

Managing Grass Heading

Most grasses head out only once, typically in May. After that first harvest, grass forage is all leaves, especially tall fescue, meadow fescue and orchardgrass, and holds quality well. As a result, later harvests of the year can capture that high-quality forage as well.

Grasses That Can Head Out More Than Once

- Annual, Italian and perennial grasses planted the previous fall
- Annual ryegrass and some perennial ryegrasses planted in spring: Will head out later that same spring. [Note: Spring-planted Italian ryegrass should have very few heads the first growing season.]
- Festuloliums, especially ryegrass types
- Timothy
- A few bromes, such as Matua
- Alfalfa: Although not a grass, alfalfa wants to bloom about every 30 days all year. Quality drops for each cutting as the stand passes bud stage.

Byron Seeds spends a lot of time and effort selecting late-heading grasses to ensure that the harvest window of the grass will line up closely with the optimum time to cut alfalfa. We make a lot of fuss about seed heads even though dealing with them is an issue only for the first of the four cuttings. But that first cutting gives you more tonnage than any of the later ones. If you mess up the first cutting, you'll have a **lot** of poor forage on your hands.

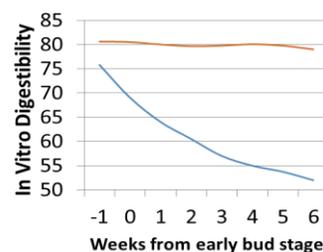
Effects of Delaying Alfalfa Harvest

Lately, there's been much talk in forage circles about delayed harvest of alfalfa. Some of the emerging alfalfa technologies, for example, low lignin, promise that delaying harvest won't compromise quality. In fact, some go so far as to say that delaying alfalfa harvest could allow you to take one less cutting per year without reducing total tons per acre.

Let's consider how this approach—and what its advocates promise—aligns with Byron Seeds' recommendation to mix grass with alfalfa. Delaying the first harvest until the grass is in boot stage instead of flag leaf will ensure that the grass is mature enough so it won't head out again in the second cut. With grass included, the quality of this mixed stand will still be better than straight alfalfa (even the low-lignin ones).

The real advantage of delaying an alfalfa harvest might be with the second, third and fourth cuttings, when the grass won't be trying to push out a low-quality seed head. As the figure shows, the vegetative grass (brown line) in these later cuts holds its quality much better than alfalfa (green line). So if you delay each cutting by a week on a four-cut system, that is four weeks—about the time it takes for one cutting to grow. So it might be possible to skip a cutting—and in doing so reduce the total harvesting cost. (The idea is **not** to let the first cutting sit out there an extra month!)

Quality of alfalfa over time



Source: Dan Undersander, PhD, Extension Forage Agronomist, University of Wisconsin-Madison.

How does that savings per acre compare to the additional seed costs for these new technologies? You will need to do the math. But if seed cost per acre is double and the stand will be terminated in only three to four years, it might be close to a wash in financial terms. However, a good alfalfa like HD425 or HD426 will produce quality that's almost identical to the low-lignin varieties. Using HD425 in combination with a grass, and cutting it on a normal schedule, is pretty tough to beat!

If You're Stuck on Low-Lignin Alfalfa

If you've just *got* to try higher-cost, low-lignin alfalfa, include a grass! Even low-lignin alfalfa is better forage with grass included. The concept of delaying harvest is still so new that what you will get in the field is impossible to predict. By adding grass, you will reduce the risk and be more assured of getting a high-yield, high-quality crop.

And there is something else to consider. Adding grass to alfalfa gives about one extra ton of dry matter per year, and that additional ton of grass will also be higher quality than the alfalfa. So by adding grass—and getting an extra ton of dry matter worth \$150 to \$200 per year—you offset some of the additional cost of the low-lignin alfalfa seed.

A Final Thought on Heading in Grasses

Last year, I saw orchardgrass head every month of the growing season. This year, most of the grass reached boot stage before I could get to it, so I am not seeing many heads now. Here is why. Last year, the first harvest was early enough so that only some tillers were in boot. The first harvest went to about 4 inches, and some shorter heads came later. Also, some were almost to boot but got cut off, so a new tiller started in May that sprung a head in late summer. Nothing is absolute, especially when trying to figure out when and why grasses head out!