

Grazing Math 2021

Graze 300 VA Professionals Training

Carl C. Stafford, Senior Extension Agent, Livestock Forages

Stocking Rate

Supports extended grazing, ac/au, ac/cow/calf pair, assume high (3 ac/cow/calf pair)
Animal Unit – 1000 pounds
Cow/calf pair – assume 1300 – 1400 lb cow/600 – 700 lb calf (about 2AU's)
No scales – estimate high

Measure Stockpile

Falling Plate meter recommended / rate of disappearance
Inches of forage, multiple locations, by Thanksgiving
Utilization rate – assume low, range 40 to 80%, wet conditions less
Rate of disappearance, be flexible, allocate then “call the bunks”

Dry Matter Intake

2 – 3%, of body weight, estimate high
Weather dependent
Stage of production
Nutrition is exact on paper, an art in application, be flexible

Utilization Rate in winter

80% daily moves – my first choice, immediate feedback, allows quick adjustments
70% if every 3 days
40% if every 14 days
Assume low

Net Income – counting costs

Small Producers compete for efficiency when in control of their biggest cost
Include cow & equipment depreciation, Land & Labor
Cost per cow = calf cost, sets the break even

Animal Production per unit of land, a model from abroad

Dairy driven, daily feedback
Beef - Annual pounds of calf/acre
Ex. 12,000 calf lbs / 67ac. = 180 pounds/ac. X 1.35/lb (2021) = \$243/ac gross

Soil Fertility

Hay annual removal/replacement
Pasture only 10% per year, distribution determined by rotating
Nitrogen Recommendation – standard vs updated
Organic Matter decay, releases nitrogen supporting 2000 – 2500 pounds stockpile
Response to added N, generally does not pay