

A. 528 PRESCRIBED GRAZING PLAN WORKSHEET (Rotational Stocking)

Name: _____ County: _____

Percentage of daily feed from pasture _____ from stored feed _____

Step 1. Estimate the Forage Demand:

The forage demand is the amount of forage dry matter (DM) required to feed herd/flock for one day. It is calculated based on the rule of thumb that grazing animals need to have daily access to approximately 4% (2.5% intake, 0.5% trampling loss, 1% buffer) of their live body weight per day in forage. This figure may be decreased if you are willing to supplement hay or grain during periods of low production.

$$\frac{\text{Average weight/animal (lbs.)}}{\text{Average weight/animal (lbs.)}} \times .04 \times \frac{\text{\% from pasture}}{\text{\% from pasture}} = \frac{\text{lbs DM/head/day}}{\text{lbs DM/head/day}} \times \frac{\text{\# of animals}}{\text{\# of animals}}$$

= Total Forage Demand _____
lbs/day

Step 2. Estimate the Forage Supply:

This amount is the amount of forage DM that is predicated to be available for grazing after a 15 day spring growth period and a 30 day summer and fall growth period. ***NOTE*** Actual pasture forage growth rates are extremely variable. As a result, *the numbers presented are for planning purpose only*. Actual and/or optimum growth periods may be longer or shorter than those indicated.

Unless actual measured DM yields are available, use estimated hay yields from the NRCS FOTG, Section II, Cropland Interpretation for grass-legume hay or UWEX figures. Use the following table to convert to annual hay yields to forage availability on a rotational basis, average over five to six rotations.

Forage Availability

Hay Yield – Tons/Acre/Year	4.5	4.0	3.5	3.0	2.5	2.0	1.0
Forage Availability – Lbs./Acre/Rotation	1800	1600	1400	1200	1000	800	400

Forage Supply = _____
Lbs/Acre/Rotation

Step 3. Select Residency Period

How long will the livestock remain in a paddock? Lactating dairy cows, dairy sheep and goats should not remain for longer 1 day, 1/2 residency periods are recommend. Growing steers one (1) day and three (3) to five (5) days for all other livestock. ***NOTE*** For maximizing harvest efficiency, use the shortest residency period indicated for the type of livestock operation.

Residency Period = _____ days or _____ hours

A. (Cont'd)

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(Rotational Stocking Continued)

Step 4. *Determine Paddock Size:*

The paddock size is based on meeting the forage demand of the herd for the time *or* the number of days grazing indicated by the residency period selected.

$$\frac{\text{Forage Demand}}{\text{Forage Supply}} \div \frac{\text{Residency Period}}{\text{Acres}} = (\text{_____}) \times (\text{_____}) = \text{_____ Paddock Size}$$

Step 5. *Calculate the Number of Paddocks:*

The number of paddocks required is based on meeting the longest regrowth interval recommended i.e. 30days.

$$30 \div \text{by } \frac{\text{Residency Period}}{\text{_____}} = \text{_____} + 1 = \frac{\text{Number of Paddocks Needed}}{\text{_____}}$$

Step 6. *Estimate the Total Number of Acres:*

$$\left(\frac{\text{Paddock Size}}{\text{_____ ac.}} \right) \times \left(\frac{\text{Number of Paddocks}}{\text{_____}} \right) = \frac{\text{Number of Acres Planned}}{\text{_____}}$$