

Paddock size

$$\begin{array}{r}
 \text{Acres} \\
 \text{required per} \\
 \text{paddock}
 \end{array}
 =
 \frac{
 \begin{array}{r}
 \text{Avg wt of} \\
 \text{animals}
 \end{array}
 \times
 \begin{array}{r}
 \text{Dry forage} \\
 \text{eaten (\% of} \\
 \text{body weight)}
 \end{array}
 \times
 \begin{array}{r}
 \text{\# of} \\
 \text{animals}
 \end{array}
 \times
 \begin{array}{r}
 \text{days on} \\
 \text{pasture}
 \end{array}
 }{
 \begin{array}{r}
 \text{Dry matter} \\
 \text{available} \\
 \text{in pasture}
 \end{array}
 \times
 \begin{array}{r}
 \text{\% of forage} \\
 \text{that will be} \\
 \text{utilized}
 \end{array}
 }$$

Dry forage eaten – usually between 2-3 % of body weight

Dry matter available in pasture-	alfalfa	225 pounds/inch
	orchardgrass	180 pounds/inch
	wheat	150 pounds/inch
	tall fescue	210 pounds/inch
	bermudagrass	300 pounds/inch



Percent of forage utilized – range between 30 and 70 percent

Example

You have thirty 600 pound steers that you want to graze on a tall fescue pasture that is 12 inches tall. You would like to set paddock size so that they will be moved about every 4 days. How big should each paddock be?

$$\text{Acres required per paddock} = \frac{600 \times 0.03 \times 30 \times 4}{(12 \times 210) \times 0.60} = \frac{2160}{1512}$$

1.4 acres per paddock

