

# **Bird-Friendly Hay**

Bird-Friendly Hay is defined as hay that is harvested after the grassland bird breeding season is finished. In Wisconsin, this is usually after July 15th.

Bird-Friendly Hay has different characteristics than hay harvested on a conventional schedule. While not suitable for some uses, it can be utilized for dry dairy cows, for beef cows a portion of the year and for horses that aren't worked hard everyday.

## **Hay Farmers**

Do you own hay ground and want to take Bird-Friendly Hay to the next level by renewing your field? Jim Munsch, a Vernon County farmer producing grass-fed beef and aiming to support our native grassland birds has come up with and used a hay mix that optimizes later-harvest hay. Here is the system he has used over the last 10 years to produce Bird-Friendly Hay that fits into his cattle production system.

## **Jim's Recipe**

Jim has found that a mix of alfalfa and Meadow Bromegrass works very well.

For the alfalfa, he selects varieties that mature later and survive the winter well. That would typically be alfalfa that has a Winter Survival Index (WSI) of <2 (lower is better) and a Fall Dormancy (FD) of <4 (again lower is better). Alfalfa provides protein in the hay and fixes atmospheric nitrogen in the hay stand.

Meadow Bromegrass is preferred for the grass component because of a higher proportion of leaves than the more common Smooth Bromegrass. All Bromegrass is inherently very winter-hardy and spreads into a thick sod that holds soil well. As bromegrass matures it remains palatable.

Alfalfa will typically be in full bloom in mid-July. Meadow Bromegrass will be past flowering and have partially ripened seed heads at that time of year. When alfalfa and bromegrass are cut after mid-July to accommodate the fledging of grassland birds, they will be past peak protein content and have more hard-to-digest fiber compared to hay cut earlier in the year.

## **Feed Quality**

Jim's hay mix that combines later-maturing, winter-hardy alfalfa with Meadow Bromegrass produces a good quality feed. Hay of this mix type grown on his farm and cut on July 16<sup>th</sup>, 2020, tested out at 8% crude protein; 116 RFQ (Relative Feed Quality); and 60% TDN (Total Digestible Nutrients.)

For the beef farmer, this hay will be sufficient for beef cows in the second trimester of gestation. With a small amount of added crude protein it is sufficient for the last trimester as well.

For serious animal management a producer should send samples of all their hay to a lab for nutrient analysis each year.

## **Establishment**

Jim uses 12-15 lb./acre for alfalfa and 10-12 lb./acre for bromegrass. Sources for good seed are Welter Seed and Honey Co (<https://welterseed.com>) or Albert Lea Seed (<https://alseed.com>).

When planting, he uses a "nurse crop" such as oats and seeds oats, alfalfa and bromegrass all at the same time. The idea is that the oats will quickly germinate and have fast growth to protect the soil and the much smaller and less vigorous alfalfa and bromegrass seedlings.

The preferred way to plant is with a no-till drill. If you do not have large acreages you probably will find it unwise to invest in a no-till drill. Most companies selling seed have drills for rent and in most areas there are farmers who will rent these machines or do the seeding on a custom basis.

If a no-till drill is unavailable you can use conventional style grain drill. The only drawback is that without a special attachment for the bulky and light bromegrass seed it is a bit of a challenge to get good germination. The way this is typically handled is to put brome in with the oats seed and put alfalfa in the "grass" chamber. The challenge is that oats are seeded 1/2 – 1" deep while brome should be seeded at 1/4". You are relying on the variability of depth to establish both and this means poor germination for either or both. It works but isn't optimal.

## **Management of the Hay Field**

Both alfalfa and brome grass are naturally perennials. With good management they will typically persist for up to 8-10 years. This is longer than would be expected for hay that is cut at peak protein content. At peak protein the plants are busy putting energy into creating blooms and eventually seeds. Closer to bloom time the plant is adding energy to roots and growth points. Cutting in July helps enhance longevity because plants have already stored regenerative energy in their root systems. Alfalfa is susceptible to freeze damage in certain conditions so eventually it will be suppressed. This is the reason to pay attention to winter hardy varieties.

This hay mix should be harvested at cut heights of about 3 inches because the growth points of brome are fairly high. This will have a small negative effect on yield but the lower portions of both plants are lower quality in that they are quite fibrous.

Jim has found that total Dry Matter yield is not significantly reduced with this system versus a system aimed at higher quality hay. In addition there is a higher probability of making good dry hay than if it were cut in June when we tend to have more frequent rains. Further, fewer cuts mean less machine work. Both wrapping hay and multiple cuts add cost. You are giving up some quality but matching quality level with actual animal need and your hay field will last longer.

### **Feedback?**

We would love to hear your feedback and any experiences you have had with Bird-Friendly Hay.