

NATURAL RESOURCE CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD

PRESCRIBED GRAZING
(Acre)
CODE 528A

DEFINITION

The controlled harvest of vegetation with grazing or browsing animals, managed with the intent to achieve a specified objective.

PURPOSE

This practice may be applied as part of a conservation management system to accomplish one or more of the following purposes:

- Improve or maintain the health and vigor of selected plants and to maintain a stable and desired plant community
- Provide or maintain food for animals of concern
- Improve or maintain animal productivity and health
- Reduce soil erosion and maintain or improve soil condition
- Maintain or improve water quality
- Maintain, improve, or enhance wildlife habitat (*including rare habitats such as Southern Appalachian Bogs*).

CONDITIONS WHERE PRACTICE APPLIES

This practice may be applied on all lands where grazing and/or browsing animals are managed.

CRITERIA

Criteria are established for:

- pre- and post-grazing heights
- rest periods
- prescribed grazing methods.

Forage systems are dynamic. The rate of plant growth shall determine when a site is ready to be grazed. Be practical and flexible to meet the needs of the forage plants in relation to climatic fluctuations.

Conservation practice standards are reviewed periodically and updated if needed. To obtain the current version of this standard, contact the Natural Resources Conservation Service.

Pre- and Post-Grazing Heights Criteria

Criteria for pre- (start) and post- (stop) grazing heights are listed in Appendices A.1 - A.2. For pastures comprised of multiple plant species (*mixtures*), manage stands to favor the predominate species. Duration and intensity of grazing will be based on desired plant health and expected productivity of key forage species. *Expected productivity, or yields, may be determined using a soil survey, historical yield data, or actual yield data. Where yield data is not available, use the data listed in Appendices A.1 - A.2 as a guide for initial planning purposes until yields can be established.*

Rest Periods Criteria

Suggested minimum length of rest periods for forages commonly grown in North Carolina are listed in the Appendices A.1 - A.2. **All forages shall receive a rest (*non-grazed*) period during the forage growing season. This is to allow for forage regrowth.** Rest periods will also be provided as needed for reseeding, hay production, pest management, nutrient management (*i.e., lime and fertilizer application*), or other special reasons.

Prescribed Grazing Methods Criteria

Acceptable prescribed grazing methods include:

- Rotational Grazing
- First and Last Grazers
- Stockpiling
- Limit-time Grazing
- Creep Grazing
- Continuous Stocking (*See note on page 528-3 under the section, "Continuous Stocking"*).

Each grazing method shall be tailored to help meet the landowner's objective(s). Prescribed grazing shall be applied in a manner to balance animal demand and available feed (*i.e., forage production plus scheduled supplemental feed*). Typical animal feed demands (*dry matter intake*) are listed in Appendix A.3. Grazing shall be in accordance with forage quantity and quality criteria that best meets the production requirements for the kind and class of animal.

Utilization rates, or the percent of forage that can be consumed by the targeted animal (above a specified residual height), may be manipulated by the grazing method utilized. *Suggested utilization rates are provided in Appendix A.10.*

- **Rotational Grazing** - involves the rotation (*movement*) of animals through two or more pastures (*or, paddocks*). A rest (*non-grazed*) period follows each grazed period. Rotational grazing systems may be extensive (*i.e., moving animals monthly*), moderate (*moving animals weekly*) or intensive (*animals are moved everyday or every few hours*).
- **First and Last Grazers** - this is a type of rotational grazing method which involves the use of two groups of livestock. Four or more pastures (*or, paddocks*) must be used for this system to be practical throughout the grazing season. "First grazers" are allotted to a pasture and remain there until one-half or less of the available forage is utilized. Then the first grazers are moved out, and the last grazers are moved in to clean up the remaining forage. *For example, grazing a group of lactating cows or stockers ahead of a group of dry cows.*

- **Stockpiling (Deferred Grazing)**- delaying grazing during part of the grazing season in order to allow an accumulation of growth to be grazed at a later time. *Tall fescue is a good example of a forage that can be stockpiled. Restrict grazing during the fall growth period as a way to reserve for grazing later during the winter .*
- **Limit-Time Grazing** - allowing animals to graze a pasture for a very limited time each day, or every other day. This is typically suggested for a high quality forage such as annuals (e.g., *winter small cereal grains or summer annuals such as pearl millet*) or legumes (e.g., *alfalfa*) .
- **Creep Grazing** - is a grazing method commonly used to provide a higher quality forage to young animals (e.g., *calves, lambs, or kids*) with high nutritional demands. Creep gates are typically used to allow passage to the higher quality forage by small stock only (*passage through the gate by older, mature stock is prohibited*).
- **Continuous Stocking** - Under continuous stocking, animals are maintained on one site for the entire grazing season without allowing a *rest (non-grazed)* period for the forage plants. **Note: Continuous stocking is not acceptable as the only method of prescribed grazing because it does not allow for a forage rest (non-grazed) period during the plant's growing season. However, in some situations continuous stocking for portions of the year may be advantageous and is permissible.**

General Criteria

Prescribed grazing will be applied in such a manner to sustain vegetative cover necessary to minimize soil erosion, soil compaction or other detrimental effects to the soil resource.

Animals shall be deferred from grazing when sites are extremely wet or when plant growth is insufficient to permit grazing. Grazing shall also be deferred from newly planted forages until seedlings are well established. *Before subjecting plants to grazing use, an adequate plant population must exist and have a root system capable of anchoring the plant, and must have reached the optimal start grazing height as listed in Appendices A.1-A.2).*

On grazed forest land, forage shall be grazed without damage to the tree resources. Rest periods shall be designed to ensure the health and vigor of forage and tree species.

Prescribed grazing will be applied in such a manner to prevent detrimental impacts to water quality; animals shall be managed to protect streambanks from erosion and, animals shall be managed so that manure and urine are deposited away from water bodies. Apply prescribed grazing in a manner to minimize effects on wetlands, riparian areas and/or frequently flooded areas.

Prescribed grazing plans for rare habitats such as Southern Appalachian Bogs shall be coordinated closely with biologists of the U.S. Fish and Wildlife Service and the N.C. Wildlife Resources Commission.

CONSIDERATIONS

When designing a plan using Prescribed Grazing, consider:

- **Landowner's objectives** - for conservation, profit and animal performance.
- **Landowner's time** - for example, a landowner who only visits his/her livestock on the weekends may not be able to implement a management-intensive rotational grazing system.
- **Soils and Topography** - where practical, consider grouping similar soil types and landscapes within a paddock to promote uniform grazing.
- **Special features** - such as roads, streams and ponds.
- **Source and location of water** - animal performance usually declines when they must travel greater than 1/2 mile to water. For more information about livestock water requirements, consult the Field Office Technical Guide for the practice, Trough or Tank (Code 614).
- **Location of supplemental feeding areas** - strive to reduce negative impacts to the natural resources when planning placement of supplemental feed (e.g., hay, minerals, etc.). Locate these areas away from water courses and drainageways.
- **Fencing** - consider existing fences, type and location. For more information, consult the Field Office Technical Guide, for the practice standard, Fence (Code 382).
- **Working Facilities** - consider existing or planned equipment such as corrals, headgates, etc., that may affect the design of the grazing prescription. It is most efficient to have facilities near the center of the grazing system.
- **Weather conditions** - consider incorporating shade (whether natural or artificial) in pastures that will be grazed primarily during summer months; provide access to shelter (e.g., barns, sheds, windbreaks, etc.), especially to small stock such as calves, kids and lambs for protection during cold, rainy, or windy periods.
- **Needs of other enterprises** - utilizing the same land, such as wildlife and recreational uses.
- **Excess forage production** - when pastures produce forage in excess of livestock demand, consider harvesting a portion of the standing crop. Consult the Field Office Technical Guide, Section IV, Forage Harvest Management (Code 511).

PLANS AND SPECIFICATIONS

The Prescribed Grazing standard will be used as a guide for the preparation of individual plans and specifications for sites. The following information is must be included, as a minimum:

1. **Identification of each grazed site (pasture, paddock, field, etc.) and identification of the dominate forage specie(s) in each grazed site.**
2. **The optimal pre- (start) and post- (stop) grazing heights for forages in each grazed site.**
3. **Expected annual forage production for each grazed site.**
4. **Number of livestock by kinds, breeds, and classes as well as monthly and annual forage (dry matter) demand. *Sample livestock inventory recording sheets are provided in Appendices A.4 - A.9.***
5. **Monthly and annual forage-animal balance. *This may be calculated using the Grazing Land Applications (GLA) computer software or other approved methods (See Appendix A.11).***
6. **Potential annual carrying capacity. *This may be determined using the GLA computer software or other approved methods (See Appendix A.11).***
7. **Type of grazing method(s) to be used for each grazed site.**
8. **Specification that all grazed sites receive a rest period during the forage growing season.**

OPERATION AND MAINTENANCE

Prescribed Grazing will be applied on a continuing basis. Adjustments should be made as needed to insure that the concept and objectives of its application are met. If an imbalance is determined the prescription should be adjusted accordingly.

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A.1. Growth Rates, Grazing Heights, Rest Periods and Annual Yields for: GRASSES.

Species	Growth Rate ^a (lbs dm/ac/day)												Optimal Height (Inches) to:		Rest Period ^b (days)	Average Annual Yield ^c (lbs dm/ac/yr)
													Start	Stop		
	J	F	M	A	M	J	J	A	S	O	N	D	Grazing	Grazing		
PERENNIALS, COOL SEASON																
Kentucky Bluegrass	0	1	13	20	33	27	13	5	8	9	3	0	4-6	1-2	30-45	4,000
Orchardgrass	4	10	28	40	38	16	8	10	14	20	8	4	6-8	3-4	20-30	6,000
Reed Canarygrass	0	0	0	17	42	33	26	22	18	8	0	0	10	3-4	30-45	5,000
Rescuegrass ^d	6	34	53	53	44	0	0	0	0	0	13	8	6-8	3-4	30-45	6,350
Ryegrass, Perennial ^e	4	13	30	42	32	13	4	6	15	32	17	4	6-8	3-4	21-45	6,350
Tall Fescue (endophyte-infected) ^f	4	13	30	42	32	12	4	6	15	32	17	4	4-8	2-4	21-45	6350 ^g
Tall Fescue (endophyte-free)	4	13	30	42	32	13	4	6	15	32	17	4	6-8	3-4	21-45	6,350
Timothy ^h	0	0	0	13	33	47	20	7	7	7	0	0	8-10	4-6	30-45	4,000
PERENNIALS, WARM SEASON																
Bahiagrass	0	0	0	4	7	39	46	39	29	17	4	0	5	2-3	20-28	5,500
Bermudagrass, Common	0	0	0	19	29	36	60	48	29	19	0	0	2-4	1-2	18-28	7,200 ^{i,j}
Bermudagrass, Hybrid	0	0	0	20	25	38	62	50	38	12	5	0	4-5	1-2	18-28	6,000 - 9,000
Bluestem, Big ^{h,k}	0	0	0	12	24	48	71	59	24	0	0	0	14 - 18	6-8 ^k	25-40	7,125
Bluestem, Caucasian ^k	0	0	0	17	33	43	50	43	30	0	0	0	6-8	2-4	25-35	6,500
Dallisgrass	0	0	0	0	12	30	45	38	23	3	0	0	5	2-3	21-30	4,500
Eastern Gamagrass ^{h,k}	0	0	0	0	20	58	65	65	43	0	0	0	18 - 24	6-8 ^k	25-45	7,500
Flaccidgrass ^k	0	0	6	19	30	66	66	50	30	8	0	0	12	6-8 ^k	25-45	8,250
Indiangrass ^{h,k}	0	0	0	12	24	48	71	59	24	0	0	0	8-10	5-6 ^k	25-45	7,125
Switchgrass ^{h,k}	0	0	5	14	35	47	55	46	24	7	0	0	12 - 16	6-8 ^k	30-45	7,125

A.1. Growth Rates, Grazing Heights, Rest Periods and Annual Yields for: GRASSES (continued).

Species	Growth Rate ^a (lbs dm/ac/day)												Optimal Height (Inches) to:		Rest Period ^b (days)	Average Annual Yield ^c (lbs dm/ac/yr)
	J	F	M	A	M	J	J	A	S	O	N	D	Start	Stop		
													Grazing	Grazing		
ANNUALS, WINTER																
Barley	6	15	23	34	29	5	0	0	5	12	17	8	6-8	3-4	14-25	4,600
Oats	6	15	23	34	29	5	0	0	5	12	17	8	6-8	3-4	14-25	4,600
Rye	6	15	23	34	29	5	0	0	5	12	17	8	6-8	3-4	14-25	4,600
Ryegrass, Annual (Italian)	7	16	30	42	56	47	12	0	0	7	9	7	6-8	2-3	14-25	7,000
Wheat	6	15	23	34	29	5	0	0	5	12	17	8	6-8	3-4	14-25	4,600
ANNUALS, SUMMER																
Crabgrass	0	0	0	0	12	23	58	58	58	23	0	0	6-8	3-4	14-30	7,000
Millet, Browntop	0	0	0	0	18	50	75	63	38	8	0	0	24	8-12	14-30	7,500
Millet, Foxtail	0	0	0	0	11	30	45	38	23	5	0	0	24	8-12	14-30	4,500
Millet, German	0	0	0	0	11	30	45	38	23	5	0	0	24	8-12	14-30	4,500
Millet, Japanese	0	0	0	0	11	30	45	38	23	5	0	0	12-24	6-12	14-30	4,500
Millet, Pearl (Dwarf)	0	0	0	0	18	50	75	63	38	8	0	0	12-24	6-12	14-30	7,500
Millet, Pearl (Tall)	0	0	0	0	18	50	75	63	38	8	0	0	24	8-12	14-30	7,500
Sorghum-Sudan Hybrids ^l	0	0	0	0	19	53	80	67	40	8	0	0	24	8-12	14-30	8,000
Sudangrass ^l	0	0	0	0	18	50	75	63	38	8	0	0	24	6+	14-30	7,500

Notes:

^a Actual growth rates may vary depending upon climate, moisture, time of establishment, etc.

^b The suggested rest period is based on favorable growing conditions for the plant. Longer cycles (more days) may be needed during stress events (e.g., drought, temperature extremes, etc.). Shorter cycles (fewer days) may be needed during times of rapid growth.

^c Based on yields above the recommended residual (stop grazing) height.

^d A.k.a., Prairiegrass, Rescuegrass is a short-lived perennial (2-3 yrs) in North Carolina. Yields depend on natural reseeding annually.

^e Usually persists only two years in North Carolina because of disease.

^f Consider stockpiling/defer grazing. Not recommended for lactating dairy cows. Not recommended for broodmares during the last 3 months of gestation.

^g For a mixture of tall fescue and ladino (white) clover, add 250 lbs dm/ac/yr to the yield.

^h Will not withstand close grazing for long periods of time.

ⁱ For Common Bermudagrass overseeded with Rye, add 3,800 lbs dm/ac/yr to the average annual yield.

^j For Common Bermudagrass overseeded with Ryegrass, add 4,300 lbs dm/ac/yr to the average annual yield.

^k Plan final grazing in order to leave a height of at least 12 inches at frost. Where wildlife habitat improvement is a goal, stop grazing at 8+ inches.

^l Prussic acid may occur during periods of stress (e.g., drought or frost) or early growth. Not recommended for grazing by horses.

A.2. Growth Rates, Grazing Heights, Rest Periods and Annual Yields for: LEGUMES.

Species	Growth Rate ^a (lbs dm/ac/day)												Optimal Height (Inches) to:		Rest Period ^b (days)	Average Annual Yield ^c (lbs dm/ac/yr)
													Start Grazing	Stop Grazing		
	J	F	M	A	M	J	J	A	S	O	N	D				
PERENNIALS, COOL SEASON																
Alfalfa ^d	0	0	27	40	53	40	27	40	27	8	5	0	5-6	3-4	20-30	8,000
Clover, Red ^e	2	5	23	58	47	28	14	14	18	19	5	2	6-8	3-4	18-25	7,000
PERENNIALS, WARM SEASON																
Lespedeza, Sericea	0	0	0	8	23	45	38	23	15	0	0	0	8	3	20-25	4,500
ANNUALS, WINTER																
Clover, Crimson	4	16	40	27	7	0	0	0	0	0	20	20	6	2-4	18-25	4,000
ANNUALS, SUMMER																
Lespedeza, Kobe	0	0	0	0	4	14	41	35	21	2	0	0	6-8	3-4	20-30	3,500
Lespedeza, Korean	0	0	0	0	4	14	41	35	21	2	0	0	6-8	3-4	20-30	3,500

Notes:

^a Actual growth rates may vary depending upon climate, moisture, time of establishment, etc.

^b The suggested rest period is based on favorable growing conditions for the plant. Longer cycles (more days) may be needed during stress events (e.g., drought, temperature extremes, etc.). Shorter cycles (fewer days) may be needed during times of rapid growth.

^c Based on yields above the recommended residual (stop grazing) height.

^d Follow recommended grazing heights or begin grazing when plants are at bud to 10% bloom.

^e Typically acts as a biennial in North Carolina.

A.3. Dry Matter Intake Estimates for Livestock.

528A-11

Animal Kind	Animal Class	Daily Dry Matter Intake Rate (% of body weight)	Annual Dry Matter Intake Rate (lbs dm/AU*/yr)
BEEF CATTLE			
	Lactating Cow	2.0 to 3.0	7,300 to 10,950
	Dry Cow	1.5 to 2.0	5,475 to 7,300
	Bull	1.5 to 2.0	5,475 to 7,300
	Stocker	2.5 to 3.5	9,125 to 12,775
	Finishing	2.0 to 3.5	7,300 to 12,775
DAIRY CATTLE			
	Lactating Cow	3.0 to 4.0+	10,950 to 14,600+
	Dry Cow	2.5 to 3.5	9,125 to 12,775
	Heifer	3.0	10,950
SHEEP			
	Lactating Ewe	4.0	14,600
	Nonlactating Ewe (pregnant)	3.0	10,950
	Ram	2.0	7,300
	Lamb, growing	5.0	18,250
	Lamb, finishing	3.0	10,950
GOATS			
	Doe (Nanny)	4.0+	14,600+
	Buck (Billy)	3.0	10,950
	Kid	5.0	18,250
HORSES			
	Mare, Lactating	2.0 to 3.0	7,300 to 10,950
	Mare, Non-Lactating	2.0	7,300
	Stallion	2.0	7,300
	Gelding	2.0	7,300
	Yearling	3.0	10,950
LLAMAS			
	Adult	2.0 to 3.0	7,300 to 10,950
	Immature (crias)	4.0	14,600

* AU - Animal Unit. One Animal Unit is equivalent to 1,000 pounds body weight.

A.4. Livestock Resources Inventory Recording Sheet for:

528A-12

BEEF CATTLE

County: _____

Date: _____

Farm: _____ Tract: _____

Client: _____

Herd ID: _____

Business: _____

Est'd Age: _____ yrs mos days

Weight (lbs): _____

Total No. _____

Breed Type: (Circle One):

Angus	Brangus	HXA HBrangXSH	HereXBrangXSH	Simbrah
Beefmaster	CharAngus	Hereford-L	LaCopita F1 H-B	Simmental
Braford	Charolais	Hereford-M	Limousin	S Devon
Brahman	CharXBrahman	Hereford-S	Maine Anjou	St Gert
*XBritLrg	Chianina	HereXAngus	Mongolian Red	Tarentaise
*XBritMod	Fist St Gert	HereXBrahman	Murrey Grey	Other _____
*XBritSml	GelbXSimmXAngus	HereXSimment	Nelore	
BrahmXDairy	Gelbvieh	HereXSt Gert	SE 1/2	

Animal Class: (Circle One):

Bull	Cow 3 yr	Heifer 4 yr	Steer 2 yr	Wnr Bull
Bull Calf	Cow 4 yr	Heifer Calf	Steer 3 yr	Wnr Heifer
* 1-3 mo	Cow 5-10 yr	* <1 mo	Steer 4 yr	Wnr Steer
* <1 mo	Cow >10 yr	* >3 mo	Steer Calf	Yrig Bull
* >3 mo	Heifer 2 yr	* 1-3 mo	* 1-3 mo	Yrig Heifer
Cow 2 yr	Heifer 3 yr	Ox	* <1 mo	Yrig Steer
			* >3 mo	

Body Condition Score: (Circle One):

1 2 3 4 5 6 7 8 9

Avg. Animal Weight (lbs) X Daily DM Intake (%) X Animals (no.) X 30 d/mo = lbs dm /month

Avg. Animal Weight (lbs) X Daily DM Intake (%) X Animals (no.) X 365 d/yr = lbs dm /month

Avg. Animal Weight (lbs) / 1,000 lbs X Animals (no.) = AU's (no.)

A.5. Livestock Resources Inventory Recording Sheet for:

528A-13

DAIRY CATTLE

County: _____	Date: _____
Farm: _____ Tract: _____	Client: _____
Herd ID: _____	Business: _____

Est'd Age: _____ yrs mos days Weight (lbs): _____ Total No. _____

Breed Type: (Circle One):

- | | | |
|-------------|----------|-------------|
| Ayshire | Guernsey | Other _____ |
| Brown Swiss | Holstein | |
| Fresian | Jersey | |

Animal Class: (Circle One):

- | | | | | |
|-----------|-------------|-------------|------------|------------|
| Bull | Cow 3 yr | Heifer 4 yr | Steer 2 yr | Wnr Bull |
| Bull Calf | Cow 4 yr | Heifer Calf | Steer 3 yr | Wnr Heifer |
| " 1-3 mo | Cow 5-10 yr | " <1 mo | Steer 4 yr | Wnr Steer |
| " <1 mo | Cow >10 yr | " >3 mo | Steer Calf | Yrg Bull |
| " >3 mo | Heifer 2 yr | " 1-3 mo | " 1-3 mo | Yrg Heifer |
| Cow 2 yr | Heifer 3 yr | Ox | " <1 mo | Yrg Steer |
| | | | " >3 mo | |

Body Condition Score: (Circle One): 1 2 3 4 5 6 7 8 9

Avg. Animal Weight (lbs) Daily DM Intake (%) Animals (no.) lbs dm /month
 Monthly Demand: X X X 30 d/mo =

Avg. Animal Weight (lbs) Daily DM Intake (%) Animals (no.) lbs dm /month
 Annual Demand: X X X 365 d/yr =

Avg. Animal Weight (lbs) Animals (no.) AU's (no.)
 Animal Units: / 1,000 lbs X =

A.6. Livestock Resources Inventory Recording Sheet for:

528A-14

SHEEP			
County: _____	Date: _____		
Farm: _____	Tract: _____	Client: _____	
Herd ID: _____	Business: _____		

Est'd Age: _____ yrs mos days Weight (lbs): _____ Total No. _____

Breed Type: (Circle One):

- | | | | | |
|----------------|-------------|---------------|------------|-------------|
| Blackface High | Dorset Horn | Montdale | Romney | Other _____ |
| Cheviot | Hampshire | Oxford | Shropshire | |
| Columbia | Karakul | Panama | Southdown | |
| Corriedale | Leicester | Polled Dorset | Suffolk | |
| Cotswold | Lincoln | Rambouillet | Targhee | |
| Debouillet | Merino | Romedale | Tunis | |

Animal Class: (Circle One):

- | | | |
|-----------------|--------------------|--------------------|
| Ewe Lamb 1-3 mo | Ram Lamb <1 mo | Weaner Wether Lamb |
| Ewe Lamb <1 mo | Ram Lamb >3 mo | Wether Lamb <1 mo |
| Ewe Lamb >3 mo | Weaner Lamb 1-3 mo | Wether Lamb >3 mo |
| Mature Ewe | Weaner Lamb <1 mo | Wether Lamb 1-3 mo |
| Mature Ram | Weaner Lamb >3 mo | Yearling Ewe |
| Mature Wether | Weaner Ewe Lamb | Yearling Ram |
| Ram Lamb 1-3 mo | Weaner Ram Lamb | Yearling Wether |

Body Condition Score: (Circle One): 1 2 3 4 5

Monthly Demand: Avg. Animal Weight (lbs) X Daily DM Intake (%) X Animals (no.) X 30 d/mo = lbs dm /month

 X X X 30 d/mo =

Annual Demand: Avg. Animal Weight (lbs) X Daily DM Intake (%) X Animals (no.) X 365 d/yr = lbs dm /month

 X X X 365 d/yr =

Animal Units: Avg. Animal Weight (lbs) / 1,000 lbs X Animals (no.) = AU's (no.)

 / 1,000 lbs X =

A.7. Livestock Resources Inventory Recording Sheet for:

528A-15

GOATS

County: _____	Date: _____
Farm: _____ Tract: _____	Client: _____
Herd ID: _____	Business: _____

Est'd Age: _____ yrs mos days Weight (lbs): _____ Total No. _____

Breed Type: (Circle One):

- | | | |
|--------|-----------------------|-------------|
| Angora | Spanish Goat | Boer |
| Nubian | Spanish Goat X L Milk | Other _____ |

Animal Class: (Circle One):

- | | | |
|-------------------------|------------------------|-----------------------|
| Billy (buck) Kid | Mutton Kid | Nanny (doe) Kid >3 mo |
| Billy (buck) Kid 1-3 mo | Mutton Kid <1 mo | Weaner Billy (buck) |
| Billy (buck) Kid <1 mo | Mutton Kid >3 mo | Weaner Mutton |
| Billy (buck) Kid >3 mo | Mutton Kid 1-3 mo | Yearling Billy (buck) |
| Mature Billy (buck) | Nanny (doe) Kid | Yearling Mutton |
| Mature Mutton | Nanny (doe) Kid 1-3 mo | Yearling Nanny (doe) |
| Mature Nanny (doe) | Nanny (doe) Kid <1 mo | |

Body Condition Score: (Circle One): 1 2 3 4 5

	Avg. Animal Weight (lbs)	X	Daily DM Intake (%)	X	Animals (no.)	X	30 d/mo =	lbs dm /month
Monthly Demand:								

	Avg. Animal Weight (lbs)	X	Daily DM Intake (%)	X	Animals (no.)	X	365 d/yr =	lbs dm /month
Annual Demand:								

	Avg. Animal Weight (lbs)	/	1,000 lbs	X	Animals (no.)	=	AU's (no.)
Animal Units:							

A.8. Livestock Resources Inventory Recording Sheet for:

528A-16

HORSES			
County: _____	Date: _____		
Farm: _____ Tract: _____	Client: _____		
Herd ID: _____	Business: _____		

Est'd Age: _____ yrs mos days Weight (lbs): _____ Total No. _____

Breed Type: (Circle One):

- | | |
|--------------|--------------|
| Quarterhorse | Thoroughbred |
| Arabian | Other _____ |

Animal Class: (Circle One):

- | | | |
|---------------|---------------|-------------------|
| Foal Colt | Mare 2 yr | Stallion 4 yr |
| Foal Filly | Mare 3 yr | Stallion >4 yr |
| Foal Gelding | Mare 4 yr | Weaner Gelding |
| Gelding 2 yr | Mare 5-15 yr | Weaner Mare |
| Gelding 3 yr | Mare >15 yr | Weaner Stallion |
| Gelding 4 yr | Stallion 2 yr | Yearling Gelding |
| Gelding >4 yr | Stallion 3 yr | Yearling Mare |
| | | Yearling Stallion |

Body Condition Score: (Circle One): 1 2 3 4 5 6 7 8 9

	Avg. Animal Weight (lbs)		Daily DM Intake (%)		Animals (no.)		lbs dm /month
Monthly Demand:		X		X		X	30 d/mo =

	Avg. Animal Weight (lbs)		Daily DM Intake (%)		Animals (no.)		lbs dm /month
Annual Demand:		X		X		X	365 d/yr =

	Avg. Animal Weight (lbs)		1,000 lbs		Animals (no.)		AU's (no.)
Animal Units:		/	1,000 lbs	X		=	

A.9. Livestock Resources Inventory Recording Sheet for:

528A-17

LLAMAS			
County: _____	Date: _____		
Farm: _____	Tract: _____	Client: _____	
Herd ID: _____	Business: _____		

Est'd Age: _____ yrs mos days Weight (lbs): _____ Total No. _____

Animal Class: (Circle One):

Adult Male	Immature (cria) Male
Adult Female	Immature (cria) Female

Body Condition Score: (Circle One): 1 2 3 4 5

	Avg. Animal Weight (lbs)		Daily DM Intake (%)		Animals (no.)		lbs dm /month
Monthly Demand:		X		X		X	30 d/mo =

	Avg. Animal Weight (lbs)		Daily DM Intake (%)		Animals (no.)		lbs dm /month
Annual Demand:		X		X		X	365 d/yr =

	Avg. Animal Weight (lbs)		1,000 lbs		Animals (no.)		AU's (no.)
Animal Units:		/		X		=	

A.10. Utilization Rates* for Grazing.

528A-18

Grazing Method	Utilization Rate (%)
Rotational, Extensive (move animals monthly)	50 - 60
Rotational, Moderate (move animals weekly)	60 - 70
Rotational, Intensive (move animals daily or every few hours)	70 - 80
First and Last Grazers	70 - 80
Stockpiling	50 - 80
Limit-Time Grazing	30 - 80
Creep Grazing	30 - 50
Continuous Stocking	30 - 50

*Utilization Rates are estimates. All rates will vary depending upon the length of time animals are allowed to graze a particular area, as well as the actual amount of forage consumed. The planner should carefully determine the appropriate utilization rate to accurately reflect the grazer's situation. Utilization Rates apply to total plant mass on offer produced at any point in time or for a grazing period, above the recommended residual (stop grazing) height for the forage species of interest.

III. Balance.

	Month												TOTAL
	J	F	M	A	M	J	J	A	S	O	N	D	
NET FORAGE SUPPLY: (tons dm)													
TOTAL ANIMAL DEMAND: (tons dm)													
DIFFERENCE (BALANCE): (tons dm)													

IV. Potential Annual Carrying Capacity*.

Net Forage Supply
(tons dm/yr)

Annual DM Intake/AU
(tons dm/AU/yr)

Potential AU/year
(no.)

/

=

*Potential Annual Carrying Capacity is the maximum stocking rate possible without inducing damage to vegetation or related resources. The rate may vary from year to year on the same area due to fluctuating forage production.