

Missouri Ag News

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The Benefits of Forest Management

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From fifth generation farmers to land investors who may never visit their property, the 300,000+ Missouri woodland owners are a diverse group. One thing they do have in common is that most of the privately owned woodlands are not actively managed. While the reasons for this are many, the one undeniable outcome is that the woodland owners are not realizing the full potential of their woodlands.

The benefits of professional management include: Better timber, wildlife, stewardship, aesthetics, tax benefits, satisfaction, extra-income and legacy. Small acreages or large, there is always an opportunity to become involved with managing the land. The first step in achieving this potential is to obtain a professionally written forest management plan.

The purpose of a management plan is to answer three basic questions: 1) what do I have; 2) what do I want; and, 3) how do I get there? While the questions are simple, the answers can be daunting for many landowners. Active engagement and professional

assistance in the process are key to creating a management plan.

The initial forest stand can limit the management options and possible outcomes. The first step in evaluating your forest's

potential is to see what is there. This can be as simple as a walk in the woods with a notebook to record your observations or using a professional forester to evaluate your woodlands. Let these observations guide your expectations on the benefits you want from your woodlands and talk with a professional forester about your goals for the property.



Benefits of Forest Management continued.....

The second question can be difficult for landowners to answer. In many cases, the land is held with the intention of bequeathing it to heirs, which can add to the complexity of planning and management. It is always best to talk to family members during the planning process to make sure the management goals are held in common.

Answering the third question requires the assistance of a professional forester. The management activities for the woodlands will depend upon the size and condition of the

forest and the interests of the landowners. In some cases, a commercial thinning operation to favor desirable trees would be appropriate. In other cases, the landowner may prefer to divide the forest into smaller stands and do work themselves.

There are several sources of assistance for landowners. Professional forestry assistance can be found through the Missouri Department of Conservation at 573-751-4115 and the Missouri Consulting Foresters Association www.missouriforesters.com. The University of Missouri Extension

provides information and workshops on forestry management principles (573-882-4444). The University of Missouri Agroforestry Center provides information on riparian forest buffers, windbreaks, alley cropping, silvopasture and forest farming. The Soil and Water Conservation Districts (573-751-1172) oversee cost-share programs that encourage landowners to become active stewards of their property.

Kyle Cunningham, Forestry and Business Development Specialist, University of Missouri Extension, Fredericktown, MO.

Goat and Sheep Conference

Lincoln University Cooperative Extension and University of Missouri Extension along with the Missouri Department of Agriculture is presenting a Goat and Sheep Conference **Saturday, May 14th** from 8 a.m. to 3 p.m. at the **Fredericktown United Methodist Church**.

Topics for the day include:

- ▶ **Getting Started in Small Animal Production:** Jodi Pennington and Dr. Helen Swartz, Lincoln University
- ▶ **Animal Health, What's New:** Dr. Charlotte Clifford-Rathert, Lincoln Univ. and Dr. Scott Poock, UMC College of Vet Medicine
- ▶ **Market Grading: What Producers Need to Know for Uniformity:** Mark Kennedy, MO Dept. of Ag USDA grader
- ▶ **Marketing with Economic Savvy:** Darvin Green, Lincoln University
- ▶ **Opportunities You Need to Know About:** Stan Cook, MO Dept. of Ag
- ▶ **Biosecurity: Rules and Regs Update:** Rachel Heimericks, MO Dept. of Ag
- ▶ **Producer Reports:** SEMO Meat Goat Producers Assoc.
- ▶ **Production Demonstration:** hoof trimming, deworming/injections, weight estimate/body condition scoring, on farm biosecurity

Cost for early registration is \$10 per person and includes lunch or \$15 at the door. You may pre-register by contacting the Wayne County Extension office at (573) 224-5600 ext. 8 by MAY 10. Checks made payable to LUCE can be mailed to Wayne County Extension, P.O. Box 200, Greenville, MO 63944.

Herbicide Resistance - Be Prepared, Proactive and Punctual

Herbicide resistant weeds are not a new phenomenon in production agriculture. Herbicide resistance has a 40 plus year history with one of the earliest confirmed cases of resistance in 1970 to the triazine chemical family. Most recently resistance was confirmed in the HPPD site or mode of action group. Herbicides control weeds by targeting plant cells in a specific area of a plant. The characteristic that groups specific herbicides by target site is called mode of action, often abbreviated MOA. There can be numerous herbicide products available under various trade names that target the exact same mode of action site. Over reliance of any one mode of action and repeated use of that mode of action within one season and over years can create resistant biotypes. It is critical when preparing to battle herbicide resistance to understand mode of action and how to find the specific MOA on the herbicide label. Understanding this concept can help suppress or slow the development of resistance or maintain low levels of an existing resistant population.

Herbicide resistance management requires a proactive approach to controlling weeds. This proactive formula must include: residual chemistry both preemergence (PRE) and/



Palmer amaranth has resistance to glyphosate. Courtesy AgWebb.

or postemergence (POST); scouting fields early and often for emerging weeds; proper identification of emerging weeds especially when using POST, conventional chemistry; rotating mode of action groups; rotating crops when possible; POST application timing must target weed size between 1 and 3 inches tall; proper spray tip selection and water volume to provide adequate PRE and POST application coverage; effectively removing weed escapes prior to producing seed; and avoiding over use or misuse of any one herbicide. A program void of a proactive approach to managing weeds will result in loss of potential crop yield, even if resistance is not currently a factor in a particular field on your farm.

It was mentioned above but cannot be stressed enough that POST application timing is critical

regardless of chemistry being used in any program. This is not a new concept. Prior to the implementation of glyphosate resistant crops, the number one reason for POST application failures was waiting too long and weeds were too big. Weed science research over the years has consistently shown that the greatest yield loss attributed to weeds is during the first 3 weeks after crop emergence. Research also indicates that the maximum control potential is achieved when weeds are between 1 and 3 inches tall. When we speak specifically of Palmer pigweed and waterhemp, being punctual is critical. These weeds have an average growth rate of one inch per day. When we consider maximum control to end at 3 inches, applicators have on average a three day window to effectively control these weeds.

For more information on herbicide chemistry, mode of action groups, weed control ratings, and a host of other information to effectively prepare a proactive and punctual herbicide management program contact your local MU extension office and ask for Missouri Manual 171 "Pest Management Guide: Corn, Cotton, Grain Sorghum, Rice, Soybean, Winter Wheat" or find it on the web at <http://extension.missouri.edu/>.

Anthony Ohmes, Agronomy Specialist, University of Missouri Extension, Charleston, MO.

Vegetable Grafting - Cape County Extension Center

- Learn how to graft vegetables for disease prevention on May 2, 2011 at 6:30 p.m. in Jackson, MO.
- There is a \$15.00 registration fee. Call Donna Aufdenberg at 573-238-2420 to sign up.

Trimming Hooves of Goat and Sheep

A domesticated animal will need hooves trimmed every 3 - 4 months.

Goats and sheep need to have strong feet and legs to survive. Overgrown hooves can cause the animal pain and suffering and can lead to hoof diseases. Goats and sheep with overgrown hooves may not be able to move to where the forage or feed may be located.

Trimming hooves is also necessary to treat or prevent foot rot. Wild livestock keep their hooves in good shape by wearing the hooves off on the rough rocks. A domesticated animal must rely on its owner to keep its hooves in good condition and will need hooves trimmed every 3 - 4 months.



Various parts of the bottom of hoof: A) the heel regions of the foot, B) the toe region on a claw that has not been trimmed, C) the outside hoof wall, and D) a fresh sole after being trimmed.

When kids and lambs are born they have perfect feet. The line of the hoof is parallel to the hair line of the foot. When trimming the hooves of goats and sheep, try to keep this parallel line between hoof and hairline.

The hoof should also be trimmed so that it is flat and level on the bottom. On animals that have extremely overgrown hooves you might have to trim as best you can and do another trimming a few weeks later to get the proper result.

To trim a goat or sheep hoof, one

of the following tools is needed, a hoof nipper, a pocket knife, or a pair of pruning shears. (Use extreme caution when working with sharp tools.) A rasp will also be required to make a smooth finish on the hooves. Restrain the animal, and lift the first hoof to be trimmed. Always fold the leg with the natural movement of the joints of the leg. Clean out any dirt or manure first so you can see what you are trimming and to reduce the wear on your cutters. Using the tool of your choice slowly remove pieces of the overgrown hoof. Use small cuts to avoid cutting too deep. When you see pink on the hoof, STOP, if you cut any farther the animal will bleed. Trim the entire hoof that has grown down from the sides and folded over as well as the heel and dew claws if needed.

If a good job has been done, the hoof will be flat and level. Use a hoof rasp to make a smooth finish on the hooves. If the animal should bleed, you will need to wash the hoof off, and soak the hoof in hydrogen peroxide, or any other disinfecting solution.

Keeping hooves as clean as possible and providing proper nutrition as well as regular hoof trimming will go a long ways in maintaining proper foot health.

Some material taken from an article written by Tim McKinney, 4-H Extension Specialist with Langston University - Oklahoma

Kendra Graham, Livestock Specialist, University of Missouri Extension, Greenville, MO.

Picture from C322 Hoof Trimming at www.infovets.com.

USDA Value Added Producers Grant



Do you or a group of producers have a value-added agriculture idea or concept that needs exploring? If so, the USDA-Value Added Producers Grants (VAPG) may be something worth considering. VAPG grants are awarded as either working capital grants or planning grants.

Working capital grants are for an established agriculture business that is expanding into a value-added agriculture enterprise. For example a blueberry processing cooperative, may be expanding into blueberry jam, and would need funds to market this product. The VAPG can be used for this marketing activity.

The second type of grant is the planning grants. Planning grants can be used for feasibility studies, business plans, attorney fees, etc. to determine if an enterprise is feasible, and then to develop the enterprise. I have written two separate planning grants that were funded through USDA-VAPG. To receive a VAPG grant, the applicant or applicants must produce the agriculture commodity and the project must entail a value-added agriculture product. The agriculture commodity must meet

one of the five value added methodologies:

- Has undergone a change in physical state.
- Was produced in a manner that enhances the value of the agriculture commodity.
- Is physically segregated in a manner that results in the enhancement of the value-added agriculture commodity.
- Is a source of farm or ranch based renewable energy, including E-85 fuel.
- Is aggregated and marketed as a locally produced food product

The last one “is aggregated and marketed as a locally produced food product” opens up opportunities for Southeast Missouri farmers, especially those selling their products into the local food market.

There are misconceptions about grants – in coffee shop talk, there is “all of this free money out there, just for the taking.” In my experience, having been involved in over 50 different grants and initiatives – this is not true. For federal and state grants, there is a time consuming application

process, there is a review and then upon reward, there are established criteria for receipt of the funds. The VAPG grants are competitive, so a good application is paramount. For a VAPG grant, it usually takes me about a week to write it.

VAPG grant applications are only accepted under a specific timeline, established annually by USDA. The VAPG request for proposals (RFP) has not been released for 2011. However, there was no RFP and no awards in 2010. From my contacts, the 2010 funding will be rolled into the 2011 funding. Therefore, there should be additional funds available for 2011.

If you or preferably a group of farmers have an idea for a value added agriculture enterprise, and would like to pursue a USDA-VAPG grant, please contact me, Van Ayers at the Stoddard County Extension Office. We will set up a meeting, and discuss your venture, and the process for applying and receiving the funds.

Van Ayers, Ag and Rural Development Specialist, University of Missouri Extension, Dexter, MO.

Tree Identification - Perryville Seminar on May 6

Learn tree identification of native and non-native woody species from Mike Keeley on May 6, 2011 from 4:00 to 6:00 p.m. beginning in front of the church at the Seminary in Perryville, MO. There is a \$10.00 registration fee. Call Donna Aufdenberg at 573-238-2420 to sign up.

Corn Planting Decisions

**On average,
corn planted on
May 10 has a
potential yield
decrease of 10%.**



http://plantsci.missouri.edu/cornx/cornfacts/corn_heat_units.pdf

Due to weather much of the corn planting has been delayed. One concern that might arise is when is the latest corn can be planted. This depends. Corn development and yield potential are not so much a function of planting date but how environmental conditions and nutrient availability influence development after planting. The reason behind planting windows or dates is trying to maximize growing degree days, which leads to physiological maturity, when environmental conditions are generally more favorable. Ideally you want enough days between planting and the hottest and/or driest part of the season so pollen shed and silk emergence will be synchronized. Any stress including heat just prior to and at VT (vegetative tasseling) will cause delayed silk emergence, therefore causing a reduction in kernel fill.

The yield penalty for delayed planting is variable from year to year, variety to variety, location to location. Long-term studies can give us averages which can help plan decisions such as planting corn versus beans or marketing a potentially shorter crop. Studies out of the Delta Center have shown that late planted corn has a gradual reduction in yield potential as planting progresses further into May. On average, corn planted on May 10 has a potential yield

decrease of 10%. After that date yield potential continues to decline at a more rapid pace. University of Kentucky data would agree with this and indicate an average decline of 1% to 2% following an early May planting (<http://graincrops.blogspot.com/2009/05/corn-planting-date-effect-on-yields.html>).

On average Southeast Missouri accumulates enough growing degree days for full season varieties to reach maturity before a frost, therefore concerns about switching varieties based on maturity date should not be a concern going into May.

Late planting generally opens the crop up to more insect pressure, such as corn borer and/or disease such as gray leaf spot. Consider varieties that have resistance traits or increase the level of scouting in susceptible fields. The decision to continue planting is ultimately up to the producer.

For more information on corn planting decisions contact your local MU Extension office and ask for the Corn Facts publication by Dr. Bill Wiebold "Growing Degree Days and Corn Maturity" or find at the following link: http://plantsci.missouri.edu/cornx/cornfacts/corn_heat_units.pdf.

Anthony Ohmes, Agronomy Specialist, University of Missouri Extension, Charleston, MO.

Use MELCAST as a Guide in Melons

In 2010 several watermelon growers throughout Missouri, including the southeast area, tried a disease forecast system to help determine when to spray to prevent Anthracnose, Gummy Stem Blight and Alternaria Leaf Blight on melons. Those who tried it believe the system gave them greater confidence in deciding when to spray and may have eliminated one spray from their schedule, saving money for their farm operation.

The MELCAST system was developed at Purdue University and has been in use for 11 years in Indiana. For melon growers living within a 20 to 25 mile radius of a weather reporting location, data can be retrieved, to help determine when to spray.

The system relies on weather data submitted from weather stations. In response to requests during the watermelon meeting in December, two additional locations have been added to the southeast area of Missouri. In addition to the Hornersville

location at Latitude 35.9978; Longitude -90.1592 there will now be locations in Clarkton (Latitude 36.4911; Longitude -89.9627) and Kennett (Latitude 36.2477; Longitude -90.0903).

Growers can either access the system online at <http://btny.agriculture.purdue.edu/melcast/> or call the access number at 800-939-1604 to utilize the data collected through the system.

Growers access the system on the day they spray melons to retrieve the EFI (Environmental Favorability Index) number. The numbers will be different for watermelon and for muskmelon. A value of 35 is added to the EFI for watermelon and a value of 20 is added to the EFI for muskmelon in order to determine the next spray day. For example, if the EFI was 22 on the day the grower sprayed watermelon, May 3, then the grower would spray again when the EFI reads 57 (see table at right). This calculation is obtained by adding

22 (the number shown on the day of spraying) and 35 (the determining value for watermelon) together. Access the MELCAST system on the day of the next spray application to obtain the EFI for that day and recalculate for the next application.

If overhead irrigation is applied or if it rains then 2 additional EFI units are added for each day that vines received overhead water. Spray when the EFI threshold is reached or every 14 days, whichever happens first. For more information go online at MELCAST.info or call the extension office at 573-686-8064.

Date	Muskmelon EFI	Watermelon EFI
12 May	35	54
13 May	38	57
14 May	39	58
15 May	39	58

These locations are currently offered in cooperation with Lincoln University through a grant that pays the fee for the host location in Missouri. Take advantage of this free reference opportunity that may save time and supplies while it gives you added peace-of-mind.

Sarah Denkler, Horticulture Specialist, University of Missouri Extension, Poplar Bluff, MO.

USDA National Farmer Market Directory

The USDA Marketing Service has opened the update process for the National Farmers Market Directory. If you are a market manager, update or add your listing by going to www.usdadirectoryupdate.com to be included in the directory which counts, lists and maps the country's farmer markets. The count stands at 6132 markets as of April 2011.

Missouri Ag News is a publication of the University of Missouri Extension, compiled by Agriculture Specialists in the Southeast Region of Missouri. Contributions to this publication are made by:

Donna Aufdenberg - Horticulture

aufdenbergd@missouri.edu 573-238-2420

Van Ayers - Ag and Rural Development

ayersv@missouri.edu 573-568-3344

Kyle Cunningham - Forestry / Business

cunninghamk@missouri.edu 573-783-3303

Sarah Denkler - Horticulture

denklers@missouri.edu 573-686-8064

Kendra Graham - Livestock

grahamkk@missouri.edu 573-224-5600 x8

UNIVERSITY OF MISSOURI
Extension

Roger Eakins - Livestock

eakinsr@missouri.edu 573-243-3581

David Guethle - Agronomy (Rice)

guethled@missouri.edu 573-568-3344

Mike Milam - Agronomy (Cotton)

milamm@missouri.edu 573-888-4722

Anthony Ohmes - Agronomy (Corn)

ohmesa@missouri.edu 573-683-6129

David Reinbott - Ag Business

reinbottd@missouri.edu 573-545-3516

Frank Wideman - Ag Engineering

widemanf@missouri.edu 573-547-4504

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10 Week Program
Tuesday's from 6 p.m.-9p.m.
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For information contact: Donna Aufdenberg at 573-238-2420
Registration Deadline: June 3, 2011 Registration Fee: \$225 before a \$100 scholarship.

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