

Grazing Cover Crops (example)

Step 1 - Determine available forage from measuring average height of cover crops

Available Forage

Total production minus the minimum allowable residual.

Ex. total prod. = 5,000 lbs./ac. - min. residual (1,200 lbs./ac.) = available forage: 5,000 - 1,200 = 3,800 lbs./ac.

Total Production Estimates

Warm-season dominant: first 4 inches = 1,275 lbs./ac. + 200 lbs./ac. per inch of height above 4 inches

Cool-season dominant: first 4 inches = 1,140 lbs./ac. + 250 lbs./ac. per inch of height above 4 inches

Mix of cool- and warm-season: roughly 215 lbs./ac. for each inch of height

Warm- or cool-season dominant: 1140 first 4 in. + 250 lbs./inch X 18 Height - 4 in. =
4640 Total air-dry production

Mix of cool- and warm season: _____ total inches X 215 lbs./ac. = _____ Total air-dry production

Available Forage

Warm- or cool season dominant: 1140 first 4 in. + 250 lbs./inch X 4 resid. ht. - 4 inches =
1140 Residual air-dry production

Mix of cool - and warm-season: _____ min. residual ht. X 215 lbs./ac. _____ residual air-dry prod.

Total production from above: 4640 - residual air-dry 1140 = Available forage 3500

Step 2 - Determine usable forage based on utilization

Utilization %: The utilization percent is higher the shorter the occupation period due to less waste.

The occupation period can be shortened by fencing out smaller areas for grazing.

0.5-1 day: 80%; 2 days: 75%; 3 days: 75%; 4 days: 70%; 5 days: 65%; 6-30 days: 60%

Usable Forage Supply

3500 lbs./ac. Available forage X 65% % utilization = 2275 lbs./ac. usable forage

Step 3 - Determine forage demand from animals

Forage Demand

1200 lbs. average animal X 3% of body weight/day = 36 lbs. forage required/AU/day

X 100 number of animals = 3600 Total Forage Demand for the herd per day

Last Step - two options

You know the number of acres, but need to determine the number of days they can graze:

2275 lbs./ac. usable forage (Step 2) X 40 acres = 91000 Total lbs.

91000 Total lbs. ÷ 3600 Total Forage Demand (Step 3) = 25 days

You know the number of days you want to graze, but need to determine the number of acres:

3600 Total Forage Demand (Step 3) X 5 days = 18000 Total lbs.

18000 Total lbs. ÷ 2275 lbs./ac. usable forage (Step 2) = 8 acres

(This second option can be used if you have a larger area, but want to divide it up into smaller paddocks in order to increase utilization and increase the overall number of days that grazing can take place.)

Grazing Cover Crops

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Total Production Estimates

Warm-season dominant: first 4 inches = 1,275 lbs./ac. + 200 lbs./ac. per inch of height above 4 inches

Cool-season dominant: first 4 inches = 140 lbs./ac. + 250 lbs./ac. per inch of height above 4 inches

Mix of cool- and warm-season: roughly 215 lbs./ac. for each inch of height

Warm- or cool-season dominant: _____ first 4 in. + _____ lbs./inch X _____ Height - 4 in. =
_____ Total air-dry production

Mix of cool- and warm season: _____ total inches X 215 lbs./ac. = _____ Total air-dry production

Available Forage

Warm- or cool season dominant: _____ first 4 in. + _____ lbs./inch X _____ resid. ht. - 4 inches =
_____ Residual air-dry production

Mix of cool - and warm-season: _____ min. residual ht. X 215 lbs./ac. _____ residual air-dry prod.

Total production from above: _____ - residual air-dry _____ = Available forage _____

Step 2 - Determine usable forage based on utilization

Utilization %: The utilization percent is higher the shorter the occupation period due to less waste.

The occupation period can be shortened by fencing out smaller areas for grazing.

0.5-1 day: 80%; 2 days: 75%; 3 days: 75%; 4 days: 70%; 5 days: 65%; 6-30 days: 60%

Usable Forage Supply:

_____ lbs./ac. Available forage X _____ % utilization = _____ lbs./ac. usable forage

Step 3 - Determine forage demand from animals

Forage Demand

_____ lbs. average animal X 3% of body weight/day = _____ lbs. forage required/AU//day

X _____ number of animals = _____ Total Forage Demand for the herd per day

Last Step - two options

You know the number of acres, but need to determine the number of days they can graze:

_____ lbs./ac. usable forage (Step 2) X _____ acres = _____ Total lbs.

_____ Total lbs. ÷ _____ Total Forage Demand (Step 3) = _____ days

You know the number of days you want to graze, but need to determine the number of acres:

_____ Total Forage Demand (Step 3) X _____ days = _____ Total lbs.

_____ Total lbs. ÷ _____ lbs./ac. usable forage (Step 2) = _____ acres

(This second option can be used if you have a larger area, but want to divide it up into smaller paddocks in order to increase utilization and increase the overall number of days that grazing can take place.)