

PASTURE CALCULATION WORKSHEET

1	Type of livestock (example: sheep, dairy cows, heifers)	
2	Number of animals in group	
3	Estimated total daily dry matter requirement per animal	
4	If supplemental feed is fed, how much dry matter per animal is fed from hay, silage, grain or other non-pasture feeds?	
5	Dry matter to be provided from pasture per animal (total intake required less non-pasture feed fed) Line 3 – line 4 = If nothing other than pasture is fed, line 5 and line 3 will be the same	
6	Calculated total dry matter intake for Group Line 2 x line 5 =	
7	Estimated forage dry matter available per acre	
8	Calculated paddock size required for 24 hours (required amount divided by total available per acre) Line 6/line 7 =	
9	Planned occupancy period (how many days is the herd left in the paddock?)	
10	Calculate paddock size needed for full planned occupancy period. Line 8 x line 9 =	

		May	June	July	Aug	Sept	Oct
11	Estimated pasture recovery period						
12	Calculate number of paddocks needed (Line 11/ line 9) + 1 =						
13	Calculated total number of acres needed for the grazing rotation Line 10 x line 12 =						

Do you have enough land to keep rotating/meeting full pasture DMI requirements during the longest planned recovery period? If not, what is your plan to avoid rotating back to paddocks that are not fully recovered?! This worksheet is for grazing acreage only and does not include additional land to meet non grazing season stored forage needs.

Stock density refers to the number of cows per acre or pounds of animals per acre for just the short period of time that they are in an individual paddock. Stock density is usually expressed as total lbs of livestock in the grazing group per acre.

Stock Density Calculation:

Total pounds of animals in the grazing group/ size of the paddock they are in

The smaller the paddock and the more often you move them to a fresh paddock, the higher the stocking density. Herd DMI needs must be met so higher stock density paddocks require either more DM available per acre OR more frequent moves to a fresh paddock.

Stocking rate is the long-term carrying capacity of the farm or the total number of animals on the entire farm. Be sure to clarify with the farmer if they are looking at all the land to harvest/make all the stored forages or if they plan to buy in some feed. Overall stocking rate is usually expressed as acres/animal or acres per animal unit.

Paddock Size Quickie Calculation

ACRES NEEDED/DAY = PASTURE DM REQUIRED BY THE GROUP/DM AVAILABLE PER ACRE