Lancaster Farming Saturday, May 6, 1989-D25

To Provide High Quality Forage

matter forage intake varies by animal species and class and is often influenced by what forage is offered and how much. To determine stocking rate and carrying capacity, the concept of animal units is often used; this gives a much better measure of pasture

required, as compared to using animal numbers. One animal unit is based on the daily forage intake of one 1,000 pounds of dry cow (about 25 pounds of dry forage per day). Table 84 gives some typical animal unit values for various species and classes of livestock.

Estimating the amount of acres required to pasture a herd or flock depends not only on the feed requirements of the animals, but also on the available forage produced. Pasture growth is dependent upon plant species, soil characteristics, topography, tempera-

Deiry beef steers	Top graze cool-season grass-legume mixtures (excépt tail fescue) or close graze and supplement with siage. Graze Brassica crops when available.				
Ewes with lambs	1. Graze cool-season grass-legume mixtures	1 Graze cool-season grass- legume mixtures except tall fescue; stockpiled birdstoot trefoil, Brassica crops	1. As in June-August 2. Brassica crops	 Stockpiled tail fescue Nitrogen fertilized Mixture with legumes Late-seeded Brassica 	
Dry ewes	Closely graze cool-seasor	n grass-legume mixtures.		1. Stockpiled tall fescue a. Nitrogen fertilized b. Mixture with legumes	
Lambe	Top-graze cool-season grass-legume mixtures.	1. Top-graze cool-sesson grass-legume mixtures. 2. Brassica crops. 3. Stockpiled birdsfoot trefoil		1. Stockpiled tail fescue a. Nitrogen ferulized b. Mixture with legumes 2. Late-seeded Brassicas	
Horees ³	1. Cool-season grass- legume mixtures. Best grasses: timothy, Kentucky bluegrass, amooth brome. Best legume: white clover.	As in Apri-May.	As in April—May	 Stockpiled tall fescue³ Nitrogen fertilized Mixture with legumed 	

Winter pasture availability will depend on snow cover date Keep close watch on cattle grazing feacue during this period; be ready to move to other pastures.

as eight weeks prior to loaking should be removed from tail lescue pasture



Livestock	Animal units	
Beel cattle		
1000-lb dry cow	1.0	
1300-lb dry cow	1.3	
1000-lb lactating cow and calf (1st 4 months after calving) 1.4	
1300-Ib lactating cow and call (1st 4 months after calving) 1.6	
2000-lb mature bull	1.7	
550-lb growing-finishing heifer (1.0 lb/d gain)	1.0	
550-lb growing-finishing steer (2.0 lb/d gain)	1.23	
Sheep		
110-lb bread ewe	.15	
132-lb brood ewe	.17	
154-lb brood ewe	.18	
175-lb brood ewe	.20	
300-lb mature ram	.40	
110- to 132-lb replacement ewe, lambs, and yearlings	.22	
220-lb replacement ram, lambs, and yearlings	.42	
Dairy ¹		
1000-lb dairy cow (maintenance)	1.0	
800-lb dairy cow (last 2 months of gestation)	1.0	
1000-lb dairy cow (last 2 months of gestation)	1.2	
1300-lb dairy cow (last 2 months of gestation)	1.5	
1500-lb mature dairy buli	1.4	
2000-lb mature dairy bull	1.9	
550-b growing dairy heifer	1.0	

Table 84. Dry matter forage requirements of various specles and classes of livestock as expressed in animal units. 1. Animal units for lactating cows are difficult to determine because of supplemental feeding.

> ture and soil moisture. Because of the variability in pasture growth, we can only estimate the amount of pasture required for grazing.

Components Of A Pasture System

There are many possible types of pasture that can provide forage for grazing animals. Their use should be based on their suitability to the soil site, the animal enterprise, and the planned grazing management. Table 83 is designed as a guide to help in planning for adequate pasture availability and forage quality for various animal enterprises over the whole grazing season. Specific information about species and varieties may be found in the 1989-90 Agronomy Guide. Permanent Cool-

Season Pasture Land that is not suitable for crop production, due to poor soil characteristics or topography is often overgrazed and underfertilized. With proper management, these pastures can provide significant amounts of forage to many dairy and livestock farms.

Kentucky bluegrass, the species most tolerant to close grazing is the cool-season grass commonly found in permanent pasture. In addition, more productive forage species such as tall fescue or reed canarygrass can be grown on permanent pasture sites, often with a legume. Other grasses may also be found in permanent pastures, but they do not persist as well.

Semi-Permanent Cool-**Season Pasture**

When properly managed, most perennial cool-season legumes and grasses grown for hay and silage can also be used for pasture. Often these pastures are incorporated in the crop rotation, and when grown on good soils and properly managed, can be very productive.

Permanent Warm-Season Pasture

Warm-season perennial grasses, including switchgrass, big bluestem and Indian grass, grow well from mid-June through September, can provide adequate pasture when cool-season pastures are often inadequate, and are especially suited for beef cattle.

Table 85 provides some estimated values of the acres required for grazing animals for various types of pasture.

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