

## FIRST YEAR MANAGEMENT OF TALL FESCUE KEY TO LONG STAND LIFE

The improved animal performance and economic benefits of replacing toxic tall fescue pastures with new non-toxic, novel endophyte-infected tall fescue varieties such as Pennington's Jesup MaxQ and Texoma MaxQ II are well documented. Replacing toxic fescue with these superior forages must be done properly to achieve maximum forage productivity and animal performance. When establishing new stands of tall fescue, proper first year management is critical to ensure a long and productive stand life. This article offers strategies producers can employ to help insure a good healthy start for newly established tall fescue plantings.

### Spring Planting

#### During Summer after Seeding

- Do not graze seedling pasture.
- Scout pasture for broadleaf weeds and if needed, apply an appropriate herbicide after fescue seedlings are fully tillered (4 leaves or more). Refer to pesticide product label for usage rate on seedling forages.
- If favorable growing conditions occur after planting, pastures may be lightly grazed when forage growth reaches 8 or more inches in height and plants are firmly anchored. Do not graze below a height of 4".
- Do not graze when soil is excessively wet and soft.

#### First Year Fall & Winter Management

- Apply fertilizer as recommended by a soil test.
- Do not graze until forage is 8 inches tall or taller and plants are firmly anchored.
- Flash graze for short periods (2-5 days). Do not graze lower than a 3 - 4" stubble height.
- Do not feed toxic hay on newly seeded pastures.
- To prevent hoof pugging damage, do not graze when soil is excessively wet and soft.
- Stockpiling of fescue forage is not recommended in the year of establishment due to potential suppression of tillering in young plants.

#### Spring Management Year-old Stand

- Apply nitrogen fertilizer just prior to the onset of rapid spring forage growth.
- Rotate graze for short periods (2-5 days) or harvest for hay at the early boot stage.
- Do not graze or clip lower than 3 - 4".

#### Summer Management Year-old Stand

- Rest fescue pasture during the summer months.
- If weather conditions are favorable for growth, forage may be used for light rotational grazing for short periods or harvested for hay. Leave 3 - 4" of forage growth after grazing or haying.

### Fall Planting

#### During Winter after Seeding

- Do not graze seedling pasture.
- Scout field for winter broadleaf weeds and if needed, apply an appropriate herbicide after fescue seedlings are fully tillered (4 leaves or more). Refer to pesticide product label for usage rates on seedling forages.

#### Spring Seedling Management

- Apply fertilizer as recommended by a soil test.
- Do not graze until forage is 8 inches tall or taller and plants are firmly anchored.
- Flash graze for short periods (2-5 days) or harvest for hay at the early boot stage.
- Do not graze or clip lower than 3 - 4".
- Do not feed toxic hay on newly seeded pastures.
- To prevent hoof pugging damage, do not graze when soil is excessively wet and soft.

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When establishing new stands of tall fescue, proper first year management is critical to ensure a long and productive stand life. Pictured is a 10 year-old stand of Jesup MaxQ in N. Central Ga.

## ESTABLISH A "BEE PASTURE" WITH DURANA WHITE CLOVER

The popularity of honey and its multiple natural food and health traits has led to a rapid rise in hobby beekeeping. This comes at the same time that the bee population has been declining due to harmful disease and insect pests along with the loss of natural bee habitat and food sources. Through research, apiculturists have discovered and are promoting best management concepts designed to promote the growth, health and sustainability of the bee population. One such practice being promoted is the establishment of so-called "bee pastures" containing blooming plants that provide the abundant pollen and nectar needed by bees to flourish and reproduce.

Plants most desirable for "bee pastures" are those that bloom profusely over a long period of time and possess self-sustaining, low maintenance traits. One such plant that many beekeepers have discovered meets this criteria is Pennington's **Durana** white clover.

Durana is a perennial legume that lasts multiple years (3-5 years or longer) under good management. It is heat and drought tolerant and competes well with grasses and weeds. It is self-sustaining only requiring an occasional clipping to remove old growth and to keep weed and grass competition in check. While these attributes set Durana apart as a superior clover, its profuse flowering trait is what makes it a highly desirable "bee pasture" plant. In research trials, Durana produced 38-44% more blooms than ladino white clover types and did so over a long period of time stretching from spring through late summer.

Durana seed are available in 5 lb. or 25 lb. bags. Seeding rate is 3-4 lbs./A when seeded into existing grass pastures or 5-8 lbs./A when seeded alone. For information on establishing, maintaining and using Durana, visit the [Pennington website](#).



Durana white clover's profuse, long season flowering trait makes it a highly desirable "bee pasture" plant.

## Economical, All-Purpose Forage Bermuda Blend New for 2016

Producers looking for a fast establishing, durable and economical forage bermuda will have a new option in 2016 with the introduction of Pennington's Tierra Verde seeded bermuda blend. Tierra Verde features two of Pennington's improved varieties of forage bermuda – Mohawk and Sahara II. Developed at Virginia Tech for improved cold tolerance, Mohawk combines outstanding forage yield with excellent quality. Its fine leaf trait gives superior forage palatability and digestibility. Like Mohawk, Sahara II produces top yields of quality forage. It develops into a thick sod resulting in excellent durability and wear tolerance. It is well suited for high traffic sites such as arenas, pasture lanes and other highly maintained areas. Mohawk and Sahara II both feature rapid emergence, quick cover and improved drought and heat tolerance traits. This unique, versatile blend contains 50% hulled and 50% unhulled seed thus allowing a wide planting window from spring to early fall. With the combined traits of Mohawk and Sahara II, Tierra Verde provides a productive and durable bermudagrass blend for pastures, hayfields and landscape areas. It is also well suited for vegetative erosion control plantings.



- **Top Yields**
- **Rapid Emergence/Quick Cover**
- **Dense Forming Sod**
- **Excellent Durability and Wear**
- **Wide Planting Window**
- **Superior Cold Tolerance**
- **Multiple Use - Hay, Grazing, Landscape & Vegetative Erosion Control**



# HAYING EFFECT ON ERGOT ALKALOID CONCENTRATIONS IN TOXIC TALL FESCUE

A question Pennington forage experts often get is “*Will the compounds contained in toxic tall fescue that cause fescue toxicity in livestock go away in stored hay?*” Thanks to a University of Missouri study, an answer can be provided and it’s “*some, but not all.*”

The 18 month study, led by University of Missouri Forage Agronomist Craig Roberts, found that the concentration of toxic compounds in tall fescue dropped by approximately one-third within the first 1-3 weeks after hay cutting with approximately one-half of the toxins gone by 6 months. After 6 months, Dr. Roberts found that the concentration of toxic compounds out to 18 months post-harvest decreased gradually, but at a much slower pace.

This study led the researchers to conclude that “*if producers are attempting to reduce the concentration of ergot alkaloids ingested by their livestock, they should be encouraged to delay feeding toxic tall fescue hay until at least 1 month after clipping. This would hold true for hay baled at both high and low moisture levels. In addition, producers should be advised that hay clipped from highly toxic pastures will still contain \*toxic amounts of ergovaline, even after 18 months of storage.*” (\*Editor’s note: above 250 ppb)

It should be noted that novel endophyte-infected tall fescue varieties such as Pennington’s **Jesup MaxQ** and **Texoma MaxQ II** produce no ergot alkaloid compounds that are detrimental to animal growth and health. They also produce forage yields equal to or higher than KY 31. If the goal is to maximize animal performance, producers should strongly consider replacing toxic fescue hay fields and/or pastures with MaxQ.



While research has shown ergot alkaloid concentrations drop some in stored tall fescue hay, hay clipped from highly toxic pastures will still contain toxic amounts of ergovaline even after 18 months of storage.

Information adapted from “Ergot Alkaloid Concentrations in Tall Fescue Hay during Production and Storage”, C.A. Roberts, et al., University of Missouri; Crop Science 49:1496-1502 (2009)

## Game Bird Mixture Added to Wildlife Product Line

*Attracts multiple game bird species including turkey, quail, dove and duck*

Pennington is adding a new product to their elite wildlife food plot line with the introduction of WINGMASTER Game Bird Mix. This new seed mixture attracts multiple game bird species including dove, quail, turkey and duck. Featuring a combination of proso, browntop and Japanese millets along with sunflower and grain sorghum, WINGMASTER Game Bird Mix offers staggered maturity times with some plants producing seed in as little as 60 days after emergence and others maturing 40-60 days later. The result is an abundant supply of seed that attracts and holds dove, quail and turkey for the entire season. In addition, WINGMASTER emerges quickly to establish a cover that attracts insects and provides excellent habitat – both of which are key components for turkey and quail reproduction and survival. When planted around water edges and in waterfowl impoundments, WINGMASTER provides excellent food and habitat for ducks.

WINGMASTER Game Bird Mix comes packaged in 40 pound bags for easy handling and use. Each bag covers one acre. Refer to planting instructions on the bag for field preparation, planting dates, planting depth and fertilizer recommendations.



## Pennington Pasture Pointer

When harvesting hay, mowers should be adjusted to prevent mowing too close. Set mowers to leave 1.5 – 2” of stubble height for bermuda and 3” stubble height for fescue and orchardgrass. “Scalping” grass can cause severe plant injury and/or slow plant recovery and regrowth. This leads to higher plant mortality and increased competition from undesirable weeds and grasses.



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*Editors Note: With this issue of the Pennington Forage and Wildlife Newsletter, we begin a new "Ask the Expert" column featuring answers to questions Pennington forage experts receive from clientele throughout the country. Pennington forage specialist Al Hubbard answers this newsletter's featured question.*

### **What advice can you give to help ensure successful establishment and maintenance of my seeded bermuda pastures & hayfields?**

#### **Tip # 1- Planting seeded bermudagrass in fields with a history of weed problems.**

Competition from other grasses and weeds is the number one reason for seeded bermudagrass stand failure. Taking steps upfront to reduce this competition will increase ones chance of successful establishment. When planting in fields or paddocks with a history of weeds, don't get in a hurry to plant. For optimum germination and early seedling growth, wait to plant until soil temperature is consistently 65°F or higher at a depth of 4". Prepare the seedbed well in advance to allow the first flush of crabgrass and other weed and grass competition to emerge. Use a non-selective, non-residual herbicide such as glyphosate to kill this flush of weeds before planting seeded varieties of bermuda like

Cheyenne II or Mohawk or blends such as Tierra Verde. Once the bermuda emerges and becomes established, there are several herbicides that can be used to control many weed species.

#### **Tip # 2 Ensuring successful seeded bermudagrass stand establishment.**

After the bermuda germinates and begins to tiller (develop runners), apply 30-40 lbs nitrogen/A. Monitor broadleaf weed and summer annual grass emergence. If broadleaf weeds become troublesome, a low dose (1-1½ pts/A) of 2,4-D amine may be applied (with water and surfactant only) when the bermuda begins to develop runners. If broadleaf weeds become a problem before runners develop, mow the area as needed to reduce weed competition and shading of the seedling bermuda plants. Keep annual grasses and johnsongrass periodically mowed until the bermuda is well established. Do not graze or harvest for hay until the bermuda is 6-8" or more in height. Do not graze below a height of 2.5". If harvested for hay, leave at least 2.0" - 2.5" of stubble height. Allow the bermuda to obtain a minimum of 3-4" of re-growth prior to a killing frost.

#### **Tip # 3 – Keeping bermuda stands thick and productive.**

Take soil samples yearly to determine soil pH, phosphorus and potassium levels. To cut costs, farmers often apply ample amounts of nitrogen, but fail to maintain proper soil pH and adequate soil levels of phosphorus and potassium. This leads to poor yields, plant decline and thinning stands. According to forage specialists, for every ton of bermuda hay taken per acre, approximately 45 lbs. of nitrogen, 10 lbs. of phosphorus and 48 lbs. of potash per acre are removed with it. Potassium is of particular importance because it is a key component of cell wall structure giving the plant improved winter hardiness, disease resistance and summer drought stress recovery. Potassium also increases rhizome and stolon production which allows bermuda stands to remain thick and productive. When bermuda forage is harvested for hay, set the mower to leave at least 2" of stubble. Scalping bermuda leads to slow plant recovery, increased weed competition and a thinning stand.

For details on establishing Pennington's **Cheyenne II**, **Mohawk** and **Tierre Verde** seeded bermuda products, see the guide entitled *Successfully Establishing Bermudagrass* under the Tips & Guides section of the Agriculture Resources tab on the Pennington website [www.pennington.com](http://www.pennington.com).

## **FOLLOW PENNINGTON ON FACEBOOK AND REDESIGNED WEBSITE**

**D**ealers and customers wanting to stay abreast of the latest news and information about Pennington's products can easily do so by visiting the redesigned forage, wildlife & cover crop websites and/or following along on Pennington's forage and wildlife Facebook pages. Both sites have been recently refurbished with a new look and stocked with fresh news and information.

When visiting the Pennington website, click on the "**Discover Products**" tab to find the latest line-up of products available for forage, wildlife, cover crops, lawns, professional landscapes and more. Users can also scroll down and click on the "**Jump to Resources**" tab to find a number of guides, tips and other useful management information related to lawns, wildlife, pastures and hayfields.

Visitors to the Pennington wildlife and forage Facebook pages can obtain the latest news happenings and information about Pennington products as well as ask questions or share their own Pennington product story.