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Increased Forestry Efforts Pay Big Dividends in 2008

Doug Wallace, USDA NRCS

Efforts by Missouri woodland owner groups, RC&Ds, and natural resource professionals over the past few years have resulted in a dramatic increase in NRCS EQIP (Environmental Quality Incentives Program) funding for family forest landowners in the state.

For new GH readers, EQIP is authorized in the Farm Bill to provide a voluntary conservation program for farmers, ranchers and forest landowners promoting agricultural production and environmental quality. The program offers financial and technical help to assist eligible participants install or implement structural and management practices on eligible land.

While both the 2002 and 2008 reauthorizations of the Farm Bill require 60 percent of EQIP funds be targeted to animal waste application, the remaining dollars can fund what is called general EQIP applications. This is where forest management practices like forest stand improvement (FSI) fall.

However, very few contracts with FSI were being awarded, even in the heavily forested Missouri Ozarks where the primary agricultural land use is forestry. Private forest landowner groups like the Eastern Ozarks Forestry Council wondered why this was so and proposed to tackle the problem by working with NRCS personnel to develop a practice that would encourage landowners to inventory their forest resources and develop a plan. These efforts resulted in the adoption of the NRCS Prescribed Forestry conservation practice standard (practice code 409).

Soon other groups like the Top of the Ozarks RC&D, the Missouri Consulting Foresters Association, the Missouri Department of Conservation and the MU Forestry faculty began regularly attending the Missouri NRCS Technical

Advisory Committee meetings to encourage that this practice as well as other NRCS-approved forestry practices be ranked higher on EQIP applications in counties associated with significant forest land acres. **(cont. pg. 13)**

Giving Trees their Space

Michelle Hall, University of Missouri Center for Agroforestry

Tall fescue is the major grass species used for pasture in the east-central U.S.; millions of acres of tall fescue are grazed in Missouri. However, establishing trees in these pastures, for silvopasture and alley cropping practices, for example, isn't easy as fescue competes with trees



These walnut trees growing at the MU Southwest Center are the same age, but the row on the right grew faster and yielded more nuts when tall fescue was eliminated. (Research initiated by the late Professor Jack Slusher.)

for moisture and nutrients, and may be allelopathic (producing inhibiting chemicals). Thus, producers must implement some form of weed control to limit tall fescue's influence on growing tree seedlings. **(cont. pg. 12)**

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Preserving the Family Forest: Conservation Easements

David Watson, Missouri Tree Farmer and Financial Advisor

Material discussed herewith is meant for general illustration and/or informational purposes only, please note that individual situations can vary. This information is not intended to be a substitute for specific individual tax, legal or investment planning advice.

A conservation easement is a legal agreement between a landowner and an eligible organization that restricts the future activities on the land (usually forever) to protect its conservation value. In theory, this opportunity exists for any landowner with any property of conservation value. In practice, however, this is a sophisticated technique for landowners who meet a very specific profile.

But first, why would any landowner ever think about entering into a legal agreement that restricts future use? There are two primary reasons:

- To reduce the “value” of the property to reduce the federal estate tax due at death, thus increasing the likelihood of keeping the property in the family
- To protect the property from development, or misuse (forever)

The typical situation in which a conservation easement is called for, involves an owner with a desire to maintain the natural integrity of the existing timberland, but faces the prospect of significant estate taxes at his death. Estate taxes are imposed on transfers of assets, and can be very costly. Without some relief, the heirs may be forced to sell the property to pay the estate taxes and transfer costs.

One potential solution is to enter into a conservation easement with an eligible non-profit organization or public entity, which limits (in perpetuity) the use of the property. The landowner can reserve certain property rights of his choosing (i.e. to harvest timber in a sustainable manner, to hunt, or to farm) while limiting development of the property (or portions of the property).

The easement transfers to subsequent landowners, even if the property is sold at a later date. It effectively limits the potential uses of the timberland – forever. This can be a “downside” of conservation easements.

However, the downside can also be the “upside.” By limiting the use of the property, the market value of the timberland is forever reduced. The reduction in market value reduces the estate tax value, which in turn reduces the estate tax due. Therefore, it may allow the property to

be retained in the family rather than sold at the death of the current owner. Conservation easements often generate up to a 20 percent reduction (or more in some cases) in value of the timberland.

A conservation easement can be donated to an eligible organization, or it can be “sold” to that organization. If donated (or sold at a below-market value), the landowner will receive an income tax deduction for the present value of the donation to the charity.

IRS guidelines are somewhat involved, so a timberland owner would be well-advised to consult a qualified accountant to fully calculate the tax impact. Additionally, since conservation easements are agreements in perpetuity, great care should be taken to craft a legal document that accurately reflects the vision of the owner (i.e. timber harvesting, agricultural uses or carbon sequestration). A competent estate planning attorney is invaluable in this process.

Another situation which may indicate the use of a conservation easement is when the primary objective of the current landowner is to preserve the timberland forever by prohibiting development.

Since a timberland owner is essentially hiring a conservation organization to police the future activities on the property, there are some important factors that need to be carefully considered by anyone who is contemplating such a permanent action:

- It is forever. Generally it cannot be changed if the family’s objectives change.
- It does not necessarily keep the property in the family. If a future generation wishes to sell the property, it can do so.
- The easement holder (conservation organization) has a legal responsibility to make sure the easement is followed. Therefore, all management of the property is overseen by the holder. A landowner needs to be very comfortable with the management and focus of the conservation organization, before entering into a perpetual agreement.
- There is a limited number of eligible organizations who are available to an owner (see box of possible organizations in Missouri).
- Not every eligible organization will be interested in a particular property. These organizations have limited budgets and resources. **(cont. pg. 14)**

Good Fences Make Good Neighbors

Part 3: Livestock Trespass

The liability of the livestock owner depends on whether the animals crossed an “exterior” or a “division” fence. An exterior fence is one that is not within a common enclosure. A fence along a public highway is an exterior fence. Division fences, on the other hand, are fences that separate adjoining landowners.

Where animals cross one or more exterior fences (or unfenced exterior boundaries) before entering a neighbor’s farm, the animal owner is probably liable for all damages that may arise on that farm and the livestock can be “distrained,” or seized. This results from the Missouri statute that places the duty to fence in animals on the animal owner (closed range, as opposed to the former “open range”). The livestock owner’s potential defense to avoid liability includes arguing that the livestock escaped through no negligence on his part, as he kept a good fence and regu-

larly fed and checked on his livestock. Another defense argument might be that “acts of God” (force majeure) were intervening and unforeseeable forces causing the livestock to escape, such as a storm knocking trees down onto fences, or dogs chasing the livestock through the fence.

When livestock cross a division fence, the measure of damages for the first trespass is the true value of the damages sustained, together with costs before a magistrate.

For any subsequent trespass by livestock through a division fence, the injured party may distrain them. The injured party must immediately notify the animal owner, who shall pay the amount of damages sustained plus reasonable compensation for taking up and keeping the animals. If the parties cannot agree on the amount of damages and compensation, either party may complain **(cont. pg. 12)**

So, Just What Does a Forester Do?

Hank Stelzer, MU Forestry Extension

I remember the Christmas before receiving my Bachelor of Science in Forestry having a conversation with family members regarding my life after college. My older sister asked, “So, just what *will* you do after you graduate?” I already knew where this conversation was headed in part because throughout my college days she had given me several Smokey Bear items; that year’s installment being a miniature Smokey Bear stuffed animal in my stocking.

After politely listening to me explain how I would help manage ‘our’ forests to produce the wood products society wants along with ‘other’ benefits, she wryly replied, “So, you will put out forest fires?” as she played with Smokey’s hat. I said, “Perhaps.” But, that putting out fires was just a small part of the job.

After several more attempts to describe what a forester did, and several more verbal jabs from sis, I realized two things. First, she was really having a hard time fully appreciating the role a forester plays in natural resource management. And second, I was having a really hard time explaining it!

Now, with some 22 years of experience under my belt, I may not say it as eloquently as I would like, but I have a

much deeper appreciation for the many hats a forester will wear in the course of his or her career.

A forester may be the most broadly skilled, yet specialized, kind of natural resource professional.

This individual must understand and apply elements of biology, ecology, economics, engineering, social science, statistics, hydrology, soil science and other fields to sustain the benefits forested landscapes provide. Foresters are not just employed in wood-producing commercial forests, but also in urban landscapes, agricultural lands, state and national parks, municipal watersheds and anywhere else trees might grow.

Yes, foresters do plan and supervise timber harvests. But, they also work to actively manage wildlife habitat, protect human property from forest hazards such as fire (okay sis, you got me on this one), monitor forest growth and health, enforce environmental law, perform research and educate the public on the value of all forests. In a world of limited resources and a growing human population, the forester is a valued professional struggling to balance the needs of people and nature. **GH**

Forest From the Trees: Trees for Sale!

Dave Murphy, Conservation Federation of Missouri

In October, 2007, our farm became certified in the Missouri Tree Farm program. This is the fourth of six articles recounting why and how this came about. It is hoped that the details of this living history may prove useful to some folks and interesting to many more.

Having completed timber stand improvement (TSI) treatments on all our stands, we were ready for the final step in this first round of major actions: our first timber sale. You may recall from our last article that we left all the marketable trees, marked for removal, in each stand. To meet our goal of reducing overstocking to ensure both overall forest health and good growth rates for individual trees we wanted to keep, we still had a bunch of trees to remove from throughout the forest. The good news was that these future logs were, thanks to all our efforts of improving access to various parts of the farm, relatively accessible for harvest. The great news was that there were folks very interested in buying them!

The same private consulting foresters who prescribed our timber stand improvement treatments marked trees for sale as they took inventory. We wanted to keep our very best trees as seed stock, to produce even better quality timber in the future and to optimize benefits for wildlife. So, either by sale or TSI, we selectively removed trees unlikely to enhance either future timber or wildlife habitat values. It amazed me that 1,689 trees of 23 species were marketable, among those to be removed.

This may sound like a lot of trees to some folks. But, consider this: 240 acres of timber at maturity with normal stocking would support maybe 35 trees per acre, or 8,400 total. One should note that few of our stands were at maturity. And all stands were heavily overstocked. We likely had more than 20,000 trees before TSI and before the sale.

It became very clear to me that this heavy overstocking was stifling growth, health and vigor of individual trees. Overstocking was also curbing acorn, nut and fruit production and thereby diminishing the wildlife carrying capacity of our forest.



Our foresters estimated a conservative financial value for each log. The summation of all species and logs gave us a pretty good idea of what a fair price for our whole timber sale might be. We then sent the inventory list, without estimates of value, to all nearby or even remote logging firms that we thought might be interested in bidding on our logs. We set up a day for them to come and visit our woods and to ask us questions.

At the time I remember feeling like a kid with my first lemonade stand with a sign “Trees For Sale!” in the front yard. All the loggers were great folks, conscientious about our property, wanting to be able to fully evaluate what our logs might be worth to them, and wanting to fully understand our expectations. All in all a very positive experience for us and, I trust, for the loggers and for our foresters as well.

We set a deadline for receiving bids. Two loggers chose to deliver their bids personally and await the opening of all bids. We made this into a public event, serving coffee and cookies. Man, was I ever disappointed when none of the bids were even close to the value we were expecting! It turned out that since the time we were doing TSI, timber prices took one of their characteristic dives.

At this moment is when private consulting foresters, in my opinion, proved most valuable. They advised us not to accept any of the bids! I immediately thought, “How are we ever going to demonstrate that good forestry practice pays?” “Will anyone ever again take seriously my zealous advocacy for TSI?” “How will I explain to my wife that all the money we have invested, all the hard work, and all the tough decisions we struggled through were really worthwhile when no one wants to pay us what we think the logs are worth?” It was a very tough moment.

The foresters maintained contact with the firms that bid on our logs. They showed the loggers what they were certain our timber was worth and encouraged them to find a way to pay full price. The solution came in the form of compromise. Isn’t this a familiar concept to us Missourians?

(cont. pg. 13)

Voluntary Logger Certification Coming to Missouri

Tammy Homfeldt, Missouri Forest Products Association

Rising consumer demand for “green” certified products, decreasing market power of many loggers, rising logger liability, and shifting public opinions threaten to close the doors of Missouri’s logging operations. The Missouri Forest Products Association (MFPA), with assistance from the Missouri Department of Conservation, has developed the Master Logger Certification Program to help loggers be proactive in these changing times.

The Master Logger Program is not a “training” program. It is a third-party audited certification of a logging operation’s business and harvest practices. Applicants must have completed MFPA’s Professional Timber Harvester Program.

“The Master Logger Program will provide a means for loggers who have received their certification through the Professional Timber Harvester program to move forward

to become a top professional in managing our forests in an environmentally and economically sustainable process,” said Brian Brookshire, MFPA Executive Director. “The importance of professional loggers to the economic health and credibility of the forest industry cannot be overestimated.”

Master Logger Certification relies on a field assessment process to clearly document a logger’s knowledge, skills and harvesting practices using a set of performance standards. The resulting certification will help loggers better market their professional services throughout the entire forest products chain; landowners, foresters, mills, retailers and consumers.

For more information on the Missouri Master Logger Program or to request an application, contact Missouri Forest Products Association at (573) 634-3252. **GH**

Best Management Practices for Woody Biomass Harvesting in Missouri

John Tuttle, Missouri Department of Conservation

Have you ever thought of harvesting wood from your woodlot? With increased interest in renewable energy production, significant interest has been given to producing energy from wood. A group of partners received a grant to write Best Management Practices (BMPs) for woody biomass harvesting in Missouri. The primary purpose of these BMPs are to provide guidance to natural resource managers, loggers, equipment operators, contractors and landowners to assist them in making informed and appropriate decisions regarding biomass harvesting on forested sites. For BMP purposes, recommendations have been drafted based on harvest effects on forestland sites and communities, using the best available scientific information. Although leaving a site alone is always an option, these BMPs are primarily intended for cases where active forest management (in this case biomass harvesting) will take place or is being seriously considered.

What is woody biomass harvesting? For the purposes of these guidelines, woody biomass harvesting includes the process of collecting and removing woody biomass from forested sites. In addition to the utilization of tops and limbs from trees harvested in a roundwood operation, woody biomass harvest might include the utilization

of small diameter trees, or stems which have historically been “non-merchantable,” dead trees, down and dead woody material, and brush. Woody biomass harvest removes more woody material from a site than would be removed under typical roundwood harvest. Often woody biomass harvesting is conducted in addition to roundwood harvesting on the same site, either in conjunction with the roundwood harvest or soon after. However, woody biomass harvesting can be conducted on sites where a roundwood harvesting is not occurring.



What did we do? A 16-member interdisciplinary technical committee developed the BMPs for Woody Biomass Harvesting document based on the best scientific information available. The committee also received valuable guidance based on issues generated from a diverse group of stakeholders. The Technical Committee was made up of individuals from the following range of expertise: soil science, wildlife biology, hydrology, forest management, forest ecology, forest industry, and silviculture. To see the final draft BMPs, visit the following Web site <http://mdc4.mdc.mo.gov/applications/MDCLibrary/MDCLibrary2.aspx?NodeID=2055> **GH**

The Carbon Corner

Hank Stelzer, MU Forestry Extension

In this installment of 'The Carbon Corner,' I will share an electronic conversation I had recently with Jon Pomp of FORECON EcoMarket Solutions (EMS), LLC. EMS is a subsidiary of FORECON, Inc., headquartered in Falconer, N.Y. You might recall back in August of this year, a press release from EMS said they successfully marketed the managed forest carbon credits for one of its long-time TIMO (Timber Investment Management Organization) clients, Forest Investment Associates.

You might also recall in the last CC, we said the Delta Institute's managed forest pool was the first pool 'sold' on the CCX. So, being a little confused (as some GH readers will readily agree), I contacted Jon Pomp, EMS Ecosystem Services Analyst, and asked him to clarify what 'the successful marketing' of their pool meant. And while I had him, I also asked some other questions regarding EMS's managed forest offset projects that he graciously answered.

GH: Did the TIMO offset ever sell or was it held back because the market crashed before reaching your client's trigger point?

EMS: For large stand-alone projects like the TIMO managed forest project you have read about, we provide personalized services like market timing, strike prices, banking strategies, etc. You hit the nail on the head with regards to the market: we have not sold any of the credits from the project because of the bearish state of the CCX market. Basically, the credits are sitting in our account waiting to be sold when the market rebounds. We expect to sell a majority of the accrued credits the early part of 2009.

GH: Can a Missouri landowner sign-up for one of your managed forest pools? If so, how does he/she go about it?

EMS: They most certainly can and I encourage them to do so. Potential income streams from the sale of sequestered carbon credits can be very beneficial to Non-Industrial Private Forestland (NIPF) owners, especially considering the current state of the timber market and increased land taxation throughout the U.S. Any landowner owning 250 forested acres or more has the opportunity to enroll in our Pooled Private Landowner Forest Carbon Project. Landowners having forested lands that are already inventoried and certified as sustainable under SFI, FSC, or ATFS represent ideal candidates because of significant reductions in associated participation costs. The first step for enrollment into our pooled project is to fill out our enrollment questionnaire (available via <http://www.foreconinc.com/ecomarket/docs/PrivateLandownerEnrollmentPackage.pdf>).



We will then review the questionnaire and identify any needs (additional inventory, harvest data, mill/scale tickets, etc.). Pending approval to enroll, the landowner would then be provided with two contracts: one agreeing to maintain positive sequestration (growth) through 2010 and one committing to maintain sustainability certification for 15 years past enrollment date.

GH: How is the initial baseline inventory conducted? Who does it? When? How much?

EMS: Only one inventory (up-front) is required when using the "model based accounting approach" (growth and yield models for sequestration quantification). If the lands already have an inventory that meets the statistical requirements (+/- 10% @ 90% confidence interval on total volume) and records pertaining to losses from harvesting and natural disasters have been kept since the inventory, a new inventory is not required. Landowners can capitalize on sequestration back to 2003 in this case. We highly recommend that the inventory be completed by a Society of American Foresters-certified forester or a current member of the Association of Consulting Foresters. With respect to an inventory cost estimate: it is going to vary depending on forester/consultant conducting the inventory, number of plots required, travel time, etc. Although we offer high quality inventory services, Missouri is really out of reach for our field staff, so a consultant in your region would be recommended. Off the top of my head: inventory costs could range anywhere from \$5 to \$25 per acre.

GH: Are annual forest inventories needed? How is the annual inventory conducted?

EMS: Again, only an up-front inventory is required when using growth and yield models for quantification. A landowner could, however, choose to do annual inventories in lieu of using growth and yield models, but it really doesn't make sense financially. That is, an inventory every year is going to be much more costly than one single inventory up-front. The inventory can be either a 100% tally, or statistical using fixed area or point sampling laid out on a random sample grid covering all forested lands the landowner owns. All trees 2" diameter class and greater should be measured and recorded.

GH: Have you selected a verifier for your managed forest pool?

EMS: We have selected Environmental Services, Inc (ESI) as the verifier for the pooled project. (cont. pg. 7)

Chain Saw Workshop Held

Brian Schweiss, Missouri Department of Conservation

Several Tree Farmers in the Macon area had the opportunity to advance their tree felling skills. A course taught by Joe Glenn with the Game of Logging program was held and sponsored in part by the Missouri Department of Conservation. The three-day course covered safety, maintenance and felling techniques to drop trees where you want them.

Glenn has been teaching these courses for more than 10 years, primarily to loggers. Many of his participants have been running a chain saw for years and come away with a wealth of new knowledge to help them be safer and more efficient with a saw. Glenn impressed the group early when he felled a tree in the opposite direction of its lean. His only tools were his saw, axe, several wedges and the knowledge needed to put them all together.

Dan Hays, a Tree Farmer in Moberly, tackled a tree in the woods that was not leaning in the direction he wanted it to go. He said “by himself he never would have tried it.”

Glenn explained the hazards to look for, how to determine the amount of lean they could handle, the cutting method needed, and where to place and drive the wedges to get the tree where they wanted it. Hays was again impressed when it all came together and worked. As were the rest of us.

One of the primary purposes of the class is to make us safer in the woods. Glenn often comments that “there is not a tree in the woods that is more valuable than your life” and “your most important tool is your brain.” With this course, even the most experienced tree cutter will gain some valuable tools to help them in the woods.

I have hosted these classes in the Macon area for the past 10 years with Glenn teaching them, and every time I sit in on a class, I learn something new. After seeing how Glenn can fell a tree, I have become convinced that every landowner and logger can benefit from the course. If you get the chance to see him in action, take it! **GH**

The Carbon Corner (cont. from page 6)

ESI is a full-service environmental consulting firm based out of Jacksonville, Fla. ESI has verified projects for us in the past and we feel that they provide high quality, cost effective, ethically sound third party verification services.

GH: When does the pool sell? How? Is the sale based upon some trigger price?

EMS: After successful verification, the pool’s credits are registered on the exchange. The first verification is scheduled to take place in March 2009; occurring annually thereafter. The credits also will be sold annually, with net proceeds distributed to the landowner immediately thereafter. Although we will time the market during a given year to maximize revenue, banking strategies and strike prices cannot really be established by an individual because there will be multiple landowners with differing views, opinions and objectives.

GH: In addition to the 20-percent reserve pool and CCX trading fee, what other costs are deducted from a landowner’s payment? (aggregator fee, verifier fee, other?)

EMS: First, the reserve pool should not be viewed as a cost. It is an insurance to cover catastrophic losses. If there are

no losses at the end of the commitment period (2010), the reserve pool can be released and marketed. Keep in mind that net sequestration must also be discounted by 2*InventorySamplingError @ 90% CI to account for sampling uncertainties.

In addition to the CCX registration and trading fees (\$.20/MtCO₂e), associated costs include:

- Inventory (if needed) (up-front)
- Sustainable certification (if needed) (up-front)
- Aggregation fees (10% of gross revenue from sale of credits)

With regards to the pooled project, FORECON EMS is absorbing the project development, reporting and verification fees on behalf of the landowner. **GH**

For more information about FORECON EcoMarket Solutions, LLC, or the services they provide, visit www.foreconinc.com/ecomarket; or contact the EMS Carbon Team at (716) 664-5602 x313, 326, or 327; msmith@foreconinc.com, jpomp@foreconinc.com, bcarlson@foreconinc.com

A Blooming Enterprise

Michelle Hall, University of Missouri Center for Agroforestry

John Marlin has watched a family business bloom, literally, from his own yard.

When Marlin, associate director of the Illinois Sustainable Technology Center at the University of Illinois, heard his then-8-year-old daughter ponder selling Kool-Aid or *something* from a sidewalk stand nearly 20 years ago (like many children do), he had a better idea. Why not sell instead plants propagated from their own yard-full of native spring wildflowers? Neighbors and others had always admired the plants.

"I've always been interested in nature," Marlin said. "My wife and I in 1976 bought a house in an older part of Urbana (Illinois); it had been owned by the same couple for close to 40 years. They had allergies to pesticides and liked birds so they let the yard grow partly wild.

"They had huge Jack-in-the-Pulpits; thousands of dogtooth violets, bluebells, red trilliums, toothwort and numerous other wildflowers in the yard. I augmented plants already in the yard with seeds and plants from farmer friends. Although our yard was wild, it was very pretty."

That first year, Marlin, his wife, Diane, and children, Kate and John E., potted up some plants and placed signs around the neighborhood advertising their sale.

"In an hour the kids had \$400 and no plants left," Marlin said. "A lightbulb went off in my head."

The annual sale "ramped up" from there. Marlin's children (and soon their friends too) collected seeds and cuttings in the fall from established flowers. Then they would pot, tag



Above: John E. Marlin offers a Solomon's Seal at a Grand Prairie Friends sale. **Top right:** Kate Marlin (third from right) and friends are ready for the annual sale. **Right:** The Marlin backyard on sale day. **Left:** Propagation bed of mayapples, bluebells.



and sell the flowers each spring, sending out information to a list of past customers and creating posters and newspaper ads for the sale. The first few sales were out of the Marlin's driveway, much like a garage sale. They then brought the customers to the backyard instead to eliminate moving all of the pots beforehand. Soon the Marlins moved their sale to the

local mall, coordinating with annual plants sales among a prairie group, a businesswomen club selling ornamentals and an herb society.

"On sale day it was almost a riot," Marlin said. "It was not at all difficult to sell a few thousand dollars-worth of plants."

Wholesaling was the next step in the family enterprise, as the University of Illinois came calling for plantings, as did local developers wishing to use native plants.

"It was a really good experience," Marlin said. "The kids got to experience a lot about the business world. And make a little bit of money." Marlin also likes that this enterprise puts native flowers back into the ground.

Although the sales "ramped down" a bit when the kids entered high school and college, John E. still today helps the neighborhood kids make a little money with the scaled-back enterprise.

"There's a great market there that isn't being tapped," John E. Marlin said of spring wildflowers. "They're easy to maintain, beautiful and come back every year."

(cont. pg. 9)

A Blooming Enterprise (cont. from page 8)

Although Marlin began his family's spring wildflower business from his own yard, any tree-filled land typically will have native wildflowers growing under the canopy. Marlin recommends forest landowners follow these steps if they too would like to begin selling the seeds of their own forest:

Marlin recommends experimenting with the following native spring wildflowers in your woods:

- celandine poppy
- trillium
- Solomon's Seal
- Virginia bluebells
- mayapples
- bloodroot
- Columbine
- Jacob's Ladder

ONE: Make sure you have a good customer base in your area. Marlin sees customers as two types: first are the customers with large trees in their yards who can't grow grass underneath but would like some foliage in their yard. Second are the customers who remember going to their grandparents' farm and seeing these plants; they buy them for sentimental value. In addition, wholesale markets could be found among commercial greenhouses, landscape businesses, ecological restoration groups, park districts, schools, etc. Growers could even contract with youth or other organizations to sell the plants as a fundraiser. (Growers don't have to sell whole plants either, Marlin reminds. Bulbs or roots are also a way to go.) Do you have a spot for a roadside stand? A "garage" sale?

TWO: Walk around your woods in early spring. Find areas where wildflowers are already growing to help determine where they might grow best. Mark where those wild plants are so in the fall seeds can be harvested. Harvest small plants under larger ones and move to a raised bed (these plants would die if left intact due to competition).

THREE: Pick your growing spot close to an access road that is "edgy" or has some openness to it. Dappled sunlight is best. Marlin recommends a number of small patches. Access to water is good although it doesn't take a lot of water to keep these plants "happy." Create beds framed with wood.

FOUR: Harvest seeds or cuttings in the fall when plants are dormant and plant in the designated beds. (Squeeze

seed pods to see if they are "ripe" – if they break open, they are ready for harvest.) Harvest cuttings, seeds from different plants; go for genetic variety. Use colored straws to mark where different seeds are planted. (Blue for bluebell, etc.) Put window screen or chicken wire over the beds to keep the squirrels out. (Deer aren't a huge concern for most plants, but

trillium is enticing.) Put a light layer of leaf mulch over the beds in winter. (You will move some plants to pots for sale when they get larger – some species can overwinter in pots, some cannot.) Remove the chicken wire in the spring.

FIVE: Let nature take its course!!

"If you want to start doing this, experiment like we did," Marlin said. "I had a botany course in college and that's it. The rest I learned by reading and playing.

"These plants for the most part take care of themselves. It gives you a lot of flexibility if one year you're too busy to deal with it. And besides, they are pretty!" **GH**

Check out these additional references about spring wildflowers:

- "Growing and Propagating Wildflowers." Harry R. Phillips. 1985. University of North Carolina Press.
- <http://www.plants.usda.gov>

See more about the Marlin's – and other agroforestry practices – on the University of Missouri Center for Agroforestry Five Practices DVD. For ordering information, go to <http://www.centerforagroforestry.org/pubs/dvdorderform.asp>

It is illegal to harvest wildflowers from public lands. Missouri law considers plants the property of the landowner, so the practice of propagating woodland wildflowers from your own forested land as Marlin describes, is ethical. Check with the Missouri Department of Conservation (<http://www.mdc.mo.gov/>) or Grow Native! (www.grownative.org) with any questions.

National Tree Farm Conference Report

Josh Stevens, Regional Tree Farm Inspector of the Year

I had the good fortune of attending this year's National Tree Farm Conference in Portland, Ore., this past October. I was surprised by the turnout of Tree Farmers from all over the U.S.; Texas, Wisconsin, Vermont, Mississippi, Arizona, Florida, Maine and even Missouri. When I overheard a lady say, "You don't see that in the Ozarks," I knew I had found my fellow Missourians.

It was great to meet the folks from the National Tree Farm in Washington, D.C., who work so hard for us. I am impressed with the amount of work those young ladies are able to accomplish. Hosting the conference was just a small part of their duties and they shined bright for three days.

Gaining certification from the PEFC has been a labor of love for the Washington, D.C., crew. They presented on the amount of work that it required to get the certification and then discussed the benefits that Tree Farmers are receiving from the newly acquired certification. While we here in Missouri might not see the benefit yet, it is coming. And when it does we all will be very thankful to the national staff.

The most interesting part of the conference for me was visiting with Tree Farmers from around the country and listening to them talk about forest management methods and strategies for their farm. The diversity of both our nation's forests and forest landowners is tremendous. But, the principle of sound and active forest management was a constant among those in attendance. It was good to hear from many Tree Farmers that forest management was not only important, but a passion.

The highlight of the conference was the field day. We traveled west from Portland to the Little Beaver Creek Tree Farm owned by Anne and Richard Hanschu. Their farm lies in the small hills (mountains to us) and grows Douglas-fir on an even-aged system on most of the acreage. A small stream dissects the farm supporting lowland hardwoods such as ash and aspen. There was something for everyone; 46 stations ranging from high cable logging and mechanical thinning of small diameter logs to pruning for value. You could learn the basics of GPS, chain saw sharpening, riparian management, and tree planting. A portable sawmill was in operation and local experts were on hand to teach tree identification and tell us about both the historical and

current-day aspects of fighting western wildfires. There was so much to see that most of us were plum tired by the end of the day.

The indoor part of the conference may not have been as exciting as the outdoor, but there was still plenty of information to gain. There were workshops on the new Farm Bill, managing for cavity nesting songbirds, selling timber, the new certification gained by Tree Farmers from PEFC, transferring your land to your children, carbon markets and business management strategies for your Tree Farm.

Overall, it was a great conference and I am glad that I was given the opportunity to attend. I met many people passionate about forestry and Tree Farm and through conversation, workshops and the field tour, my knowledge has grown. I can't think of a better reason to go to Oregon than to talk about and look at trees, inside and out. **GH**

Carbon Corner II: Delta Institute Update

Todd Parker, Delta Institute

On Nov. 8, the Delta Institute announced the completion of the sale of carbon credits from sustainably managed forestlands in Michigan, generating \$468,300 in gross revenue, and significantly offsetting carbon dioxide emissions. After administrative fees, the initial 34 Michigan landowners in this program earned \$389,097, or \$8 per acre, for fighting climate change through sustainable forest management and good stewardship of the land.

As part of the Delta Institute's Managed Forest Carbon Offset Program, Michigan landowners enrolled 48,665 acres of certified forestlands, earning carbon offset credits for sale on the Chicago Climate Exchange (CCX®). Through sustainable forest management, enrolled landowners showed a net increase in carbon sequestration of 172,000 metric tons over the 2006 baseline. This sale represents net carbon storage during the 2007 growing season. These landowners will continue to earn credits for the 2008, 2009 and 2010 growing seasons. **GH**

The Bid Box

(All volumes reported in Doyle Scale)

On top of the usual information, we have a little extra something this time around for The Bid Box; a break-down of the marked timber by species and size. You will note there are other species besides white oak and walnut in the sale. Also notice that while trees less than 18 inches were marked for sale, in nearly all cases, these trees were cut to make room for their neighbors that will now be able to grow bigger and have better quality as a result of reduced competition.

Randolph County

- 85 Acres
- 1,405 hardwood trees
- Estimated volume: 191,246 bd.ft.

Species	Trees < 18" dbh		Trees > 18" dbh		Total	
	No. Trees	Volume	No. Trees	Volume	No. Trees	Volume
ash	19	869	8	846	27	1,715
basswood/						
cottonwood/sycamore	2	166	11	3,894	13	4,060
elm	16	685	2	1,215	18	1,900
hackberry	3	144	1	216	4	360
hickory	60	3,269	24	4,012	84	7,281
honeylocust	9	409	4	753	13	1,162
red oak/black oak	313	20,971	252	54,241	565	75,212
shingle oak/pin oak	177	9,964	185	43,347	362	53,311
white oak	95	5,826	121	26,287	216	32,113
swamp white oak/						
post oak	32	1,797	44	9,469	76	11,266
other hardwoods	3	255	0	0	3	255
walnut	12	556	12	2,055	24	2,611
Total	741	44,911	664	146,335	1,405	191,246

- Forester valued the sale at \$27,000
- 5 bids
 - o \$32,100
 - o \$25,099
 - o \$25,500
 - o \$21,700
 - o \$20,000

- **Return: \$378 per acre**

Do you have a timber sale for The Bid Box? We would love to hear from you!

Take Our Bioenergy Survey!

Go to <http://www.snr.missouri.edu/forestry/extension/>, click on the 'Take our survey' link and tell us what you think about various wood-to-energy issues. A summary will appear in a future issue of GH.

Good Fences Make Good Neighbors (cont. from page 3)

to the circuit court of the county to settle the action in court. If the animal owner wins, he or she shall recover costs and any damages sustained, and the judge shall issue an order for the return of the animals. If the person who distrained the animals is allowed recovery for actual damages, compensation for keeping the animals and court costs, the judgment shall be a lien on the distrained livestock.

Example: A's cow gets into B's cornfield and causes substantial damage.

If there is no division fence between A and B, then A will be liable for the actual damages to B's cornfield. If there is a division fence between A and B, the extent of A's liability will depend on several factors:

Under the general county fencing statute: A will be liable for the damages only if the fence was a lawful one. If all portions of the fence are in good repair and A's cow still sneaks through or over, A is liable for actual damages. If the cow sneaks over or through a portion of the fence B

was obligated to repair but did not, A will not be liable for any damages caused by the cow to B's land.

Under the optional county fencing statute: A's liability will be determined basically as under the newly revised general county fence law. However, in a local option fence county, the statute specifically authorizes B to have A's defective portion of the division fence repaired at A's expense if A neglects or refuses to repair his fence.

This information and more can be found in MU Guide G810: Missouri Fencing and Boundary Laws. Do not rely upon this series or G810 for legal advice. This information is a general statement of the law. Please direct your questions to an attorney to get relevant facts and act on them in your best interest. **GH**

This series will conclude in the next issue of Green Horizons when we examine boundary line disputes and "squatter's rights."

Giving Trees their Space (cont. from front page)

However, the amount of weed control required for successful tree establishment in tall fescue is unclear. Current recommendations for vegetation-free zones around trees vary widely, with some literature suggesting zones extending as much as 7.8 feet (2.4 meters) from tree seedlings. More defined guidelines are necessary to minimize weed control costs and optimize land use; finding the minimum radius needed for optimal tree development is vital to growers.

A study by Jimmy Houx, University of Missouri Center for Agroforestry researcher and MU research specialist in Plant Sciences, was designed to answer the question of how much weed control is enough and to create guidelines on establishing trees in existing tall fescue pastures for ease of tree farmers and agroforestry practitioners.

Houx planted walnut seeds in six different sized vegetation-free zones in tall fescue pastures (a no-herbicide control was also included). The study was conducted two consecutive years at two locations in central and north-central Missouri, differing in soil types. Data were taken on tree seedling height and diameter every two weeks during the growing season and also at the end of the season in October. Black walnut was chosen for its importance in producing both nut and timber crops.

The research showed that a minimum of a 4-foot (1.21 meter) vegetation-free radius should be implemented to optimize tree growth and survival. Although rings as large as 6 feet in radius were studied, results showed 4 feet was optimal. Tree growth increased steadily as weed control increased from 0 to 4 feet from tree seedlings. Growth in larger zones (5 and 6 feet in radius) was not greater than that in zones of 4 feet, suggesting weed control beyond a distance of 4 feet from tree seedlings may not result in greater tree growth, but would require greater weed control costs and remove more land from forage production.

Seedling diameter was affected more than height by the different weed-free size treatments, suggesting this growth parameter is more sensitive than height to tall fescue competition.

Houx also says this study suggests that in the initial years after planting, competing vegetation is the primary factor influencing black walnut seedling growth (i.e., initially, site characteristics may not be as important as weed control for seedling growth). **GH**

For more information on the five practices of agroforestry or UMCA's research, go to <http://www.centerforagroforestry.org>

Big Dividends (cont. from front page)

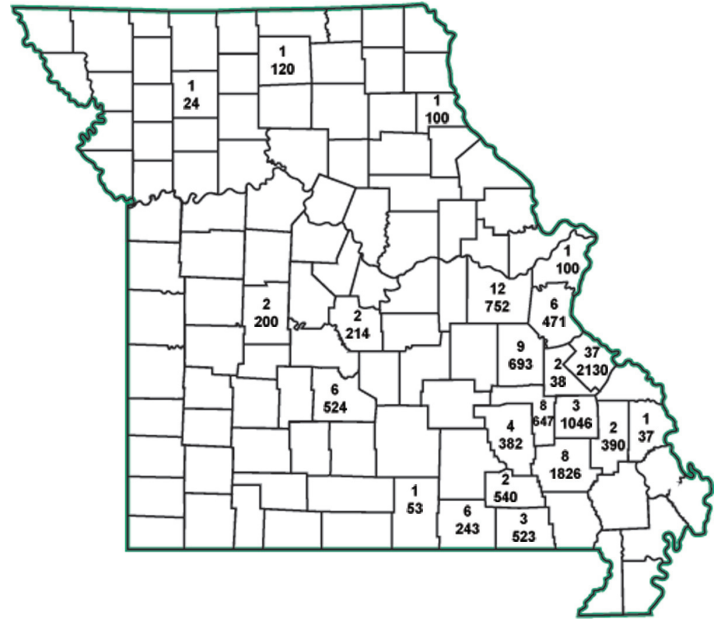
One outgrowth of this increased emphasis on forestry is the administering of approved Missouri EQIP 409 contracts by the Top of the Ozarks RC&D, in partnership with MDC and USDA-NRCS. The state was divided into six regions based upon geography and number of contracts. Bids were solicited from foresters that are TSP (Technical Service Providers, as certified by NRCS) and/or certified foresters (as certified by the Society of American Foresters), located in Missouri and surrounding states.

“Each forester or firm could bid on one, all, or any combination of the bid packets,” explains Richard Stricklin, Top of the Ozarks RC&D Forestry & Wildlife Committee Chair. The bids were awarded on a lowest cost basis.

The results will be impressive: 118 landowners, with forests ranging in size from 5 to 643 acres will have a forest stewardship plan in place by August 2009. Total area impacted for Missouri will be more than 10,000 acres.

Stricklin says this project “is a perfect example of government and local people working together to manage our resources wisely and effectively.”

But, the work is far from over. Less than 10 percent of Missouri’s 12 million acres of family-owned forestland have a forest stewardship plan in place to guide landowners. If



EQIP 409 Prescribed Forestry contracts for FY08, which ended Sept. 30, 2008. The top number in each county represents the number of landowners and the bottom figure is the total acreage.

you are among the other 90 percent, consider calling your local NRCS or Missouri Department of Conservation office to learn more about the EQIP program and other incentive programs available to help you help the land. **GH**

Forest From the Trees (cont. from page 4)

With prices being low, all loggers were stretched pretty thin for financial resources, with all available funds wisely invested in standing timber. Also, most logging yards were full of readily available, decent quality, inexpensively priced logs.

The solution? In our case, because the logger was close by and readily accessible, we were able to work out a schedule of payments instead of the usual “down payment up front and balance when we begin logging.” With delays of weather it wound up taking considerably more than the four months the logger estimated to conduct his harvest anyway. We got paid full price for our logs.

For us, private consulting foresters were the key to our success. Once upon a time, very early in the entire process, our foresters had promised us that the difference in revenues

we would receive in future sales would more than pay us back for what we invested in their services. This proved to be absolutely true.

The Missouri Department of Conservation has excellent foresters in the field, as well. But, my family needed the immediately available services of a private firm. And their negotiations on our behalf, no doubt, went well beyond what any agency professional could be expected to provide.

Next time I’ll report on tax implications, further steps in management and results so far. The final segment of this report will really encourage participation in the Missouri Tree Farm Program. **GH**

Preserving the Family Forest (cont. from page 2)

In addition, they may have a specific conservation focus (i.e., a certain geographic area). They have to be selective in which properties they make perpetual commitments to oversee.

- Small properties may not generate much interest from organizations, unless there is a unique circumstance (i.e., endangered species or unique habitat present).
- Landowners may wish to do their own due diligence on the eligible organization. Since the organization is promising to supervise the management of the property, and enforce the specific provisions in the easement, a timberland owner will want to make reasonably sure that they are partnering with an organization that has the requisite resources (i.e., vision, management, structure, financing, etc.) to fulfill the obligation across several generations.

In closing, conservation easements are not for everyone. However, in certain family situations, they could be a perfect answer. They can reduce estate taxes, they can generate current tax benefits, and they can provide peace of mind to timberland owners concerned about misuse or development. If used appropriately, a conservation easement is an extremely effective and powerful tool for those interested in the long-term stewardship of their forestland. **GH**

Note to GH readers: We did not fire Kirk Fine, Dave's partner in this series. As you can imagine, financial planners are under higher scrutiny these days and Dave's compliance people have asked him to fly solo. So, to accommodate both our writers and readers, David and Kirk will alternate providing articles to GH.

Potential Conservation Easement Holders in Missouri

Ducks Unlimited
Eleven Point Conservancy
Great Rivers Habitat Alliance
Greenbelt Land Trust of Mid-Missouri
The Nature Conservancy
Ozark Greenways
Ozark Regional Land Trust
St. Charles County Land Trust
The Missouri Farmland Preservation Trust
National Wild Turkey Federation

Note the above organizations will have, in all likelihood, priority areas and will not be interested in all lands equally. Readers are encouraged to contact these potential easement holders for specific information.

Sign Up for Missouri Tree Farm Conference Today!

Your Family Forest Heritage: Passion, Preparation, and Planning is the theme for the 2009 Missouri Tree Farm Conference set for April 3-4 at the Stoney Creek Inn in Columbia.

If you own and care for forest land, you probably have strong feelings about leaving your land in good condition for the future. Keeping family forests intact after the older generation passes is one of the most urgent issues facing family forest owners today. According to the National Woodland Owners Survey, 80 percent of the country's forest landowners say their primary goal is to pass their property intact to the next generation. But, most do not have a succession plan for the forest property they have worked so hard to develop and maintain.

One reason for this: Passing property from one generation to the next is legally and emotionally challenging. A smooth transfer takes not only passion, but preparation and planning.

We are extremely fortunate in Missouri to have not one, but two financial planners who not only understand the complex process of estate planning, but are Tree Farmers themselves! David and Kirk will lead a Friday afternoon in exploring the often overlooked emotionally challenging aspects of transferring your legacy and set the stage for presenting the legal aspects at the Saturday conference.

Green Horizon subscribers will be receiving a conference brochure in January. But, if you can't wait till then to register, call Glenda at (573) 634-3252 or go online www.moforest.org **GH**

The Back Page

Deadlines for Newsletter Submissions

Spring Issue: March 15
Summer Issue: June 15
Fall Issue: September 15
Winter Issue: December 15

Best wishes for a Happy New Year!

From Green Horizons co-editors Hank Stelzer and Michelle Hall. We are excited about '09 and hope you are too!



GH Online: Find Green Horizons on the Internet at <http://agebb.missouri.edu/agforest/index.htm> or <http://snr.missouri.edu/forestry/extension/resources.php>

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Calendar of Events

Feb. 7, 2009: Walnut Pruning Workshop, Ritchey, Mo., on Shoal Creek in Newton County. Tree Farmer Dennis Evans shows how to prune young walnut seedlings and saplings to improve stem quality for eventual quality walnut products. The workshop will run 10 a.m. to noon. For directions and information, call Dennis Evans (evenings) at 417-451-7862 or Skip Mourglia (M-F) at 417-732-6485.

Feb. 27-March 1, 2009: Conservation Federation of Missouri's Annual Conference, Lodge of the Four Seasons, Lake Ozark, Mo. On Saturday, Feb. 28, the Forestry Committee invites you to participate in discussing the pros and cons of forming a Missouri Woodland Owners' Association under the auspices of the Federation. For more information or to register for the conference, visit www.confedmo.org

March 7, 2009: MO Chapter of the Walnut Council Spring Meeting and Tour, Glen Riekhof Farm, west of Concordia, Mo. Tour topics will include timber stand improvement of a recently harvested site and management of a plantation of 5,000 trees in a riparian buffer strip. Directions and pre-registration details for non-members can be obtained after Feb. 1 by e-mailing palmh@missouri.edu or calling Dennis Potter at 660-808-0837. The Glen Riekhof Farm is west of Concordia, Mo., in Lafayette County.

April 3-4, 2009: Missouri Woodland Owners' Conference, Stoney Creek Inn, Columbia, Mo. See additional information, page 14.

May 31-June 3, 2009: 11th North American Agroforestry Conference, Stoney Creek Inn, Columbia, Mo. Please see www.centerforagroforestry.org for more information or contact Julie Rhoads, Technology Transfer Events Coordinator, University of Missouri Center for Agroforestry, 573-882-3234 or RhoadsJ@missouri.edu

July 19-22, 2009: 100th Anniversary Meeting of the Northern Nut Growers Association, Lafayette, Ind. See www.nutgrowing.org for details.