Timeliness of harvesting and planting of forages greatly impacts the potential profitability of a dairy operation. Forages which are harvested at the proper stage of maturity contain more energy and protein and cattle eat them better than those harvested later. Thus, more forage and less grain can be fed which can help keep feed costs lower. Also, timely planting of corn for silage or grain impacts tonnage or yield per acre. Late planted corn results in lower yields for corn silage with more acreage needed to produce the required tonnage or more hay or other forages being purchased for the dairy operation. Both of these scenarios increase land requirements and decrease potential profits. With spring harvest and planting time upon us, decisions and ability to multi-task to get forages harvested and planted on a timely basis will set the stages for future feed cost and thus economics of your dairy operation.

Impact of corn planting dates

Corn planted late for either silage or grain often times results in lower tonnage and grain yields. Corn planting is recommended from April 1 to May 1 in western and central Kentucky and April 15 to May 15 in eastern Kentucky. The challenge of timely planting of corn becomes even greater in fields that are double-cropped with small grains such as rye and wheat harvested for forage. Harvesting the small grain crop earlier will decrease tonnage of wheat hay, baleage, or silage but will result in higher tonnage of corn silage—a win-win situation for your dairy operation and cash flow long term.

When to harvest spring forages

The quality of forages is greatly impacted by the stage of maturity at which plants are harvested. This factor is definitely under management’s or your control. As grass and legume plants mature, the percentage of leaves in the total plant decreases while the percentage of stems increases. As a result, the digestibility or energy value of the crop decreases with advancing stage of maturity. Thus, the recommendation is to harvest grasses and small grains, such as wheat and rye, at the late boot stage of maturity or just before the seed head emerges from the stem (see figure 1). Delaying harvest does increase yield slightly, but can negatively impact milk production and heifer growth and the amount of forage that can be used in the diet because of lower levels of digestible nutrients. Timeliness of the spring harvest also impacts the number of cuttings you can harvest from alfalfa and alfalfa-grass stands. Remember that the hardest nutrient to get into cattle of all ages is energy, thus forage maturity or the stage at harvest greatly impacts the amount of forage which can be effectively used in dairy cattle diets and maintain milk production or growth.
Stage of Maturity for Harvest in Spring
Grasses ............................... Late Boot*
Alfalfa ................................. Late Bud (note this is the stage just before early flower and earlier than previously recommended)
Oats/Rye ............................... Late Boot*
Wheat ................................. Late Boot* and then soft dough**
* Late Boot- Just before the seed head emerges from the stem (see figure 1)
** Soft dough- wheat kernel is filled out and is soft when pinched with

Kentucky’s spring weather is often times an enemy when trying to harvest quality forages. Spring rains can delay harvest. The key is to make the most of Kentucky’s unpredictable weather. Starting a few days before the optimum stage of maturity allows you to harvest higher quality forages overall with only small decreases in yields. These small decreases in yield result in more milk or growth per acre, which greatly affects your bottom line. Ideally, you want to be one of the first of your neighbors in the field instead of the last. Those dairy neighbors in the field first are often times those who are able to utilize more forage in their cows’ diets and get higher economical milk yield and thus more income after feed costs are accounted for.