MISSISSIPPI STATE UNIVERSITY™ EXTENSION

Lee Links

LEE COUNTY MAY/JUNE 2025

IN THIS ISSUE:

On the Mow Again

I can't wait to get on the mower again...

Mowing is necessary for a quality turfgrass. Mow frequently and at the proper height. The frequency and height of cut depend on the type of turfgrass, fertilization program, and the amount of rainfall.

The frequency of mowing depends on the growth rate of the turfgrass. The best rule of thumb is to mow enough that you never remove more than one-third of the leaf area per mowing. A common mistake is to allow the turf to become overgrown before mowing; this stresses the grass by removing too much of the foliage at one time.

When you mow turfgrass properly, it is not necessary to remove clippings for the health of the lawn. The only time you need to remove clippings for the grass's sake is when they are so heavy that the uncut grass is not visible; then remove the clippings to allow the sun to hit the grass. Clippings are an excellent source of slow-release nutrients to the turf. If you remove clippings for aesthetic purposes, consider placing them in a compost pile rather than the trash.

Recommended cutting heights for some popular grasses are:

Bermuda 0.5"–1.5" Centipede 1.5"–2"

St. Augustine 2.5"–3" Zoysia 1"–1.5"

More tips and recommendations are online at: http://extension.msstate.edu/publications/establish-and-manage-your-home-lawn or pickup Extension Publication 1322, "Establish and Manage Your Home Lawn," at our office.

Reviewed by Jay McCurdy, PhD, Associate Professor, Plant and Soil Sciences. Revised by Wayne Wells, PhD, Extension Professor/Turfgrass Specialist (retired), with pesticide updates by Blake Layton, PhD, Extension Entomologist; Alan Henn, PhD, Extension Plant Pathologist; and James Taylor, former Weed Science Research Associate. Originally prepared by David Nagel, PhD, Extension Professor (retired), Plant and Soil Sciences; Mukund V. Patel, former Extension Plant Pathologist; and John D. Byrd Jr., PhD, Extension/Research Professor, Plant and Soil Sciences. This publication is a revision of previous editions. The contributions of James H. Perry, Hiram Palmertree, and Donald J. Blasingame are acknowledged.

5338 CLIFF GOOKIN BLVD., TUPELO, MS 38801

CATTLE MARKET NEWS

Investing in Herd Expansion: Time Value of Money and Opportunity Cost

By: James Mitchell and Ryan Loy, University of Arkansas

The decision to rebuild the U.S. cowherd based on profitability—not just current prices. According to the Livestock Marketing Information Center (LMIC), cow-calf returns in 2023 and 2024 are estimated at $252 and $443 per cow, respectively. At the same time, a common concern among producers is the cost of heifers. For example, USDA-AMS data show 2024 bred heifer prices from the Missouri Show-Me-Select sales averaging over $3,000 per head, a 26 percent increase compared to 2023. Before investing in replacement heifers, whether by buying or raising your own, producers should evaluate the investment over the heifer's entire productive life on the operation.

Whether you're spending revenue from calf sales or borrowing, the dollars used today to grow the herd have a cost. Buying bred heifers at $3,000 per head or retaining heifers valued at $1,500/head ties up capital that could be used elsewhere in your business. The key question is: will the future stream of returns from those heifers over their productive life exceed the value of that initial investment today? To answer that, producers can use net present value (NPV), a tool that accounts for both profitability and the time value of money.

To calculate NPV, start by estimating all future revenues from the heifer, primarily from calf sales over her productive life, include her cull value in the last year, and subtract expected annual cow costs to derive future net returns. Next, discount those net returns into today's dollars using a rate comparable to your loan interest rate or expected return on investment. An 8 percent discount rate is a reasonable starting point. Finally, subtract your initial investment, whether that's the purchase price or the value of a retained heifer, from the total value of your discounted net returns. A positive NPV suggests the investment will add value to your operation. A negative NPV suggests it does not generate a sufficient return and would not be worth undertaking.

For example, assume you purchase a bred heifer for $3,000 and annual cow costs are $1,000 per year, including pasture, feed, veterinary care, and labor. You expect her to wean a 525-lb calf per year for five years, with calves selling for $295/cwt (or $1,549 per calf). Net returns are $549 per year ($1,549 - $1,000). At the end of year five, you expect to sell her for $1,200, based on 1,200 pounds at $1.00 per pound. To calculate net present value (NPV), we discount each year's net return and the cull value back to today's dollars using an 8 percent discount rate:

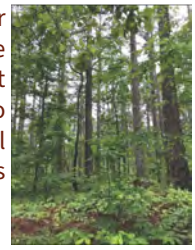
- Year 0 (Initial Investment): $\$3{,}000 \div (1 + 0.08)^0 = \$3{,}000$
- Year 1: $\$549 \div (1 + 0.08)^1 = \$508.33$
- Year 2: $\$549 \div (1 + 0.08)^2 = \$470.68$
- Year 3: $\$549 \div (1 + 0.08)^3 = \$435.82$
- Year 4: $\$549 \div (1 + 0.08)^4 = \$403.54$
- Year 5: $\$549 \div (1 + 0.08)^5 = \$373.65$
- Year 5 cull value: $\$1{,}200 \div (1 + 0.08)^5 = \$815.77$

The total present value is $508.33 + $470.68 + $435.82 + $403.54 + $373.65 + $816.88 = $3,007.79 and the net present value is $3,0079 - $3,000 = $7.79. In this example, the heifer generates a positive NPV over her productive life. However, this NPV is derived under a constant revenue and cost assumption; any unexpected cost or revenue changes can greatly impact the feasibility of this investment due to the small, but positive, NPV value.

There is no single "correct" set of assumptions for this type of analysis. Producers should test a range of scenarios by adjusting calf prices, input costs, reproductive performance, the discount rate, and cull value to reflect their operation. If the investment only appears viable under highly optimistic assumptions, such as a cow producing eight or nine consecutive weaned calves without any setbacks, that should raise concern. The likelihood of that happening is low. If the investment requires everything to go exactly as planned over an extended period just to break even, it may warrant reconsideration. It's better to identify those risks through planning than to be surprised by them later.

Attend our next meeting on May 15th at 6 PM when Josh Maples, Associate Professor & Assistant Director of Agriculture Economics, Mississippi State University, will address current cattle market trends. Be sure to call 662-841-9000 by Tuesday, May 13th, to reserve your seat. <u>There will be no meetings the months of June, July, & August.</u>

FORESTRY NOTES



Two-aged mixed pine-hardwood stand. A younger hardwood component has been established in the understory of the older pine stand. Management can be used to recruit these hardwood stems into overstory positions through silvicultural manipulation favoring the more desirable species present. Photo by Brady Self.

Herbicide Options for Mixed Pine-Hardwood Management

By A. Brady Self, PhD, Extension Professor, Forestry

Forest ownership is often motivated by a variety of factors. While many landowners cite timber production as an important reason for owning forestland, many are also interested in enhancing recreational experiences or maintaining the family forest legacy.

While many ownership goals are at least somewhat compatible with traditional forms of intensive timber management, balancing multiple objectives can sometimes be difficult. Consequently, a growing number of forest landowners are interested in exploring alternative forms of pine forest management. Although pine plantation management has been historically employed to maximize economic returns, managing mixed pine-hardwood stands may serve some landowners with multiple management goals.

A mixed pine-hardwood stand is a forest stand comprised of a species mixture where both pine and hardwood species are represented as significant components of the overall stand. Due to their greater functional and structural diversity, mixed pine-hardwood stands have several inherent advantages compared to pine plantations. For example, mixed pinehardwood stands can provide higher quality habitat for wildlife because they produce more desirable mast and have greater structural diversity.

Mixed pine-hardwood stands are also valued for timber production, as both hardwood and pine sawtimber can be produced within the same stand. Growing a diversity of sawtimber products may be desirable to landowners concerned with economic and environmental risks.

An additional benefit of mixed pine-hardwood stand management is that these stands can be attained through natural regeneration. In Mississippi, mixed pine-hardwood stands typically develop in a two-aged structure, with stems of younger hardwood species establishing beneath an older pine overstory. Another scenario where these stands might be established is as an even-aged stand following some form of natural disturbance (e.g., hurricanes, tornadoes, or insect outbreaks).

While obtaining a mixed pine-hardwood stand under some circumstances may be relatively easy, it is important to recognize that obtaining and maintaining desirable trees in the specified species mixture may require silvicultural intervention. This is particularly true if maintaining timber value is an important management objective, as less valuable shade-tolerant species will eventually gain dominance in the absence of disturbance.

Forest landowners have access to several tools for controlling species composition in these stands. However, in many situations, the cheapest, quickest, and most effective option for obtaining and maintaining a desirable pine-hardwood mixture may be using herbicides.

This publication describes herbicide options available to forest managers interested in the establishment and maintenance of mixed pine-hardwood stands. Careful attention is warranted when considering application rates and timing because forest herbicides can damage these stands if applied improperly. While herbicidal treatment of pine stands is relatively straightforward, achieving competition control in pine-hardwood mixtures is a more complicated process compared to pure pine stands.

This publication is not intended to be an all-encompassing listing of treatment options. We have reviewed only the more commonly used product names, rates, and application timings with proven worth in both operational forest herbicide work and research. As with any application of forest herbicides, you should consult your local MSU Extension agent, Extension forestry specialist, or consulting forester before using the information found in this publication if you are not familiar with the products detailed and their effects in mixed pine-hardwood stands.

For treatment options & more information, continue reading this article is on the extension website at:
https://extension.msstate.edu/publications/herbicide-options-for-mixed-pine-hardwood-management

Join us for the next Forestry meeting, Monday, May 5th, at 6 PM.

We will have James Shannon, Extension Specialist, North MS Research & Extension Center, speaking on Land Management. Call 662-841-9000 by Friday, May 2nd, to reserve your seat. There will be no meetings the months of June & July.

What's NEWS?

High 5 for 4-H launches on May 4th!

You will have the opportunity to help the Lee County 4-Hers beginning **May 4th**. You can give your highest $5, be it $5, $10, $20, or as high as you choose. All funds raised will help supply scholarships, registration fees, & other costs incurred by 4-Hers competing on district, state, & national levels.

Either scan the QR code, or follow this link: **https://www.zeffy.com/EN-us/donation-form/high-five-for-4-h** Continue to check our Facebook page for more information on how to make a difference in a 4-Her's path to success. **https://www.facebook.com/leecountyextensionms**

Learn to Grow Beautiful Roses

Wednesday, May 7th, 10-11 AM
North MS Research & Extension Center
5421 HWY 145 S, Verona, MS 38879
662-566-2201

Tour the formal rose area in the Magnolia Botanical Gardens. Learn how to select, plant, & maintain to have beautiful flowers all season long! See hybrid tea, floribunda, grandiflora, landscape, mini, & climbing roses.

No cost & no preregistration required.

2025 Lee County Master Gardeners' Celebration of Gardens

Join us Saturday, May 10th, 9-11 AM, at S Spring Street Gardens in Tupelo. This is a fun, interactive, & educational event designed for all ages to celebrate the wonders of nature! Activities include a butterfly release, scavenger hunt, crafts, & miniature gardens. Exhibitors will have roses, succulents, herbs, mosses, house plants, potted plants, and more.

For more information or to participate as an exhibitor contact Donna Lee at 870-329-0750.

Backyard Bees

Tuesday, May 20th, 6 PM
Lee County Extension Office

Extension Agent Randall Nevins covers the basics to start your own hive & help our pollinating friends! Call 662-841-9000 to reserve your spot.

Programs hosted by the Lee County Extension Office:

Bloom at Noon *will host on* ***May 13th*** *our own Cassandra Hainsworth, Family, Health, & Wellness Agent. She will be preparing salsa & include an introduction to preserving.*

On ***June 10th****, Master Gardener Kathleen Greene will present "Butterflies, Host Plants, & Maypops".*

Follow the Lee County Extension Facebook page: ***https://www.facebook.com/leecountyextensionms*** *for more information. Call ahead to reserve your seat!*

Lee County Cattlemen Association connects local cattlemen and provides access to learning & knowledge for the betterment of their cattle herds, from farm to plate. The next meeting is **Thursday, May 15th, at 6 PM**. Call by the Tuesday, May 13th, before the meeting to reserve your seat.

Lee County Forestry Association brings together local land owners interested in proper land & timber management. The next meeting will be **Monday, May 5th at 6 PM.** You will need to call by Friday, May 2nd, to reserve your seat.

We also offer many opportunities for youth ages 5-18 through our 4-H programs.

Please call us at 662-841-9000 for more information or to reserve your seat at our next program!

05 MAY 2025

MISSISSIPPI STATE UNIVERSITY EXTENSION

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
27	28	29	30	01	02	03
04 High 5 For 4-H Fundraiser	05 Forestry 6 PM Lee Co. Ext. Office	06 Foodie 4-H 10-18 5 PM Lee Co. Ext. Office - Back Kitchen	07 Rose Workshop 10-11AM at NMSREC Verona, MS Crochet Club 10-18 4:30 PM Lee Co. Ext. Office	08 Expressive Arts 8-18 3:30 PM Lee Co. Ext. Office	09	10 Lee Co Master Gardeners' Celebration of Gardens 9-11 AM S Spring Street Tupelo
11	12 Cloverbuds 5-7 & Junior Leaf 8-13 4:30 PM Rabbit Club 8-18 6 PM Lee Co. Ext. Office	13 Bloom at Noon Clodhoppers 14-18 5 PM Aggies Club 8-18 6 PM Lee Co. Ext. Office	14	15 Cattlemen Meeting 6 PM Lee Co. Ext. Office	16	17
18	19 Ropes & Reins 8-18 6:30 PM Lee Co. Ext. Office	20 Sewing 10-18 3:30 PM Backyard Bees 6 PM Lee Co. Ext. Office	21	22 Junior Master Gardener 8-13 4 PM Lee Co. Ext. Office	23	24
25	26 **OFFICE CLOSED** **MEMORIAL DAY**	27	28 4-H Club Congress at MSU Begins	29 4-H Club Congress at MSU	30 4-H Club Congress at MSU Ends	31

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MISSISSIPPI STATE UNIVERSITY EXTENSION

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
01	02	03	04 Crochet Club 10-18 4:30 PM Lee Co. Ext. Office	05 NE 4-H District Horse Show at Houston, MS	06 NE 4-H District Horse Show at MSU Horse Park	07
08	09 Rabbit Club 8-18 6 PM Lee Co. Ext. Office Agronomy Camp Registration Deadline	10 Bloom at Noon Clodhoppers 14-18 4 PM Aggies 8-18 6 PM Lee Co. Ext. Office	11	12 Agronomy Camp 9 AM NMSREC Verona Expressive Arts 8-18 3:30 PM Lee Co. Ext. Office	13	14
15	16 Sewing 10-18 3:30 PM Ropes & Reins 8-18 6:30 PM Lee Co. Ext. Office	17	18 State 4-H Horse Show Begins Jackson, MS	19 State 4-H Horse Show Jackson, MS	20 State 4-H Horse Show, Jackson, MS	21 State 4-H Horse Show Ends Jackson, MS
22	23 Senior 4-H Record Books Due in Lee County Office	24 STEAM Day at MSU	25	26 Junior Master Gardener 8-13 4 PM Lee Co. Ext. Office	27 NE District 4-H Project Achievement Day at NECC	28
29	30	01	02	03	04 **OFFICE CLOSED**	05

Lee County Extension Office Staff:

Warner Creekmore
warner.creekmore@msstate.edu

Jan Garrett
jan.garrett@msstate.edu

Cassandra Hainsworth
cassandra.hainsworth@msstate.edu

Susan McGukin
susan.mcgukin@msstate.edu

Rosanne Brown
rosanne.brown@msstate.edu

Contact Us:

MISSISSIPPI STATE UNIVERSITY™ EXTENSION

662-841-9000

5338 Cliff Gookin Blvd.
Tupelo, MS 38801

www.extension.msstate.edu

https://www.facebook.com/leecountyextensionms

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EXTENSION
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MISSISSIPPI STATE, MISSISSIPPI 39762-5446
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