

Alfalfa Remains a Valuable Feed Option During Volatile Times

Robin Newell, S&W Seed Company

Spring 2022 brought a great deal of variable and somewhat unusual growing conditions across the geographic area covered by this publication, leading to a lot of variation in early hay and forage growth. Some North Dakota hay farmers reported an above-average first crop, while some parts of South Dakota see-sawed from very dry (with mid-May dust storms) to areas which were so wet farmers took the prevent-plant option for row crops. Meanwhile, northern Wisconsin had one of the latest spring warm-ups in memory which, for many, led to a slow-growing first haylage crop with disappointing yields.

The underlying grain markets, especially soybeans and certain classes of spring wheat, were like a siren song plucking off forage seeding intentions for spring 2022. The USDA-NASS March 31 *Prospective Plantings* report listed the states of Michigan, Wisconsin, Minnesota, plus North and South Dakota, as having 8.65 million acres of hay harvested in 2020, with hay harvest intentions dropping to 8.06 million acres for the 2022 harvest season, a drop in hay acreage intentions of nearly 7% in just two years.

What about new seedings of alfalfa? New alfalfa seedings are roughly half what they were on a yearly basis now versus the late 1990's through early 2000's, before the enactment of the Renewable Fuels Standard that drove up corn grain utilization for ethanol and commodity prices in general. Distillers grains, a medium protein feed competing with alfalfa, became more widely available. 2021 saw the lowest number of newly seeded alfalfa acres in the United States since record-keeping began. USDA-NASS doesn't report 2022 newly seeded alfalfa acres for several more months, but reported 2021 numbers of 15.25 million acres of alfalfa hay is the lowest alfalfa hay acreage in production in the U.S. since the high-water mark achieved in the 1940's, and the stable acreage plateau that ensued for nearly fifty years during the second half of the twentieth century.

One thing that seems to be common across a wide swath of the U.S. is increased prices for hay of all kinds compared to prices reported the prior year. For those who need to purchase hay, there might be some price relief as hay stocks build over the summer harvest months. But procrastination in purchasing could mean increasing market pricing for hay post-harvest, with many of the best-quality hay lots picked over. Logistical challenges and increasing fuel costs have put upward pressure on transportation and hauling costs as well, adding insult to injury whether you are a buyer or a seller of hay.

Where does U.S. hay and haylage production go from here? Many influencing factors are in flux and the upcoming planting intentions for next season could be in flux, too. On the face of it, one might expect newly seeded and overall acres of alfalfa and mixed hay to creep back up and recover as commodity prices settle into a new normal (whatever that turns out to be). After all, hay and haylage provide needed roughage, and alfalfa in particular



These alfalfa plants are showing good crown development in spring, following late summer planting the prior year. Tap root and nodule development is evident but not far advanced. The crowns of these young plants are already developed well enough to exert multiple crown buds and put forth multiple stems per crown to contribute to first-cut yield.

provides very nutritious high-protein forage for high-producing dairy diets. But when individual farm production fails to keep up with feed needs, there is added pressure to produce more dry matter per acre on farms with limited land resources. That points toward increasing corn silage for many farms.

Corn requires a lot of nitrogen (N) which has become quite expensive. With the continuing Russian invasion of Ukraine, and with sanctions currently in place, natural gas shortages continue pushing the price of N fertilizer manufacturing upward in many countries, including for import into the U.S. As sanctions and shortages drag on, N prices will likely remain high. This could exert some pressure to plow down alfalfa and other legumes for their fixed N value. Shorter rotations might make sense from an N management standpoint. Crop rotation plans will need to be adjusted in order to maintain the needed balance of on-farm forage production.

Some farms are taking a renewed interest in forage sorghum and sorghum-sudangrass hybrids as less N-intensive crops with high dry matter yields. Sorghum species have better overall heat and drought tolerance over corn. BMR and male-sterile variants with high digestibility and NFC content can challenge corn silage production of digestible dry matter per acre, as well as expend less for seed and fertilizer compared to corn. Likewise small grains are getting more interest as a forage crop, with added manure application windows and opportunities for better overall growing-season utilization. The pairing of sorghum species with small grain forages provides a very interesting growing-season extension over full-season corn alone, with corn's yield so dependent on a timely planting date.

No matter what happens on the world stage, cattle need forages. On-farm forage production is the first and best defense against potential price volatility and uncertainty in the markets for crop and feed inputs.

Tips for Late-Summer Alfalfa Establishment

Late summer alfalfa planting can offer some advantages over spring planting by utilizing a portion of the growing season that becomes available after small grain harvest, or open ground that you may have been unable to seed earlier in the growing season.

- Check the moisture status of your soil profile. Make sure there is enough soil moisture below planting depth to keep seedlings growing after emergence.
- It isn't a good idea to plant into a bone-dry soil profile unless you can irrigate to get young plants established.
- Even with sufficient soil moisture at rooting depth, you might be planting into dry surface soil. This may lead to uneven emergence unless a timely irrigation or rain follows within a reasonable period.
- Make sure to obtain good seed-to-soil contact for improved soil moisture intake during germination.
- Weed pressure is generally less than it is in spring, and weeds may present fewer problems with late-summer establishment.
- Even so, follow herbicide label recommendations to obtain best control and scout fields soon after emergence for any problem weed escapes.
- No-till planting has the edge on soil moisture conservation compared to tillage for seedbed preparation. If planting via no-till, take advantage of the option for a burn-down herbicide before planting to control existing weeds.
- Try to plant at least 6 weeks before a killing freeze. Shorter time frames have increasing risk of poor winter survival.
- Refrain from taking a fall cutting even if the new stand appears to have adequate growth. Young plants are forming taproots and storing up carbohydrates, and will need that energy for winter survival and initiation of robust spring growth.
- With adequate fall establishment, the new stand can begin its growth on schedule the following spring, ready to go into full production.