Forages provide lower-cost nutrients in ration

DEKALB, Il. — Economic studies show forages to be underpriced relative to feed grains and supplements, considering nutrient content alone. It is recognized that, except for range and pasture, forages present a greater challenge in terms of storage and handling; so the net difference is less. Regardless, as grain and/or supplement prices increase, forages become more attractive to livestock feeders and dairymen.

Once in the feedbunk, the worth of an individual forage, whether hay, silage, haylage, cubes, or whatever, depends on its quality. Everybody recognizes forage quality when they see it. Or do they? Even experts have trouble defining forage quality. For our purposes, the value of a forage for meat, milk, or wool production depends on nutrient availability per unit of forage consumed and how much of it an animal eats.

Every animal has a given requirement for energy to maintain body functions. Any energy remaining after these maintenance requirements are met is used to produce meat, milk, etc. The greater the available energy, the greater the production; up to the capacity of the animal to eat and digest feedstuffs.

Animals will eat more of a high quality forage and they'll derive more energy from every mouthful, but they do have a capacity limit. No cow can eat 100 pounds of hay in a day, no matter how good the quality. High production requires that part of the total energy come from more concentrated nutrient sources — the grains. But with a high quality forage, less grain is required to provide the same total energy. The value of that high quality forage, then, lies in its ability to provide more lower-cost nutrients in the total ration. As forage quality declines, animals will eat less and the nutrient contribution will be reduced — leading to either a reduction in energy available for production or to increased need for concentrated nutrient sources if production is to be maintained.

Alfalfa is the most popular, mechanically harvested, perennial forage crop in the world. Let's take a look at alfalfa harvest management in relation to quality. Every alfalfa grower, concerned with maximizing return, has to make quality-related harvest decisions.

Maximum alfalfa yields generally occur from harvesting near the full bloom stage. Highest quality, however, is achieved at the more immature pre-bud stage. Most growers compromise between highest yield and highest quality and settle on a harvest stage best identified as "first bloom." Unless there is a special need or market for maximum quality or medium to low quality forage, this stage is as near right as we can get with alfalfa.

By selecting varieties that differ a few days in the time we take to start blooming, one can spread harvest time and get to more of the crop at near-optimum stage. If large acreages are involved, it may be necessary to start harvesting a few days early — at early — to mid-bud stage. If you do this, switch from field to field for the earliest harvest as the stand will be weakened by taking every cutting at an early bud stage.

Weather conditions may cause unavoidable harvest delays, which have to be accepted as part of any forage production program. There are some ways of coping with weather. Although not widely used as yet, certain preservatives allow higher moisture hay storage. Also, there are some promising chemical applications that hasten moisture loss from alfalfa stems, allowing pickup and storage a day or two earlier than normal. Engineers are reporting some success with a squeezing process which extracts a valuable high protein juice, leaving a very digestible residue which can be ensiled or dried and utilized as forage. The process can virtually eliminate weather damage.

4-H'ers Sponsor Fair

LEESPORT — The Berks County 4-H Fair will take place Aug. 4, 5, and 6 at the 4-H Community Center Building.

The time for setting up exhibits is from 10:30 a.m. to noon Thursday.

Some of Thursday's featured events include a watermelon eating and seed spitting contest, laugh olympics, a bale throwing contest and a scavenger hunt. 4-H family olympics will occur at 7 p.m.

Friday's list includes a fish rodeo, a talent contest, 4-H Seeing Eye Puppy demonstrations and a hoedown and modern dance.

A pig roast will take place from 5:30 to 7 p.m. Friday. Preregistration is necessary.

Saturday will feature the Horse Clubs Round-Up.