

Warm-Season Annuals Protocol **300 Day Grazing – Emphasis Program**

Objective:

Demonstrate the benefits associated with increasing the number grazing days by utilizing warm-season annuals.

Methods & Procedures:

- Soil test by March 1
- Pasture inventory one month prior to planting
- Remove forage residue prior to planting
- Select annual based on farming operation and soil
- Prepare grass sod for planting appropriate warm-season annual
- Plant between March and June
 - Crabgrass can be planted from March to May
 - Lespedeza, pearl millet, sorghums, sorghum x sudan grass hybrids, etc. should be no-till drilled following roundup application or planted into a prepared seedbed in May or June.
(*Note sorghums and sorghum x sudan grass hybrids are **not** safe for horses.*)
- Apply 50-60 lbs. N in June
- Defer grazing until 6 to 8 inches of forage growth has accumulated for crabgrass
- Defer grazing until 24 inches tall for Sudangrasses, sorghum x Sudangrass hybrids and pearl millet
- Rotationally graze
- Measure forage quality and yield of warm–season annual pasture at turn in
- Record the number of acres, stocking rate, grazing method and turn in and turn out date.
- BCS or Weigh livestock at beginning and ending of grazing period
- Record rainfall events and amounts or utilize local weather station data

Data Analysis:

1. Determine cost of planting annual
2. Determine cost of hay and supplemental feed
3. Determine animal performance.
4. Determine number of grazing days.
4. Determine economic cost difference between grazing warm season annuals vs. feeding hay plus supplement (if needed).

Outcomes:

1. Total cost comparison as a result of grazing warm season annuals
2. Number of days grazing warm season annuals
3. Average daily gain while grazing warm season annuals

Outputs:

1. Number of producers reached through field days, news letters and presentations.
2. Number of producers adopting the practice

Warm Season Annuals

Agent Name: _____
Producer Name: _____

Field

Acres _____
Soil Test (by March 1) _____
Soil Type _____
Forage Inventory forage inventory sheet included

Seed

Type _____
Date Applied _____
Rate per acre _____
Cost Per Acre _____
Total Cost _____

Fertilizer

Type _____
Date Applied _____
Rate per acre _____
Cost Per Ton _____
Total Cost _____

Grazing Period

Beginning Date _____
Ending Date _____

Grazing Method

Strip – How often were cattle moved _____
Continuous _____

Yield Estimate (*At turn in*) yield estimate worksheet included

Forage Quality

 (*Routine Analysis*)

At turn in _____

Rainfall

Record Daily Amounts March – Aug. (*calendar included*) _____

Hay Fed

 (*During Grazing Period (if any) or would have been fed*)

Hay Analysis (*Routine*) _____
Hay Type _____
Hay Age _____
Hay Storage (*Inside or Outside*) _____
Bale Value _____
Bale Wt. (*try to get actual weight*) _____
Number of bales fed & date _____

Supplemental Feed

Type _____
Cost per ton _____
Pounds fed per day _____
Number of days fed _____

Livestock

Type _____
Number _____
Estimated average weight _____
Beginning Wt or BCS _____
Ending Wt or BCS _____

Livestock Weighing or BCS Guideline

Weighing: Calves or small ruminants

- Make sure you have a scale that is in working condition
- Try to do the beginning and ending weights at the same time of day
- Record weights and keep in project folder

BCS: Mature cows, bred heifers or horses

- Have the same person do the beginning and ending BCS
- Try to do a representative cross section of the herd
- Score a minimum of 5 head or 25% of the herd if over 20 head
- Score the same individual animals for beginning and the ending BCS
- Record BCS and keep in project folder

Forage Yield Estimate Worksheet

Date: _____

County: _____

Agent: _____

Yield Estimate: (*At turn in*)

(Cut 6-17" squares to 1 1/2")

(Dry and weigh forage in grams)

Weigh forage when completely dry.

| | <u>Ht – Inches</u> | <u>Density – (Thin, Medium or Thick)</u> | <u>Wt. Grams</u> |
|-----|--------------------|--|------------------|
| #1 | _____ | _____ | _____ |
| #2 | _____ | _____ | _____ |
| #3 | _____ | _____ | _____ |
| #4 | _____ | _____ | _____ |
| #5 | _____ | _____ | _____ |
| #6 | _____ | _____ | _____ |
| Avg | _____ | _____ | _____ |

Forage Inventory Sheet

| Name: | | | | Date: | | | |
|----------------------------|--------|-------|---|---------------------------|-------|-------|---|
| County: | | | | | | | |
| Field ID: | | | | Number of Acres: | | | |
| Species | County | Total | % | Species | Count | Total | % |
| Cool-Season Grasses | | | | Legumes | | | |
| Fescue | | | | White Clover | | | |
| Orchardgrass | | | | Red Clover | | | |
| Ky Bluegrass | | | | Annual Lespedeza | | | |
| Small Grain | | | | Hairy Vetch | | | |
| Annual Ryegrass | | | | Hop Clover | | | |
| Other Cool Season Grasses | | | | Other Legumes | | | |
| Warm-Season Grasses | | | | Weeds/Other | | | |
| Bermudagrass | | | | Perennial Broadleaf Weeds | | | |
| Bahiagrass | | | | Annual Broadleaf Weeds | | | |
| Dallisgrass | | | | Perennial Grassy Weeds | | | |
| Crabgrass | | | | Annual Grassy Weeds | | | |
| Other Warm Season Grasses | | | | Sedge/Rush | | | |
| | | | | Woody/Thorny Brush | | | |
| | | | | Bare Ground | | | |

To conduct a pasture inventory, walk a zip-zag pattern across a pasture and record what is found at the end of your toe on every 5th step. Record at least 50 tally marks—preferably 100 tally marks for each field.

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