behind would be too expensive. The woody material sold for energy feedstocks could not be sold as pulp or saw timber, and was going to be either burned or decomposed in the woods.

In such a case, the fact that the wood replaced fossil fuels instead of being burned as slash or decomposed in the woods is clearly an emissions reduction. We might have to burn 1.5 tons of wood to replace a ton of coal, but those 1.5 tons would have been emitted anyway, and the ton of coal emissions was prevented. That means that the wood was carbon neutral, because it would have been burned or decomposed in the woods anyway. In terms of an offset, it should earn one ton to reflect the amount of coal emission avoided.
The other point made very clear in the Manomet study was that the study made no attempt to evaluate the entire cost-benefit balance between using wood for energy versus using fossil fuels. Back to our point about the wood needing to come from sustainably managed forests, those forests produce a host of other environmental and economic benefits, while avoiding a few things like serious air pollution, mine disasters, or oil well blowouts. None of those considerations were part of the Manomet study, and the study should not be seen as an analysis of the relative value of using forests for bioenergy production.

So the challenge for foresters is to inform the public about the climate benefits of woody biomass produced in sustainably managed forests, and it is the latter point that is critical. Foresters need to show people through their actions in the forest, and their communications to the public that sustainably managed forests create a broad array of environmental, economic, and social benefits, including the opportunity to produce a class of woody products that can be an important factor in reducing greenhouse gas emissions in the process of producing energy. That woody biomass can be an addition to the saw timber needed to produce wood products and the clean chips needed for paper production, and it can help forest landowners create and maintain healthy, sustainable forests. Forests are a win, win opportunity as society addresses the complex issue of climate change.

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