



Ag Allies Grassland Bird Project

Somerset County Soil & Water Conservation District

LATER CUT HAY: GOOD FOR BIRDS, GOOD FOR HORSES

Bobolinks are an iconic sight and sound each spring in the fields and meadows of Maine. In addition to being a delight to see and hear, bobolinks and other grassland birds are true agricultural allies to central Maine farmers as these birds consume large quantities of both insect pests and weed seeds each growing season. Sadly, the population of these beneficial birds has been in a



Bobolink. Photo L. Suomi-Lecker

steady and precipitous decline since the 1960s. The bobolink appears on the North American Bird Conservation Initiative's State of the Birds 2016 **Watchlist** of bird species most in need of

conservation action (www.stateofthebirds.org). Here in Maine, according to Dr. Noah Perlut, Associate Professor and Department Chair, Department of Environmental Studies, University of New England, we are losing our bobolink population at a rate of more than 3% each year for the past 15 years.

The reason we have habitat for grassland birds at all is because of our agricultural landscape. Unfortunately, however, the hayfields that provide nesting habitat are typically cut at least once during the nesting timeframe (end of May – mid July). This results in total nestling mortality, a pattern that plays out across the state each summer.

Is there opportunity to make room for nesting grassland birds in our working agricultural landscape? **Yes!**

Though many believe that all livestock are created equal in nutritional needs, this misconception is no more true for livestock than it is for humans.

Just as a young Olympic athlete has higher caloric and nutritional needs than someone who leads a more sedentary life, the same is true for livestock. For example, the nutrient requirements for dairy cattle are vastly different than those of beef cattle. It is important to note that **not only is it not necessary for some livestock to have high protein/high digestible carbohydrate hay, it can actually be detrimental to the health and production of some.** This difference in nutritional requirements can provide a need and use for hay cut later in the season, which works hand in hand with supporting nesting grassland birds.



Dairy cows and other production animals may need high-protein, high-digestible hay. Photo J. Brockway 2019

Keeping in mind that individual animals are different, for ease of discussion, livestock can be roughly divided into two different categories:

Category 1: production/breeding/growing animals: These animals may need high protein, high digestible carbohydrate hay. (e.g. dairy cows need much higher protein diets than beef cows). High protein hay is harvested in the 'boot stage', before the grass seed heads appear, such as with an early first cut or a second or third cut. High-producing dairy cows must consume large amounts of forage, and high fiber forages limit milk production. However, even for animals such as dairy cows, there are times when rations might require some higher fiber forage.

Category 2: Dry cows/'pets'/ many horses/retired working or production animals:

These animals are often better off with higher fiber, more mature hay. All horses need fiber in their diet and some of it must be the form of long hay. Some horses, in fact, are vulnerable to metabolic conditions such as Equine Metabolic Syndrome and/ or insulin resistance (which can sometimes accompany Cushing's disease) and are healthier and less prone to conditions such as laminitis when fed hay that is low in digestible carbohydrates.

These horses do not need high protein, high carbohydrate hay and are actually better off being fed well-made later cut, first crop hay. (This hay should never be dusty or moldy.)



Many horses could be healthier when fed hay that is lower in carbohydrates. Photo L. Suomi-Lecker 2019

Livestock owners should note that this does not mean a reduction in the quality of forage, just a reduction in the protein and carbohydrate content. In addition, many non-working livestock such as pet goats or pet cattle, which are increasingly common in our state, are prone to obesity, especially when being fed high-digestible carbohydrate hay. Thus, nutritional requirements for this category fit well with a delayed cutting regime that benefits our grassland nesting birds.

Additionally, there are some possible opportunities to harvest some of both high-protein and high-fiber hay from the same fields. This can be done by simply delaying mowing on a field until the birds can fly, resulting in a high-fiber first crop and then taking a high-protein second cutting and even third. However, it should be noted that delaying the first crop may lead to an overall reduction in total yield for the season. An ongoing study in Vermont by Dr. Perlut indicates a second option may be available

when it's possible to take an early first cut before the end of May and then leave the field for 65 days. This allows the harvest of a high-protein first crop, and the 65-day delay allows time for regrowth and nesting activity before the second cut.

Understanding differing livestock nutritional requirements presents field managers with an opportunity to support the needs of both the farm and grassland birds. Fields with a history of grassland bird nesting would make excellent sites to target for high-fiber feed production. In this way, if we can match livestock needs with grassland bird nesting habitat, we can produce a truly win-win situation for farmers and wildlife.

Additionally, shifting some fields later in the cutting schedule benefits more than grassland birds. The longer grasses provide cover and food for many species, including pollinator species vital to food production and semi-aquatic turtles that may look for cover and forage in hay fields. Tall grass is also a refuge for deer to drop their fawns, and delayed mowing for bird nesting coincides nicely with the

AgAllies is Here to Help

Assistance is available for landowners and operators interested in adapting field management to meet multiple needs. Ag Allies works across the state, providing technical assistance and, in some cases, incentive payments to facilitate a transition in management techniques. For more information, contact Laura Suomi-Lecker, Technical Director, Somerset County Soil & Water Conservation District, at 207-474-8323 or email: laura.lecker@me.nacdnet.net

timing when most deer are using this refuge.

This fact sheet is intended to provide general information for livestock owners and hay producers. Nutritional value of the hay for a delayed first cut will depend on type of forages as well as soil fertility levels. For further information on forage grasses and forbs and soil fertility, contact your University of Maine Cooperative Extension agent. For specific nutritional needs of your livestock, check with your veterinarian. Technical information for this article was provided by Dr. Noah Perlut, University of New England; Dairy Specialist Rick Kersbergen, University of Maine Cooperative Extension; and Dr. Kelsey Hilton, DVM.