

# Foraging Around



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The growing season for 1986 has come to a close. And, as seems to be the rule, it was a year of weather extremes — too wet in the north and too dry in the south. In between the result was a good growing season for some, but a near disaster for others.

However, now it's time to look ahead to 1987 and prepare for what we hope will be a good forage year. One step in that preparation is the selection of perennial forage species for optimum production and quality.

We know that most perennial cool-season grasses and legumes, when properly fertilized and managed, can be used successfully for hay, silage or pasture. Some species, however, are more sensitive than others to soil acidity, marginal drainage, low fertility and intensive cutting or pasture management. Likewise, species differ in their seed characteristics and seedling emergence, early seedling vigor and general ability to compete during the establishment year. This is sometimes referred to as seedling aggressiveness. All of these fac-

tors should be considered when selecting species or mixtures for a particular site or use.

Let's take a brief look at how a number of our most common forage crops, both perennials and annuals, compare for several of these factors. I realize this is old hat for many of you. But there's no harm in a little review.

### Tolerance to Poor Drainage

Species vary in their tolerance to soil depth and drainage. Yet we frequently attempt to establish a species on a soil where it is not suited.

While the tables shown below aren't perfect they will give you an idea as to how various species compare in their tolerance of soil drainage and acid sensitivity.

Of course, species such as Birdsfoot Trefoil and Reed Canarygrass also grow well on deep, well-drained soils. But you're stretching your luck when you try to move a species down on the drainage scale.

You can successfully move a species up the pH scale, such as from moderate acidity to slight acidity or above. In fact, most

forage species grow best when the soil pH is near 7.0. But don't expect to successfully establish alfalfa or sweet clover, for example, on a soil high in acidity (pH 6.0 or below).

### Seedling Aggressiveness

Seedling aggressiveness is a combination of speed of germination and emergence and the ability of the seedling to compete.

For example, of the legumes red clover is generally considered most aggressive, followed by sweet clover, alfalfa and alsike clover, ladino clover, birdsfoot trefoil and crownvetch.

Perennial ryegrass tops the aggressiveness list of the perennial cool season grasses and is followed in order by orchardgrass, tall fescue, bromegrass, timothy, reed canarygrass and Kentucky bluegrass.

### Competition

Seedlings of the various species differ in their ability to compete with other plants for light, nutrients, and other limiting factors.

For example, seedlings of all common forage legume and grass species are adversely affected by intense shading. However, of the legumes, red clover is most tolerant of shade followed by alfalfa and ladino clover. Birdsfoot trefoil seedlings are most seriously affected by reduced light. That explains in part why you can successfully establish red clover in wheat, while attempting to establish birdsfoot trefoil in winter wheat usually ends in failure.

There are many other factors that could be considered, including: seed size and shape, and seedling heat, drought and cold tolerance.

The expected yield and stand life for the intended use may be another consideration. For example, most perennial legume and grass species will produce highest yields and persist longer under a silage or hay management system, or if used for pasture under a system of rotational or more intensive grazing rather than continuous grazing.

Finally, when selecting forage species you should consider the suitability of the species to the animal enterprise. Dairy cattle, for example, have higher forage quality and intake requirements than do beef cows or sheep. Therefore, highly palatable and digestible species are generally more important in dairy forage systems than in forage systems for beef or sheep. It has also been shown that under pasture conditions sheep can graze more closely than cattle, and, thus, if allowed to overgraze can cause more damage to upright growing grasses and legumes.

### Seed Needs for 1987

And as you plan for 1987, it isn't too early to take inventory of your next year's forage seed needs. Except for short supplies of certain newer varieties, seed supplies of most legumes should be okay. This

Tolerance To Drainage		
Tolerates Moderately Poor Drainage	Tolerates Slightly Poor Drainage	Very Sensitive To Off Drainage
Birdsfoot Trefoil Ladino Clover Alsike Clover Reed Canarygrass Tall Fescue Switchgrass Big Bluestem	Red Clover Kentucky Bluegrass Perennial Ryegrass Orchardgrass Timothy Brassica Sp Sudangrass	Alfalfa Crownvetch Bromegrass
Acid Sensitivity		
Tolerates Moderate Acidity (pH 5.5 to 6.0)	Tolerates Slight Acidity (pH 6.0 to 6.5)	Very Sensitive (pH 6.5 to 7.0)
Birdsfoot Trefoil Reed Canarygrass Tall Fescue Redtop Bentgrass Sudangrass Millet Rye Oats	Red Clover Alsike Clover Ladino Clover Timothy Bromegrass Orchardgrass Perennial Ryegrass Kentucky Bluegrass Corn Wheat	Alfalfa Sweet Clover Barley

includes red clover, although because of unfavorable weather in many seed producing areas you can expect slightly higher prices for this species.

Seed supplies of certain cool-season grasses could be another story. Weather conditions this year in many of the important grass seed producing areas were less than good. Briefly, seed supplies of orchardgrass should be okay. There should be enough timothy seed, but prices are up slightly.

But seed supplies of common southern bromegrass, Kentucky bluegrass and tall fescue are definitely on the short side. Don't panic, but do plan ahead.

Finally, the holiday season is fast approaching. May I take this opportunity to wish each and everyone the best of the holiday season and may 1987 be especially good to you.

Merry Christmas and a Happy New Year!

## Blair County Lists High DHIA Herds

HOLIDAYSBURG — Clover Will Farms, Williamsburg, topped the yearly Blair County DHIA report in milk, fat and protein. Their herd averaged 21,880 pounds of milk, 792 pounds of fat and 694 pounds of protein on 141 cows.

Fidelity Holsteins, Martinsburg, scored the second highest herd average in the three categories. On 42.4 cows, their herd completed an average of 21,385 pounds of milk, 781 pounds of fat and 668 pounds of protein.

Brenneman Brothers, were honored for the greatest increase in fat production; their herd fat average rose 100 pounds from the 1985 testing year.

Marcove Farms, Martinsburg, owned the top 2-year-old cow in Blair County. Their cow completed a lactation of 27,282 pounds of milk, 878 pounds of fat and 810 pounds of protein. This Holstein herd also owned the high milk cow. Their 6 year old posted a record of 30,408 pounds of milk.

Robert Kensinger, Roaring Spring, owned the second high milk cow for the county. His 4 year old produced 30,378 pounds of milk. This Holstein also posted the highest protein production with 884

pounds. A 10-year-old cow owned by C. Eugene Smith, Martinsburg, registered the highest fat production for the county with 1,162 pounds.

Owners of the top five cows for lifetime fat production were also honored. These producers and the production of their cows are: Baker Farms, 204,036 milk and 8,330 fat; William England, 211,767 milk and 8,183 fat; Smith Hollow Farm, 201,047 milk and 7,951 fat; Burket Fall Farm, 187,659 milk and 7,837 fat; and Marcove Farm, 208,544 milk and 7,705 fat.

Five herds were recognized for low somatic cell counts. These herds are: Dale Hoover, 93,000 SCC; Clover Will Farm, 140,000 SCC; Penn-England, 146,000 SCC; Charles and Mike Hoover, 148,000 SCC; and Jayray Farms, 154,000 SCC.

Blair County DHIA finished its 58th year on Sept. 30 with 90 whole-year herds on DHIA and eight owner-samplers. This year the program tested 436 more cows than in 1985 for an average of 17,082 pounds of milk and 619 pounds of fat.

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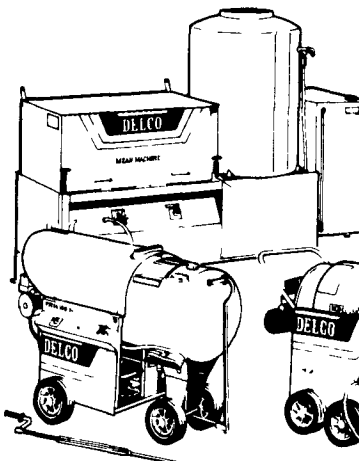
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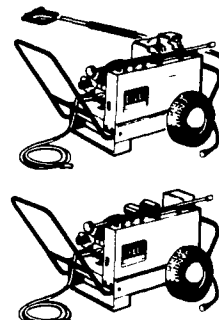
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