

When is the Latest I Can Graze/Harvest My Alfalfa or Orchardgrass in the Fall?

by Dr. John Fike, Virginia Extension Forage Specialist

“When is the latest I can graze/harvest my alfalfa or orchardgrass in fall?” Of course, the answer to that is quite simple; anyone who’s spent time talking with a university professor could figure that, “It depends!”

First, that question should be answered based on the plan for the field/stand in the coming season. If the field will continue as a hayfield or pasture in 2023, it’s important that the stand be nurtured this fall, which will affect management decisions.

If the field will be used for some other purpose, then management for stand longevity is no longer a worry and you can hay or graze in any time frame.

To overwinter, a healthy alfalfa stand relies on the proteins and carbohydrates (often called “root reserves”) that are stored in roots.

Following harvest in fall, alfalfa will rely on these stored nutrients for 7 to 10 days to develop new top growth, but the plant will continue building root reserves for another 4 to five weeks. Without a complete five- or six-week period of root replenishment, the plant will enter the winter in a weakened state and at greater risk of mortality.

Generally, one can cut at or soon after a killing freeze (a period with several hours of 23-24°F temperature) and have no negative effects on the stand because the freezing conditions encourage the plant to go dormant and root reserves are not spent on new growth.

Thus, if you know your typical killing frost date, you can generally consider 4 to 5 weeks before that time as the appropriate window for harvests during the growing season.

If plants are stressed by harvesting without sufficient time to regenerate reserves, they may still make it through the winter; however, they can still be prone to poor growth or death in spring if they break dormancy during a warm spell and then experience another deep freeze.

Orchardgrass is a little different than alfalfa in that the carbohydrates and proteins that sustain it over winter are stored in stem bases as well as roots.

Like alfalfa, orchardgrass needs about five weeks to replenish reserves in fall. Unlike alfalfa, close cutting will both reduce orchardgrass’ capacity for regrowth (by taking away leaf tissues) as well as some



of its stored nutrient supply—needed by the plant to overwinter.

Thus, keeping a higher stubble height is important for management. A 6-inch stubble height is a common recommendation.

One more note that is applicable to both species and important in an era of high fertility prices: If you desire to keep alfalfa or orchardgrass stands for use next year, be sure that your fields have adequate potassium.

Potassium plays important roles in helping these plants tolerate environmental stressors, including cold temperatures, and potassium is more likely to be low in hayfields if the forage is routinely being harvested and removed.

Working Alongside Farmers to Bring Back Our Grassland Birds

by Justin Proctor, Smithsonian’s Virginia Working Landscapes

Virginia farms have *always* been a place for birds. So much so that you might be hard-pressed to find a farmer that doesn’t have an anecdote about any number of our iconic bird species.

Most will be familiar with the sharp look and melodious song of the Eastern Meadowlark perched on a fencepost, the hauntingly beautiful face of a Barn Owl gliding over a hayfield at dusk, and the unmistakable—and highly sought after—“bob-white” call echoing from the back edge of a field.

Many farmers will also be familiar with other “barnyard favorites”, including Short-eared Owls, Northern Harriers, American Kestrels, Barn Swallows, Purple Martins, and Red-winged Blackbirds.

But when it comes to birds that can be found on our agricultural grasslands—hayfields, cattle pastures, fallow fields, and the like—well...that list goes on...Bobolinks, Grasshopper Sparrows, Savannah Sparrows, Field Sparrows, and on...Indigo Buntings, Yellow-breasted Chats, Horned Larks, Loggerhead Shrikes, and on... In fact, there are over 50 species of birds that rely on Virginia’s working grasslands for breeding, nesting, foraging, and refuge throughout the entire year.

And just as these species need grasslands, the grasslands need *them*. These birds offer priceless and irreplaceable ecosystem services that keep grasslands healthy and balanced, from insect and rodent control to seed dispersal and nutrient recycling.

However, the majority of grasslands in Virginia have, over time, been converted to “working landscapes,” and over the last century those landscapes have been worked harder and harder.

So much so that native grasslands have suffered the most intense impact by humans of any of North America’s terrestrial ecosystems.

This has unfortunately resulted in grassland birds experiencing a steeper decline than any other guild of birds, with some species seeing declines of more than 75% over the past fifty years.

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With the majority of remaining grasslands in Virginia currently held in private hands and under agricultural use, the onus for grassland conservation has fallen largely on landowners and agricultural producers.

Recognizing that balancing the needs of grassland bird conservation as well as the demands of working agricultural lands can be a complex conservation challenge, Smithsonian's Virginia Working Landscapes and the Piedmont Environmental Council came together to create a collaboration that could help create solutions—the Virginia Grassland Bird Initiative (VGBI)—and brought on American Farmland Trust and Quail Forever as lead partners.

The combined capacity and expertise of these organizations allows the initiative to offer landowners and producers a start to finish pathway for implementing a suite of win-win conservation practices tailored to their working landscapes.

VGBI Coordinator, Justin Proctor, explains the initiative's approach: "What we have created with these partnerships is the ability to conduct research on working lands that is locally relevant, addressing the needs of our community of landowners and producers, and then translate that research into tangible management practices. We are able to bridge what's referred to as the research-implementation gap, which means that we can take new information we learn and directly apply it to conservation action on farms."

Indeed, Virginia Working Landscapes (VWL) has spent more than a decade studying Virginia's plant, pollinator, and bird communities on working lands, trying to better understand the obstacles that our local plant and wildlife communities are facing.

Through this work, VWL has helped grow a vibrant community of landowners, producers, researchers, and citizen scientists working together to restore biodiversity—and in turn, greater ecosystem services and landscape resiliency—to working lands in Virginia.

The Virginia Grassland Bird Initiative uses this knowledge to better raise awareness about the plight of grassland birds, and identify science-based best management practices

that can simultaneously benefit grassland birds, landscape resiliency, and farmers.

"We are careful to make sure that we create a conservation plan for landowners and producers that can work for their production goals," says Justin. "The goal here is to find win-win compromises for grassland birds and agriculture, and the great news is that we are developing a handful of methods that work very well."

One such success story is the initiative's new in-house financial incentives program that pays farmers to adopt bird-friendly practices into their operation.

Eligible practices include either delayed spring haying or summer pasture stockpiling—both of which protect grassland birds and their young during the vulnerable nesting season.

VGBI's Co-coordinator, October Greenfield, oversees the incentives: "Delaying the first hay cutting in the spring until at least early July is a game-changer for allowing the bulk of our grassland birds to fledge at least one successful clutch of young, which quickly changes a hayfield from a population sink to a population source," explains October. "And while a delayed cut may not work for every farmer, it can work for many of them, especially in cases where producers aren't targeting high protein hay."

Meanwhile, summer pasture stockpiling involves rotating cattle off of select pastures in the early spring to allow a stockpile of grass to grow and be available for grazing in the summer, when hot temperatures normally reduce available forage.

"More and more evidence supports the positive impacts of rotational grazing—for cattle, soil health, and forage quality. Meanwhile, strategically stockpiling forage for the tough summer months means less dependency on needing to supplement cattle with hay. Excitingly, this practice works very well for grassland birds as well, as we are able to work with farmers to select stockpile fields that are conducive for their needs and also where nesting activity is most dense."

In its first pilot year (2022), the incentives program enrolled more than 1,800 acres into these bird-friendly best management practices. The 2023 incentives program



Eastern Meadowlarks are grassland birds that build their nests in hayfields and cattle pastures. Haying and grazing practices can be modified to allow these at-risk birds to successfully nest and fledge their young.

will be opening its enrollment soon. If you are interested in learning more, please visit vagrasslandbirds.org/incentives.

Agriculture covers more than 8 million acres in Virginia, roughly a third of the entire landscape. Such an extensive presence makes working landscapes a dominant "habitat" in our state. Therefore, the opportunity to make this habitat more productive for a diversity of wildlife, including the suite of grassland birds that fully depend upon it, is one that we should seize.

For more information on Smithsonian's Virginia Working Landscapes and the Virginia Grassland Bird Initiative, including their upcoming events, programming, and ways to get involved, don't hesitate to reach out:

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