Alfalfa will quit growing after the first hard freeze in Kansas which occurs, on average, around October 15, but can be as early as October 1 or late as November 1. The timing of the last two cuttings impacts the winter survival and productivity of the stand in the following year.

The last cutting, prior to fall dormancy, should be made based on expected crown regrowth rather than one-tenth bloom because of the decreasing photoperiod. The last cutting should be made so there will be 8 to 12 inches of foliage, or 4 to 6 weeks of growth time, before the first killing frost. This should allow adequate time for replenishment of root reserves. Which means the second to final cutting should occur around September 1st.

At this stage of the growing season, alfalfa plants need to store enough carbohydrates to survive the winter. If root reserves are not replenished adequately before the first killing freeze in the fall, the stand is more susceptible to winter damage than it would be normally. That could result in slower green-up and early growth next spring, and in some cases stand loss due to winter kill.

The final cutting should occur right after the first killing freeze, before too many of the leaves have dropped. Producers should be prepared to enter the fields as soon as soil moisture conditions allow. After a killing freeze, the remaining forage (if any) can be hayed safely. However, the producer should act quickly because the leaves will soon drop off.

Consider soil sampling alfalfa fields now

Late fall is also a great time of the year to soil sample alfalfa ground. This timing allows for an accurate assessment of available soil nutrients and provides enough time to make nutrient management decisions before the crop starts growing in the spring. Key soil tests include pH, phosphorus, and potassium, and to a lesser extent, sulfur and boron. In particular, potassium is highly related to winter survival so it’s important to make sure to have optimum range of potassium in soil before entering winter. When sampling for immobile nutrients, sampling depth should be six inches, while mobile nutrients (sulfur) should be sampled to 24 inches.

Alicia Boor is an Agriculture and Natural Resources agent in the Cottonwood District (which includes Barton and Ellis counties) for K-State Research and Extension. You can contact her by e-mail at aboor@ksu.edu or calling 620-793-1910