CLARK COUNTY AG & NATURAL RESOURCES NEWSLETTER

Clark County Extension Service • 1400 Fortune Drive • Winchester, KY 40391 • 859-744-4682 • clark.ext@uky.edu • http://clark.ca.uky.edu/



A Word from the Agent ...

Cooperative Extension Service

March 2024

It seems like spring might show up a little earlier this year, and I'm extremely happy for the warmer weather. Spring has always been my favorite season, and always will be.

The warmer weather means that you should be making plans to start working

your fields. Just a reminder, most weeds need to be identified early in order for proper control. The Clark County Extension Office will be glad to help in the identification and control of weeds. Also, be sure to send in your soil tests. A soil test is the only way to really know which nutrients your fields may need.

As always, please feel free to contact the Clark County Extension Office (859-744-4682) with questions and setup farm visits in you may need one. Be safe!









Don't get behind on production this spring waiting on soil sample results, get your samples into the Extension Office early, so we can get your sample results back to you in a timely manner!

As always, soil sampling is a free service we offer our clientele here at the Clark County Extension Office. Current wait time on sample results is approximately two to three weeks.



Forage Management Tips for March

- Continue pasture renovation by no-tilling seeding legumes.
- Place small seed at 1/4 to 1/2 inch deep and check depth several times during planting; slow down for more precise seeding.
- Continue feeding hay until adequate forage exists in the pasture for grazing.
- Spring seeding of grasses should be done in early to mid-March (but fall is preferred)
- Begin smoothing and re-seeding hay feeding and heavy traffic areas.
- Graze pastures overseeded with clover to reduce competition from existing grasses.
 Pull off before grazing new clover plants.
- Provide free choice high-magnesium mineral to prevent grass tetany on lush spring growth.



Cooperative Extension Service

Agriculture and Natural Resources

MARTIN-GATTON COLLEGE OF AGRICULTURE, FOOD AND ENVIRONMENT

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Disabilities accommodated with prior notification

Family and Consumer Sciences 4-H Youth Development Community and Economic Development



Round-baled silage has emerged as a preferred method for preserving high-quality forage in Kentucky, offering numerous advantages for livestock feeding. However, this technique presents unique challenges. Notably, achieving the ideal moisture content (MC) of 40-60% and ensuring the forage is adequately oxygenfree when wrapped in plastic.

A fermentation report helps producers evaluate the quality of their baleage and assess potential feeding risks. Poorly fermented baleage can lead to clostridrial bacterial growth, and even botulism.

Here are some ways to optimize your baleage quality:

- pH and its Importance: Ensiling lowers bale pH through the production of lactic acid. A pH of 5.0 or lower inhibits clostridial bacteria growth. The target pH varies with forage type and moisture content. For example, legume baleage is stable at a higher pH than grasses.
- 2) Moisture Content and Dry Matter: Achieving a MC within the 40-60% range is essential for effective fermentation. The sweet spot for fermentation is between 50-60% MC, fostering robust lactic acid production and maintaining a pH below 5.0, thereby inhibiting harmful clostridial bacteria. Baleage with MC lower than 50% may have restricted lactic acid production and elevated pH levels, potentially affecting fermentation. However, bales kept anaerobic by at least six layers of UV-resistant plastic can remain valuable feed, even if not fully fermented.
- 3) Crude Protein: The forage's crude protein content, determined by its nitrogen content multiplied by 6.25, is a key indicator of fermentation potential. Early-cut forages, which usually have higher crude protein levels, also possess more fermentable carbohydrates, crucial for a successful fermentation process.

- 4) Lactic and Acetic Acids: Lactic acid, the primary product of anaerobic fermentation, is pivotal in reducing pH and stabilizing baleage. Desired lactic acid levels are above 3% on a dry matter basis. However, levels often fall below this target, especially when MC is under 50%. These lower levels are not overly concerning if the bales are wrapped in plastic which remains intact until feeding. Acetic acid, vital for preventing yeast and mold growth once bales are exposed to oxygen, should ideally be between 1-4% (DM basis). Excessive acetic acid may signal issues like high moisture content or clostridial fermentations.
- 5) **Propionic and Butyric Acids:** These acids should be minimized, with propionic acid below 1% and butyric acid under 0.5% (DM basis). Elevated levels indicate possible fermentation problems, such as insufficient sugars for fermentation or secondary fermentation by clostridial bacteria, potentially affecting livestock health.
- 6) Ammonia and Ash Content: Ammonia, measured as a percentage of total nitrogen or as a crude protein equivalent, indicates the extent of clostridial fermentation. Ammonia-N levels exceeding 15% suggest significant clostridial activity. Ash content can reveal soil contamination; levels above 11% often mean dirt intrusion, a primary pathway for clostridial bacteria into baleage.
- 7) **Physical Observation:** Evaluating baleage's physical attributes, such as odor, bale shape and effluent presence, is also crucial. A pleasant smell, the absence of seepage and intact plastic wrapping are good indicators of successful fermentation.

For more information on practical solutions for forage storage, contact the Clark County Extension Office at 859-744-4682.

Cooperative Extension Service

At The Clark County Extension Office 1400 Fortune Dr. Winchester, KY

> MARCH 14TH, 2024 AT 6:30PM Livestock Basics

MARCH 21ST, 2024 AT 6:30PM Vegetable/Fruit Production and Preservation

MARCH 28TH, 2024 AT 6:30PM Farm Financials

COME LEARN THE BASICS OF STARTING YOUR OWN FARM FROM LIVESTOCK, VEGETABLES, FRUITS, FOOD PRESERVATION, AND FARM SETUP

REGISTER BY CALLING: (859) 744-4682

MORE CONTACT INFO: levi.berg@uky.edu



Source: Forrest Wynne, Extension Aquacultur Specialist, Kentucky State University

Fishing is a wonderful warm-weather pastime many of us enjoy. At the extension office, we often receive calls in the spring and fall from landowners on how to properly stock recreational ponds with fish.

Pond owners can call farm supply stores during the spring and fall to find out when their live fish trucks may arrive. Fish are typically transported during cool weather to reduce handling stress. The fish are typically small and can be hauled short distances in large, water filled containers.

Kentucky Department of Fish and Wildlife Resources no longer stocks recreational ponds, but the department recommends the following fish species to establish a balanced fish population that will provide good pond fishing in about two years' time. Bluegill (not hybrid bluegill) and largemouth bass form a predator-prey relationship where the prolific spawning of bluegill provide enough food to support a largemouth bass population. Largemouth bass consume some of the bluegill and control their overpopulation. Two years after you stock a pond, you should have largemouth bass at least a foot long and bluegill at least 6 inches in length. You can catch these fish provided they are stocked and harvested in the proper numbers.

You can stock redear sunfish and channel catfish as supplemental species if desired. Fish stocking rates are listed:

- Stock 400 fingering bluegill (1 to 2 inches long) per acre in the fall*
- Stock 120 largemouth bass per acre in the spring.
- 50 channel catfish fingerlings may be stocked per acre in the fall if desired.
- *40% of the bluegill (160 fingerings) may be substituted with redear sunfish (shell crackers) if desired. Redear sunfish only spawn once a year and will not provide an adequate food source for bass if stocked without bluegill.

It's more difficult to maintain a balanced fish population in smaller ponds. You can be better off stocking ponds less than a half-acre in size with 50 -100 channel catfish fingerlings and fathead minnows for forage fish or feed them a commercial catfish feed instead.

It is important to stock only bluegill, largemouth bass, redear sunfish and channel catfish in ponds. You should not stock fish species such as crappie, hybrid sunfish, gizzard shad, golden shiners, bullhead catfish and yellow perch, as they may overpopulate small ponds. Ponds containing undesirable species often need to be drained or the entire fish population chemically eliminated and later restocked.

Restocking ponds that contain existing fish populations is challenging since fish fingerlings are typically small and easily consumed by larger fish. Buying large replacement fish may be expensive. Transferring fish from other ponds or lakes is not recommended, because it may introduce disease problems.

In time, many ponds may become overcrowded with small, stunted largemouth bass. Removing some of these small fish may correct the problem. However, these ponds may provide fewer but larger bluegill.

Ponds with overpopulated bluegill will produce many 2- to 3-inch long fish and often a few large largemouth bass that are hard to catch. You can add more largemouth bass to the pond to try to obtain a balanced population.

To maintain a proper balance among fish populations, a rule of thumb is to harvest 4 or 5 pounds of bluegill for every pound of largemouth bass removed.

More information on aquaculture topics is available at the Clark County Extension Office.





Wednesday, March 27 8:30 am to 4:00 pm (or as supplies last)

Clark County Conservation District (667 Tech Drive; Winchester, KY)

Tree Seedling Give-A-Way

The Clark County Conservation District will be holding its annual Tree Seedling Give-A-Way. The seedlings consist of:

- Pawpaw
- Shellbark Hickory
- Yellow– Poplar
- Eastern Redbud
- Rough leaf Dogwood
- White Pine
- Pin Oak
- Pecan
- Black Walnut
- Wild Plum

The seedlings will be given away free on a first come / first serve basis, with a limit of 15 per person. Please bring wet newspaper or cloth and a plastic bag to transport seedlings to ensure that the roots will stay moist.

Cow-Calf Profitability Conference

Cow-Calf Profitability Conferences are one day, intensive seminars focusing on key topics for beef producers. Conferences are funded by the Kentucky Agricultural Development Fund through the Kentucky Beef Network and delivered by UK Agricultural Economics' Kenny Burdine, Greg Halich and Jonathan Shepherd.

Thursday, March 14, 2024

9:00 am - 4:00 pm

Madison County Extension Office 230 Duncannon Lane Richmond, KY 40475

Call

859-623-4072

to **RSVP**

Doors open at

8:00 AM

Sponsored Lunch

provided by

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opics

Key Profit Drivers Managing Hay Production Costs

- Breeding Stock Depreciation
- Reducing Fertilizer Use
- Keys to Cow Herd Management
- Tax Management Strategies
- Bale Grazing & Stocking Rates











YAIP INFORMATION

Youth Agricultural Incentives Program (YAIP) is a cost share program designed for applicants that are enrolled in elementary, middle, high school or home school, that are at least 9 years of age at the time of the application, and are actively engaged in agriculture. Starting Monday, February 26, until Friday, March 15, during the hours of 8:30 am to 4:00 pm, Monday through Friday the applications will be available at:

Clark County Conservation District Office 667 Tech Drive; Winchester, KY (also available at <u>cccdky.com</u> under forms) For more information: Angie Embry: 859-744-2322

angela.embry@ky.nacdnet.net

YAIP INVESTMENT AREAS

- Agricultural Diversification
- Supervised Agriculture Experience
- Forage & Grain Improvement

- Showmanship
- Animal Production
- Country Ham Projects

Maximum local cost share is \$1,500.00 on a 50/50 matching basis upon the investment area completion. Submit education certification form, project invoices & proof of payment for cost share reimbursement. (NO cash receipts)

RECIPE

