

**NATURAL RESOURCES CONSERVATION SERVICE  
CONSERVATION PRACTICE STANDARD**

**PRESCRIBED GRAZING**

(Acre)

**Code 528**

**DEFINITION**

Managing the harvest of vegetation with grazing and/or browsing animals.

**PURPOSE**

Prescribed Grazing may be applied as part of a conservation system to achieve one or more of the following:

- Improve or maintain desired species composition and vigor of plant communities.
- Improve or maintain quantity and quality of forage for grazing and browsing animals' health and productivity.
- Improve or maintain surface and/or subsurface water quality and quantity.
- Improve or maintain riparian and watershed function
- Reduce accelerated soil erosion, and maintain or improve soil condition.
- Improve or maintain the quantity and quality of food and/or cover available for wildlife.
- Manage fine fuel loads to achieve desired conditions.
- Extend the grazing season

**CONDITIONS WHERE PRACTICE APPLIES**

Prescribed Grazing applies to all lands where grazing and/or browsing animals are managed.

**CRITERIA**

**General criteria applicable to All Purposes**

Removal of herbage will be in accordance with site production limitations, rate of plant growth, the physiological needs of forage plants, and the nutritional needs of the animals. Refer to tables 1, 2, and 3; and Chapter 5, section 2 of the

National Range and Pasture Handbook for additional guidance.

Adequate quantity and quality of drinking water will be supplied at all times during periods of occupancy.

Intensity, frequency of defoliations, timing, season of grazing, and duration of grazing and/or browsing will be adjusted to meet the desired objectives for the plant communities and the associated resources, including the grazing and/or browsing animal. The length of the grazing period should be based on the length of the rest period needed for recovery of the forage resource and reduction of second bite opportunity.

Manage kind of animal, animal number, grazing distribution, length of grazing and/or browsing periods, and timing of use to provide grazed plants sufficient recovery/rest time to meet planned objectives. The recovery/rest period of non-grazing can be provided for the entire year or during the growing season of key plants. Deferment (non-grazing period less than one year) and/or rest (non-grazing period equal to or greater than one year) will be planned for critical periods of plant needs. Refer to Table 2 and the Illinois Graze4 Worksheets for additional guidance.

Provide deferment or rest from grazing or browsing to ensure the success of prescribed fire, brush management, seeding or other conservation practices that cause stress or damage to key plants.

Protect soil, water, air, plant and animal resources when locating livestock feeding, handling, and watering facilities.

Plan the placement of supplemental feeds (salt, mineral and other supplementation feeders) away from water and shade sources to distribute

livestock throughout the pasture and encourage uniform grazing.

Manage grazing and/or browsing animals to maintain adequate vegetative cover on sensitive areas (i.e. riparian, wetland, habitats of concern, and karst areas).

Develop contingency plans (i.e. having extra feed on hand, reducing stocking rate, providing adequate water during a drought, etc...) to deal with expected episodic disturbance events (i.e., flooding, drought, insect infestations, wildfire, etc...).

Manage livestock movements based on plant growth, available forage, and allowable utilization target; and not calendar dates.

#### **Additional Criteria to Improve or Maintain the Health and Vigor of Plant Communities**

Duration and intensity of grazing and/or browsing will be based on desired plant health and expected productivity of key forage species to meet management objectives. Refer to Tables 1 and 2 for rest period guidance.

Plan periodic deferment from grazing and/or browsing to maintain or restore the desired plant community following episodic events, such as flooding, wildfire or severe drought.

Where appropriate, soil test periodically for nutrient status and soil reaction and apply fertilizer and/or soil amendments accordingly to improve or maintain plant vigor. For soil sampling and testing guidelines, refer to the Grazing in Illinois Manual. Composite samples should be collected by field. No composite sample should represent more than 20 acres for pastures that are uniform and 10 acres for pastures that are non-uniform. Additional samples should be collected where soil types, topography, or other features are non-uniform. Composite samples are obtained by collecting at least 15-20 sub-samples.

Incorporate at least 30% legumes (20% for sheep pastures), by weight, into grass pastures to provide for a nitrogen source for the pasture. Note: 30% legumes by weight would visually appear as about 60% cover when looking across the pasture.

Grazing use on native warm season grasses and grass like species will not remove more than 50 percent, by weight, of the current year's growth of the identified key grazing species when grazed during the growing season, and not more than 60 percent when grazed during the dormant season. Table 1 can be utilized as a tool to help determine the percent of weight removed of common grasses by estimating the percent of the plant height removed.

Grazing use, for sustainable management purposes, on browse (woody) species will not remove more than 65 percent of the current years' growth of the designated key browse species.

Grazing use on pasturelands; the designated key species will not be grazed closer than the minimum plant heights shown in Table 1. Also, grazing use should not be initiated on pastureland until the designated key species has reached the minimum height shown in Table 1. To maintain the health and vigor of the designated key species, these species should attain the minimum plant height as shown in Table 1 before the first killing frost.

All domestic grazing animals must be removed from the grassland unit being deferred.

In some cases the planned grazing sequence may be changed for short periods to take advantage of rapid spring growth and seasonal forages such as annual forages, crop aftermath, etc.

#### **Additional criteria to Improve or Maintain Quantity and Quality of Forage for Grazing and Browsing Animals' Health and Productivity**

Movement of animals will be scheduled to improve and/or maintain animal health and performance and to reduce or prevent the spread of disease, parasites, and contact with harmful insects and toxic plants.

Plan grazing and/or browsing to match forage goals of the producer for quantity and quality within the capability of the resource to respond to management.

Supplemental feed and/or minerals will be balanced with the forage consumption to meet the desired nutritional level for the kind and class of grazing and/or browsing livestock.

Dietary needs of livestock will be based on the National Research Council's Nutrient Requirements of Domestic Animals or similar scientific sources (Refer to USDA Natural Resources Conservation Service computer program "NUTBAL" and the GANLAB <http://cnrit.tamu.edu/ganlab/> for more detailed information). Appropriate adjustments need to be made for increased energy demand required by browsing or grazing animals foraging for food including travel to and from pasture site.

Shelter in the form of windbreaks, sheds, shade structures, and other protective features will be used where conditions warrant protecting livestock from severe weather, intense heat/humidity, and/or predators. For more information see Conservation Practice Standard Windbreak/Shelterbelt Establishment (Code 380).

The grazing manager needs to initiate a monitoring program to document actual grazing dates, livestock performance, climatic conditions, vegetation utilization, and changes in plant communities over time. Monitoring is needed to analyze results and to develop the following years grazing schedule. IL 528-1 Documentation Record for Grazing Management, the current NRCS Pasture Condition Score Sheet, or other record keeping systems should be used to aid in record keeping.

When multiple pastures are grazed in rotation, begin grazing in a different pasture each year.

On pastureland, grassland, rangelands, or native pasture, provide grazing and rest periods to meet the desired objectives for plant communities and associated resources in each pasture including the grazing animals. Refer to Table 1 for minimum and maximum grazing heights and dates to begin rest for the winter protection. Use Table 2 for grazing and rest periods during the growing season.

Where applicable, biosecurity safeguards will be put in place to prevent the spread of disease between on-farm or ranch classes of livestock and between livestock farm or ranch units.

#### **Additional Criteria to Improve or Maintain Surface and/or Subsurface Water Quality and Quantity**

Minimize concentrated livestock areas to enhance nutrient distribution and improve or maintain ground cover. Locate loafing areas, watering facilities, feeding locations (including winter feeding areas), and sacrifice areas away from waterbodies, and maintain adequate, vegetated buffers between concentration areas and waterbodies.

Plan intensity, frequency, timing and duration of grazing and/or browsing to:

- Minimize deposition or flow of animal wastes into water bodies,
- Minimize animal impacts on stream bank or shoreline stability.
- Provide adequate ground cover and plant density to maintain or improve infiltration capacity, reduce runoff, and reduce evaporation.
- Provide adequate ground cover and plant density to maintain or improve filtering capacity of the vegetation.
- Plan animal access points away from shade.

#### **Additional Criteria to Improve or Maintain Riparian and Watershed Function**

Minimize concentrated livestock areas to enhance nutrient distribution and improve or maintain ground cover and riparian/floodplain plant community structure and functions.

Plan Intensity, frequency, timing, and duration of grazing and/or browsing to provide adequate ground cover and plant density to maintain or improve infiltration capacity, reduce runoff, and filtering capacity of the vegetation.

Exclude livestock or practice flash grazing of paddocks adjacent to or perpendicular across streams. Remove livestock when recommended stubble height is attained (Refer to Table 1).

Plan animal access points away from shade.

Maintain adequate riparian community structure and function to sustain associated riparian, wetland, floodplain and stream species.

**Additional Criteria to Reduce Accelerated Soil Erosion and Maintain or Improve Soil Condition**

Minimize concentrated livestock areas, trailing, and trampling to reduce soil compaction, excess runoff, and erosion.

Maintain the amount of vegetative cover needed to prevent accelerated soil erosion due to wind and/or water erosion. Refer to recommended minimum grazing plant heights in Table 1.

Duration, intensity, frequency, and season of grazing and/or browsing shall be managed to minimize soil compaction, sustain high levels of vegetative cover, and reduce detrimental effects on soil condition. Refer to grazing and rest periods recommended in Table 2.

**Additional Criteria to Improve or Maintain the Quantity and Quality of Food and/or Cover Available for Wildlife**

Identify species of concern in the objectives of the prescribed grazing plan.

Plan intensity, frequency, timing and duration of grazing and/or browsing to provide for the development and maintenance of the plant structure, density and diversity needed for the desired fish and wildlife species of concern. See Conservation Practice Standard Upland Wildlife Habitat Management (Code 645).

When needed, the prescribed grazing plan will be designed to result in the plant community meeting the needs of the animals of concern as to cover, shelter, food, nesting cover, water, etc... The habitat management guides in the FOTG should be used to provide assistance in writing the plan.

**Additional Criteria to Manage Fine Fuel Loads to Achieve Desired Conditions**

Intensity, frequency, timing and duration of grazing and/or browsing will be planned to reduce hazardous fuel loads.

Intensity, frequency, timing and duration of grazing and/or browsing will be planned to manage fuel continuity, load, and other conditions in order to facilitate prescribed burns. See Conservation Practice Standard Prescribed Burning (Code 338).

**CONSIDERATIONS**

Protect soil, water, air, plant and animal resources when locating livestock feeding, supplement, handling, and watering facilities.

Livestock feeding, handling, and watering facilities will be designed and installed in a manner to improve and/or maintain animal distribution. Facilities will be designed and installed to minimize stress, the spread of disease, parasites, and contact with harmful organisms and toxic plants.

Avoid grazing riparian areas when soils are saturated. Graze only in times when vegetation will recover. Consider using lighter weight animals for creep grazing of riparian areas to reduce impact on vegetation.

Consider a grazing system that provides forage for as much of the year as possible to minimize supplemental feed cost (i.e. crop aftermath, summer and winter annuals, native warm season grasses, and stockpiling). Consider a grazing system that incorporates the use of native, warm season grasses for drought tolerance, wildlife habitat, or to meet forage needs during the summer when cool season grasses are not at peak production.

Consider strip grazing to improve harvest efficiency and prolong grazing days.

Consider locating winter feeding areas away from waterbodies, on lower slopes, and in a location central to grazing acres.

Consider using natural or artificial shelter as part of the Prescribed Grazing practice when appropriate.

Design the grazing program to the cooperators' goals and resources. Animal husbandry requirements (breeding programs, etc.) may affect the design of the grazing plan and need to be considered.

Stubble heights can be used in conjunction with monitoring to ensure resource conservation and

producer objectives are met. For guidance see Table 1.

Where practical and beneficial, start the grazing sequence in a different management unit each growing season.

When weeds are a problem prescribed grazing and/or browsing should be implemented in conjunction with other pest or brush management practices to promote resistance to invasive or noxious species and maintain desired plant communities.

Prescribed Grazing should consider the needs of other enterprises utilizing the same land such as wildlife and recreational uses.

Consider improving carbon sequestration in biomass and soils through management of grazing and/or browsing.

## PLANS AND SPECIFICATIONS

A Prescribed Grazing Plan will be prepared for the operating unit or portion of an operating unit being addressed. The plan will be recorded in a manner that is readily understood and usable by the decision maker. The content of the documentation will depend upon the size and complexity of the operating unit and the details required for the grazing plan.

A prescribed grazing plan will include the following information:

1. Goals and objectives clearly stated
2. Resource Inventory (The 528 Illinois inventory worksheet or other worksheets will be used for documentation) that identifies:
  - a. existing resource conditions and concerns. (The current Pasture Condition Scoresheet is to be used to document this.)
  - b. ecological site or forage suitability group if available
  - c. identifies opportunities to enhance resource concerns
- d. location and condition of structural improvements such as fences, water developments, etc. including seasonal availability and quality of watering sites.
3. An inventory (Forage Inventory) of the expected forage quantity, quality, time of availability and species for each management unit. Also, document any special problems inventoried such as location of toxic plants, invasive plants, etc. (The Illinois Graze4 Worksheets or other comparable worksheets will be used to document items 3-5).
4. For each kind and class of domestic livestock and grazing/browsing wildlife species of concern, document the animal numbers and forage demands by month, nutritional surpluses, and deficiencies from the forage resources and supplemental feed requirements needed to meet the desired nutritional level. Also, document any special needs of animals such as nesting cover, etc.
5. Development of a planned grazing schedule for livestock which identifies periods of grazing, resting, and other treatment activities, or needs, for each management unit. The grazing schedule is to be used as a guide and cannot take the place of daily observations which reflect changing climatic conditions and changes in supply and demand. Refer to Tables 1 thru 3 and the National Range and Pasture Handbook for additional guidance.
6. A contingency plan that details potential problems (i.e., flooding, drought, insects, etc...) and guidelines for adjusting the grazing prescription to insure resource goals are achieved in an economically feasible manner without resource degradation.
7. Monitoring plan developed with appropriate records to assess whether the grazing strategy is meeting objectives. Identify the key areas and key plants that the manager should evaluate when making grazing management decisions.
8. IL-528-1 Documentation Record for Grazing Management or other record keeping systems will be used to document annual grazing information.

**Stocking Rates**

Appropriate estimated stocking rates will be calculated and used as a guide to aid in determining forage supply and demand (Refer to the Illinois Graze4 Worksheets, or other appropriate tools).

Adjust livestock numbers and/or grazing time to match forage demand to forage yield.

**Harvest Efficiency**

The length of the grazing cycle determines the harvest efficiency. The shorter the grazing

cycles are below 7 days the higher the harvest efficiency.

Harvest efficiency will be optimized based on the objectives and goals of the client.

**Grazing and Rest Period**

A prescribed grazing plan includes minimum grazing heights from Table 1, a balance with forage growth by the month from Table 3 and min/max rest and grazing periods from Table 2, to sustain the proper forage growth and longevity. When grazing the first one or two pastures in the spring, beginning minimum heights can be lower than the recommended height.

The following formulas are used to estimate animal numbers or grazing days:

$$A.N. = \frac{T.F.P./Ac. \times Ac. \times \%H.E.}{A.W. \times I.R. \times Days} \text{ Days} = \frac{T.F.P./Ac. \times Ac. \times \%H.E.}{A.W. \times I.R. \times A.N.}$$

**A.N.** = Animal Number

**T.F.P.** = Total Forage Production (Total above ground biomass in lbs./acre dry weight)

**Ac.** = Acres

**% H.E.** = % Harvest Efficiency  
 continuous grazing = 25%-30%  
 7 day grazing period = 35%  
 6 day grazing period = 40%  
 5 day grazing period = 45%  
 4 day grazing period = 50%  
 3 day grazing period = 55%  
 2 day grazing period = 60%  
 1 day grazing period = 65%  
 ½ day grazing period = 70–75%

**A.W.** = Animal weight (pounds)

**I.R.** = Intake Rate in % body weight  
 Guide:

Dry cow	2.0%
Annual ave. production, Beef	2.6%
Lactating cows	3–4%
Dairy cows	2.5-3.5 + grain
Lactating sheep/goats	3.5-4%
Dry sheep/goats	3%
Doelings/ewes	3%
Horses	2-3% + grain

**Days** = Days of grazing planned

During rapid growth, short rest periods are necessary; as growth slows rest periods need to be lengthened. (See TABLE 2 for minimum and maximum rest periods)

$$\text{GP} = \frac{\text{Rest Period needed in days}}{\text{No. of pasture} - \text{No. of herds}}$$

(GP = Grazing Period)

Remove all livestock from a resting pasture.

Begin grazing sequence each year in a different pasture.

### Livestock Stress

Systems shall be developed that subject animals to a minimum amount of handling stress.

Livestock water shall be provided that is adequate in quantity and quality.

## OPERATION AND MAINTENANCE

**Operation:** Prescribed Grazing will be applied on a continuing basis throughout the grazing period for all planned grazing units.

Adjustments will be made as needed to ensure that the goals and objectives of the grazing plan are met.

**Maintenance:** Evaluations of the current grazing plan should be made periodically to monitor the results of the plan on all of the resources and for the planned goals and objectives. If the planned goals or objectives are not being met or there is degradation of any of the resources including animal performance, the plan needs to be adjusted accordingly.

All facilitating and accelerating practices (i.e. Fence (382), Herbaceous Weed Control (315), Integrated Pest Management (595), Brush Management (314), Forage and Biomass Planting (512), etc.) that are needed to effect adequate grazing and/or browsing distribution will be maintained in good working order and will be operated as intended.

## REFERENCES

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**TABLE 1: Minimum Heights of Forage Species for Initiating and Terminating Grazing**

SPECIES AND MIXTURES	Minimum/ Optimum Height of Vegetative Growth <sup>1/</sup>	Minimum Grazing Height <sup>2/</sup>	Minimum Regrowth Before Killing Frost	Approximate Date to Begin Rest for Winter protection, by Plant Suitability Zones <sup>3/</sup>		
				I	II	III
COOL SEASON (C3s)	INCHES Begin Grazing	INCHES End Grazing	INCHES			
Alfalfa	10	3	6	9/1-10/1	9/15-10/15	9/20-10/20
Annual Crabgrass	8	3	6	9/1-10/1	9/1-10/1	9/1-10/1
Annual Lespedeza	8	4	<u>5/</u>	9/1-10/1	9/15-10/15	9/20-10/20
Annual Lespedeza with Orchardgrass or Tall Fescue	8	4	8	9/1-10/1	9/15-10/15	9/20-10/20
Birdsfoot Trefoil	10-12	5-6	5	9/1-10/1	9/15-10/15	9/20-10/20
Brassicas (Turnips, Radishes, Kale, etc... Fall)	12-14	4	NA	NA	NA	NA
Chicory	6	2	6	9/1-10/1	9/15-10/15	9/20-10/20
Kentucky Bluegrass, Perennial Ryegrass	4-6	2-3	4	<u>4/</u>	<u>4/</u>	<u>4/</u>
Kentucky Bluegrass, Perennial Ryegrass with a clover legume	4-6	4	5	9/1-10/1	9/15-10/15	9/20-10/20
Ladino White Clover	8	3	6	9/1-10/1	9/15-10/15	9/20-10/20
Orchardgrass, Tall Fescue and other non-jointed grasses	8	3	6	<u>4/</u>	<u>4/</u>	<u>4/</u>
Orchardgrass, Tall Fescue and other non-jointed grasses with a clover legume	6-8	3	8	9/1-10/1	9/15-10/15	9/20-10/20
Orchardgrass, Tall Fescue and other non-jointed grasses with Alfalfa	8-10	3	8	9/1-10/1	9/15-10/15	9/20-10/20
Pearl Millet	18-20	4-6	NA	NA	NA	NA
Red and Alsike Clover	8-10	3	8	9/1-10/1	9/15-10/15	9/20-10/20
Reed Canarygrass <sup>7/</sup>	8	4	6	9/1-10/1	9/15-10/15	9/20-10/20
Reed Canarygrass with a legume	8	4	6	9/1-10/1	9/15-10/15	9/20-10/20
Small Grains	8-10	3	NA	NA	NA	NA
Sorghum-Sudangrass	18-24	8-10	NA	NA	NA	NA
Timothy, Smooth Bromegrass and other jointed grasses	8	4	8	9/1-10/1	9/15-10/15	9/20-10/20
Timothy, Smooth Bromegrass and other jointed grasses with a legume	8	4	8	9/1-10/1	9/15-10/15	9/20-10/20
WARM SEASON (C4s)						
Big Bluestem	18	8 <u>6/</u>	10	9/10-10/10	9/15-10/15	9/20-10/20
Eastern Gamagrass	20	10	15	9/10-10/10	9/15-10/15	9/20-10/20
Indiangrass	18	8 <u>6/</u>	10	9/10-10/10	9/15-10/15	9/20-10/20
Switchgrass	18	8 <u>6/</u>	10	9/10-10/10	9/15-10/15	9/20-10/20

<sup>1/</sup> Minimum plant heights are to be reached before grazing is permitted or following a rest period resulting from rotational grazing. When grazing the first one or two pastures in the spring, beginning minimum heights can be lower than the recommended height.

<sup>2/</sup> Minimum plant heights below which grazing is not permitted.

<sup>3/</sup> Protection from fall grazing is required for one month before a killing frost. Remove livestock on or before the dates shown and do not permit grazing before a killing frost occurs.

<sup>4/</sup> No restrictions.

<sup>5/</sup> Allow to set seed during growing season

<sup>6/</sup> Leave a 10" stubble at end of grazing season until after first killing frost

<sup>7/</sup> Reed Canarygrass is not recommended for use in pastures due to wildlife concerns and its invasive nature. If present it is recommended that the pasture be renovated, otherwise the grazing guidelines above for management should be followed.

**TABLE 2: Grazing Management Guidelines.**

Pasture Kind	Min-Max Grazing Periods (days) 1/	Min-Max Rest Periods (days) 2/	Minimum Pastures Needed (number) 3/
<b>Single Species - 1 specie planting (essentially a monoculture)</b>			
Introduced:			
cool-season	10 - 22	20 - 45	3
warm-season	10 - 22	20 - 45	3
legume	6 - 9	25 - 35	5
Native:			
warm-season	1 - 17	20 - 50	4
<b>Simple Mixtures - 2 - 4 similar species and/or legumes</b>			
Introduced:			
cool-season	8 - 15 / 6 - 11	25 - 45	4/5 w/legumes
warm-season	8 - 15 / 6 - 11	25 - 45	4/5 w/legumes
Native:			
warm-season	8 - 12	30 - 50	5
<b>Complex Mixtures - 5 or more dissimilar species</b>			
Introduced:			
cool-season	5 - 9	25 - 45	6
warm-season	5 - 9	25 - 45	6
Native			
warm-season	4 - 7	30 - 50	8

1/ "Min-Max Grazing Periods" are determined by the Min-Max Rest Period necessary for adequate recovery of the pasture following grazing, and also limits second bite opportunity. However, second bites occur if livestock are left in a pasture longer than 5 days.

2/ "Min-Max Rest Periods" provide time for pastures to recover from grazing. The pasture's potential growth rate and current growing conditions regulate the length of the rest period. (rapid growth, rapid rotation - slow growth, slow rotation.

3/ "Minimum Pastures Needed" is a relationship between necessary rest period and appropriate grazing period. Increasing pasture numbers reduces length of grazing period; increases pasture rest time, improves harvest efficiency, and provides higher forage quality. A minimum of three pastures must be included in the plan to meet prescribed grazing standards for grass pastures and a minimum of five pastures for pastures containing grass legume mixtures.

**TABLE 3-1. FORAGE PRODUCTION**

Pasture/Forage Type*	Total Yield**	Percent of Total Yield Available in Each Month**												Total
		%Jan	%Feb	%Mar	%Apr	%May	%Jun	%Jul	%Aug	%Sep	%Oct	%Nov	%Dec	
Northern IL (NRCS Plant Suitability Zone 1) -- Optimum Management***														
Alfalfa	6.00				5	23	24	18	15	10	5			100
Alfalfa/Orchardgrass	5.50				6	23	24	18	13	11	5			100
Alfalfa/Smooth Bromegrass	5.20				6	23	24	18	13	11	5			100
Big Bluestem	3.40					3	14	37	32	14				100
Big Bluestem/Indiangrass	3.40					3	12	37	36	12				100
Birdsfoot Trefoil/cool season grass	3.40				5	14	32	23	12	8	6			100
Bluegrass, Kentucky/Dutch Wh. Clover	3.60				8	28	29	9	7	12	7			100
Bluegrass, KY/Tall Fescue/Ladino Cl.	4.20				9	20	20	17	10	11	11	2		100
Bluegrass, KY/Orchardgrass/Ladino Cl.	4.20				7	23	24	16	10	14	6			100
Bluegrass, KY/Orchardgrass/Red Cl.	4.50				6	19	24	20	12	14	5			100
Bluegrass, KY/Tall Fescue/Red Cl.	4.50				5	20	20	19	11	13	10	2		100
Bromegrass, Smooth	4.50				8	31	27	11	6	11	6			100
Bromegrass, Smooth/Ladino Clover	4.80				8	25	25	15	10	10	7			100
Bromegrass, Smooth/Red Clover	5.10				8	22	25	15	15	10	5			100
Brush, (for Goat pasture)	1.60				4	25	28	28	10	5				100
Brush, Grass, and Forbes for Goats	3.20				5	23	23	22	15	9	3			100
Chicory	3.00				5	11	32	24	13	10	5			100
Corn (Green Grazed)	5.80					10	40	40	10					100
Corn Stalk Residue	2.00										100			100
Eastern Gama Grass	5.50					8	30	35	22	5				100
Fescue, Tall (not stockpiled)	4.80				9	26	25	13	7	12	6	2		100
Fescue, Tall (stockpiled)	5.50				9	20	20	13	8	15	13	2		100
Fescue, Tall/Ladino Clover	4.90				9	20	23	15	10	11	10	2		100
Fescue, Tall/Red Clover	5.30				5	20	20	19	11	13	10	2		100
Fescue, Tall/Red Clover (stock piled)	5.70				5	20	20	10	10	15	15	5		100
Indiangrass	3.40					2	12	34	38	14				100
Millet, Pearl	4.50					1	15	31	31	19	3			100
Oats (August seeding)	1.60								12	40	40	8		100
Oats (March-April seeding)	2.90				20	35	35	10						100
Orchardgrass	4.50				7	27	20	14	12	13	7			100
Orchardgrass/Ladino Clover	4.70				9	23	23	14	11	15	5			100
Orchardgrass/Red Clover	4.80				5	20	23	19	13	15	5			100
Orchardgrass/Red Clover (stockpiled)	5.50				5	20	20	10	10	15	15	5		100
Orchardgrass/Tall Fescue/Ladino Clover	5.20				9	22	22	14	7	11	13	2		100
Orchardgrass/Tall Fescue/Red Clover	5.50				5	20	21	18	12	13	8	3		100
Red Clover	3.50				6	25	33	17	9	6	3	1		100
Reed Canarygrass	4.40				5	19	27	20	12	11	5	1		100
Rye, Cereal (Aug. seeded)	2.10			3	22	28	10		5	15	10	7		100
Ryegrass, Italian/Annual (Aug. seeded)	2.00				15	30	20	5		2	10	13	5	100
Ryegrass, Perennial/Ladino Clover	4.50				8	30	25	12	5	10	7	3		100
Ryegrass, Perennial/Red Clover	4.80				5	22	25	18	8	10	10	2		100
Sorghum-sudangrass	4.70					1	13	32	34	20				100
Switchgrass	3.90					11	24	32	23	10				100
Timothy	3.50				8	23	34	10	6	14	5			100
Triticale, Fall seeded	3.10			2	23	30	10		5	15	10	5		100
Turnips (Aug. seeded)	3.20								12	38	35	15		100
Turnips/C. Rye (Aug. seeded)	5.80			3	22	25			5	15	15	10	5	100
Turnips/C. Rye/Oats (Aug. seeded)	3.80			5	25	20			5	15	15	10	5	100
Turnips/Oats (Aug. seeded)	3.90								12	38	35	15		100

\*The listing of forage species is not meant to be all inclusive, rather the listing represents species commonly grown in this region of Illinois.

\*\*Yields and monthly production figures were obtained from a wide variety of sources and should be considered a guide, and not absolute values. Differences (disease resistance, winter hardiness, environmental factors, etc.) between varieties will exist and these differences, are not reflected in the yield and monthly production.

\*\*\*Optimum Management: A high plant density exists; pH, P, & K are at optimal levels; nitrogen is applied to grass dominant paddocks; undesirable weeds are controlled; and controlled grazing (rotational or MIG) is practiced.

**TABLE 3-2. FORAGE PRODUCTION**

Pasture/Forage Type*	Percent of Total Yield Available in Each Month**														Total
	Total Yield**	%Jan	%Feb	%Mar	%Apr	%May	%Jun	%Jul	%Aug	%Sep	%Oct	%Nov	%Dec		
Northern IL (NRCS Plant Suitability Zone 1) -- Average Management***															
Alfalfa	3.90				5	23	24	18	15	10	5				100
Alfalfa/Orchardgrass	3.60				6	23	24	18	13	11	5				100
Alfalfa/Smooth Bromegrass	3.40				6	23	24	18	13	11	5				100
Big Bluestem	2.50					3	14	37	32	14					100
Big Bluestem/Indiangrass	2.50					3	12	37	36	12					100
Birdsfoot Trefoil/cool season grass	2.20				5	14	32	23	12	8	6				100
Bluegrass, Kentucky/Dutch Wh. Clover	2.30				8	28	29	9	7	12	7				100
Bluegrass, KY/Tall Fescue/Ladino Cl.	2.70				9	20	20	17	10	11	11	2			100
Bluegrass, KY/Orchardgrass/Ladino Cl.	2.70				7	23	24	16	10	14	6				100
Bluegrass, KY/Orchardgrass/Red Cl.	3.00				6	19	24	20	12	14	5				100
Bluegrass, KY/Tall Fescue/Red Cl.	3.00				5	20	20	19	11	13	10	2			100
Bromegrass, Smooth	3.00				8	31	27	11	6	11	6				100
Bromegrass, Smooth/Ladino Clover	3.10				8	25	25	15	10	10	7				100
Bromegrass, Smooth/Red Clover	3.40				8	22	25	15	15	10	5				100
Brush, (for Goat pasture)	2.60				4	25	28	28	10	5					100
Brush, Grass, and Forbes for Goats	3.10				5	23	23	22	15	9	3				100
Chicory	2.00				5	11	32	24	13	10	5				100
Corn (Green Grazed)	3.90					15	35	40	10						100
Corn Stalk Residue	2.00											100			100
Eastern Gama Grass	3.60					8	30	35	22	5					100
Fescue, Tall (not stockpiled)	3.10				9	26	25	13	7	12	6	2			100
Fescue, Tall (stockpiled)	3.50				9	20	20	13	8	15	13	2			100
Fescue, Tall/Ladino Clover	3.00				9	20	23	15	10	11	10	2			100
Fescue, Tall/Red Clover	3.50				5	20	20	19	11	13	10	2			100
Fescue, Tall/Red Clover (stock piled)	3.80				5	20	20	10	7	15	15	8			100
Indiangrass	2.50					2	12	34	38	14					100
Millet, Pearl	3.00					1	15	31	31	19	3				100
Oats (August seeding)	1.10								12	40	40	8			100
Oats (March-April seeding)	1.80				20	35	35	10							100
Orchardgrass/Tall Fescue/Ladino Clover	3.40				9	22	22	14	7	11	13	2			100
Orchardgrass/Tall Fescue/Red Clover	3.50				5	20	21	18	12	13	8	3			100
Orchardgrass	3.00				7	27	20	14	12	13	7				100
Orchardgrass/Ladino Clover	3.00				9	23	23	14	11	15	5				100
Orchardgrass/Red Clover	3.10				5	20	23	19	12	16	5				100
Orchardgrass/Red Clover (stockpiled)	3.50				5	20	20	10	10	15	15	5			100
Red Clover	2.30				6	25	33	17	9	6	3	1			100
Reed Canarygrass	2.90				5	19	27	20	12	11	5	1			100
Rye, Cereal (Aug. seeded)	1.30			3	22	28	10		5	15	10	7			100
Ryegrass, Perennial/Ladino Clover	3.00				8	30	25	12	5	10	7	3			100
Ryegrass, Perennial/Red Clover	3.10				5	22	25	18	8	10	10	2			100
Ryegrass, Italian/Annual (Aug. seeded)	1.30			15	30	20	5			2	10	13	5		100
Sorghum-sudangrass	3.00					1	13	32	34	20					100
Switchgrass	2.60						11	24	32	23	10				100
Timothy	2.20				8	23	34	10	6	14	5				100
Triticale, Fall seeded	2.10			2	23	30	10		5	15	10	5			100
Turnips (Aug. seeded)	2.10								12	38	35	15			100
Turnips/C. Rye (Aug. seeded)	3.90			3	22	25			5	15	15	10	5		100
Turnips/C. Rye/Oats (Aug. seeded)	2.50			5	25	20			5	15	15	10	5		100
Turnips/Oats (Aug. seeded)	2.60								12	38	35	15			100

\*The listing of forage species is not meant to be all inclusive, rather the listing represents species commonly grown in this region of Illinois.

\*\*Yields and monthly production figures were obtained from a wide variety of sources and should be considered a guide, and not absolute values. Differences (disease resistance, winter hardiness, environmental factors, etc.) between varieties will exist and these differences, are not reflected in the yield and monthly production.

\*\*\*Average Management: Bare or open soil areas exist in paddocks; pH, P, & K are below optimal levels; nitrogen is not applied to grass dominant paddocks; undesirable weeds are not controlled; and paddocks receive limited rest periods.

**TABLE 3-3. FORAGE PRODUCTION**

Pasture/Forage Type*	Percent of Total Yield Available in Each Month**														Total
	Total Yield**	%Jan	%Feb	%Mar	%Apr	%May	%Jun	%Jul	%Aug	%Sep	%Oct	%Nov	%Dec		
Central IL (NRCS Plant Suitability Zone 2) -- Optimum Management***															
Alfalfa	5.60			2	8	19	21	15	10	16	7	2		100	
Alfalfa/Orchardgrass	5.20			3	9	21	20	13	8	10	12	4		100	
Alfalfa/Smooth Bromegrass	4.90			4	10	25	20	10	7	9	12	3		100	
Big Bluestem	3.90					10	33	32	20	5				100	
Big Bluestem/Indiangrass	3.90					8	20	27	30	15				100	
Birdsfoot Trefoil/cool season grass	3.40			2	9	22	23	16	10	10	7	1		100	
Bluegrass, Kentucky/Dutch Wh. Clover	3.00			2	14	28	21	6	4	7	12	6		100	
Bluegrass, KY/Tall Fescue/Ladino Cl.	4.70			2	11	20	21	12	8	9	13	4		100	
Bluegrass, KY/Orchardgrass/Ladino Cl.	4.40			1	9	21	24	12	9	10	10	4		100	
Bluegrass, KY/Orchardgrass/Red Cl.	4.80			1	5	22	24	12	9	13	10	4		100	
Bluegrass, KY/Tall Fescue/Red Cl.	4.90			3	9	20	19	14	9	10	12	4		100	
Bromegrass, Smooth	3.90			2	15	23	20	10	6	8	10	6		100	
Bromegrass, Smooth/Ladino Clover	4.30			3	10	23	23	9	7	8	12	5		100	
Bromegrass, Smooth/Red Clover	4.90			2	8	22	23	10	9	10	12	4		100	
Brush, (for Goat pasture)	1.60				5	28	29	25	7	6				100	
Brush, Grass, and Forbes for Goats	3.30			2	12	21	22	12	9	10	8	4		100	
Chicory	3.30				7	19	20	20	13	15	6			100	
Corn (Green Grazed)	5.80					15	25	25	25	10				100	
Corn Stalk Residue	1.90										100			100	
Crabgrass, Annual	1.90					5	23	30	22	15	5			100	
Eastern Gama Grass	5.30					12	21	31	25	8	3			100	
Fescue, Tall/Lespedeza	5.10			2	10	17	16	13	11	11	14	5	1	100	
Fescue, Tall (not stockpiled)	5.00			5	16	20	20	8	5	10	13	3		100	
Fescue, Tall (stockpiled)	5.70			5	15	17	16	8	5	12	13	8	1	100	
Fescue, Tall/Ladino Clover	4.90			2	15	18	21	10	8	9	12	4	1	100	
Fescue, Tall/Red Clover	5.20			2	12	20	19	12	8	10	12	4	1	100	
Fescue, Tall/Red Clover (stockpiled)	5.70			2	10	17	20	15	6	12	14	3	1	100	
Indiangrass	3.90					7	15	30	32	12	4			100	
Millet, Pearl	4.60					9	25	30	25	10	1			100	
Oats (August seeding)	2.00								10	35	35	20		100	
Oats (March/April seeding)	2.70			8	25	37	29	1						100	
Orchardgrass	4.40			5	15	21	20	9	7	10	10	3		100	
Orchardgrass/Ladino Clover	4.70			5	15	23	22	7	7	9	10	2		100	
Orchardgrass/Red Clover	4.80			3	12	20	19	12	8	10	12	4		100	
Orchardgrass/Red Clover (stockpiled)	5.50			2	10	17	17	15	6	15	15	3		100	
Orchardgrass/Tall Fescue/Ladino Clover	5.10			7	18	21	20	7	7	8	9	3		100	
Orchardgrass/Tall Fescue/Red Clover	5.30			5	10	20	21	14	9	10	8	3		100	
Red Clover	3.80			4	9	23	24	16	9	8	6	1		100	
Reed Canarygrass	4.70			4	14	21	21	12	7	12	9			100	
Rye, Cereal (Aug. seeded)	2.90		5	14	28	21	2			2	10	12	6	100	
Ryegrass, Italian/Annual (Aug. seeded)	2.60		1	15	30	20	5			8	14	6	1	100	
Ryegrass, Perennial/Ladino Clover	4.60			7	21	20	15	5	5	9	12	6		100	
Ryegrass, Perennial/Red Clover	4.90			5	13	25	18	9	4	10	10	6		100	
Sorghum-sudangrass	5.30					1	12	31	31	23	2			100	
Switchgrass	4.60					15	34	28	18	5				100	
Timothy	3.50			2	12	29	30	6	5	11	5	0		100	
Triticale, Fall seeded	3.40			3	32	30	10			5	15	5		100	
Turnips (Aug. seeded)	3.60								5	35	35	23	2	100	
Turnips/C. Rye (Aug. seeded)	5.70		3	30	20	10			2	10	15	8	2	100	
Turnips/C. Rye/Oats (Aug. seeded)	4.70		2	15	28	21			2	10	15	5	2	100	
Turnips/Oats (Aug. seeded)	4.20								5	35	35	23	2	100	

\*The listing of forage species is not meant to be all inclusive, rather the listing represents species commonly grown in this region of Illinois.

\*\*Yields and monthly production figures were obtained from a wide variety of sources and should be considered a guide, and not absolute values. Differences (disease resistance, winter hardiness, environmental factors, etc.) between varieties will exist and these differences, are not reflected in the yield and monthly production.

\*\*\*Optimum Management: A high plant density exists; pH, P, & K are at optimal levels; nitrogen is applied to grass dominant paddocks; undesirable weeds are controlled; and controlled grazing (rotational or MIG) is practiced.

**TABLE 3-4. FORAGE PRODUCTION**

Pasture/Forage Type*	Percent of Total Yield Available in Each Month**													
	Total Yield**	%Jan	%Feb	%Mar	%Apr	%May	%Jun	%Jul	%Aug	%Sep	%Oct	%Nov	%Dec	Total
Central IL (NRCS Plant Suitability Zone 2) -- Average Management***														
Alfalfa	3.60			2	8	19	21	15	10	16	7	2		100
Alfalfa/Orchardgrass	3.40			3	9	21	20	13	8	10	12	4		100
Alfalfa/Smooth Bromegrass	3.10			4	10	25	20	10	7	9	12	3		100
Big Bluestem	2.70					10	33	32	20	5				100
Big Bluestem/Indiangrass	2.70					8	20	27	30	15				100
Birdsfoot Trefoil/cool season grass	2.30			2	9	22	23	16	10	10	7	1		100
Bluegrass, Kentucky/Dutch Wh. Clover	2.10			2	14	28	21	6	4	7	12	6		100
Bluegrass, KY/Tall Fescue/Ladino Cl.	2.90			2	11	20	21	12	8	9	13	4		100
Bluegrass, KY/Orchardgrass/Ladino Cl.	2.90			1	9	21	24	12	9	10	10	4		100
Bluegrass, KY/Orchardgrass/Red Cl.	3.10			1	5	22	24	12	9	13	10	4		100
Bluegrass, KY/Tall Fescue/Red Cl.	3.30			2	9	20	19	14	9	10	13	4		100
Bromegrass, Smooth	2.30			2	15	23	20	10	6	8	10	6		100
Bromegrass, Smooth/Ladino Clover	2.60			3	10	23	23	9	7	8	12	5		100
Bromegrass, Smooth/Red Clover	3.10			2	8	22	23	10	9	10	12	4		100
Brush, (for Goat pasture)	1.30				5	28	29	25	7	5	1			100
Brush, Grass, and Forbes for Goats	2.30			2	12	21	22	12	9	10	8	4		100
Chicory	2.30				7	19	20	20	13	15	6			100
Corn (Green Grazed)	4.60					10	30	30	20	10				100
Corn Stalk Residue	2.00										100			100
Crabgrass, Annual	2.00					5	23	30	22	15	5			100
Eastern Gama Grass	3.50					12	21	31	25	8	3			100
Fescue, Tall (not stockpiled)	2.30			5	16	20	20	8	5	10	13	3		100
Fescue, Tall (stockpiled)	3.60			5	15	17	16	8	5	12	13	8	1	100
Fescue, Tall/Ladino Clover	3.10			2	15	18	21	10	8	9	12	4	1	100
Fescue, Tall/Lespedeza	3.60			2	10	17	16	13	11	11	14	5	1	100
Fescue, Tall/Red Clover	3.00			2	12	20	19	12	8	10	12	4	1	100
Fescue, Tall/Red Clover (stockpiled)	3.40			2	10	17	20	12	6	10	14	8	1	100
Indiangrass	2.70					7	15	30	32	12	4			100
Millet, Pearl	3.00					9	25	30	25	10	1			100
Oats (August seeding)	1.30								10	35	35	15	5	100
Oats (March/April seeding)	1.70			8	31	31	29	1						100
Orchardgrass	2.90			5	15	21	20	12	7	10	10			100
Orchardgrass/Ladino Clover	3.00			5	15	23	22	7	7	9	10	2		100
Orchardgrass/Red Clover	3.10			3	12	20	19	12	8	10	12	4		100
Orchardgrass/Red Clover (stockpiled)	3.50			2	10	17	17	15	6	15	15	3		100
Orchardgrass/Tall Fescue/Ladino Clover	3.40			7	18	21	20	7	7	8	9	3		100
Orchardgrass/Tall Fescue/Red Clover	3.50			5	10	20	21	14	9	10	8	3		100
Red Clover	2.50			4	9	23	24	16	9	8	6	1		100
Reed Canarygrass	3.10			4	14	21	21	12	7	12	9			100
Rye, Cereal (Aug. seeded)	1.70		2	14	28	24	2			2	11	12	5	100
Ryegrass, Italian/Annual (Aug. seeded)	1.70		1	15	30	20	5			8	14	6	1	100
Ryegrass, Perennial/Ladino Clover	3.00			7	21	20	15	5	5	9	12	6		100
Ryegrass, Perennial/Red Clover	3.10			5	13	25	18	9	4	10	10	6		100
Sorghum-sudangrass	3.30					1	12	31	31	23	2			100
Switchgrass	3.00					15	34	28	18	5				100
Timothy	2.50			2	12	29	30	6	5	11	5			100
Triticale, Fall seeded	2.10			3	32	30	10			5	15	5		100
Turnips (Aug. seeded)	2.30								5	33	35	25	2	100
Turnips/C. Rye (Aug. seeded)	3.90		3	30	20	10			2	10	15	8	2	100
Turnips/C. Rye/Oats (Aug. seeded)	3.10		2	15	28	21			2	10	15	5	2	100
Turnips/Oats (Aug. seeded)	2.90								5	35	35	23	2	100

\*The listing of forage species is not meant to be all inclusive, rather the listing represents species commonly grown in this region of Illinois.

\*\*Yields and monthly production figures were obtained from a wide variety of sources and should be considered a guide, and not absolute values. Differences (disease resistance, winter hardiness, environmental factors, etc.) between varieties will exist and these differences, are not reflected in the yield and monthly production.

\*\*\*Average Management: Bare or open soil areas exist in paddocks; pH, P, & K are below optimal levels; nitrogen is not applied to grass dominant paddocks; undesirable weeds are not controlled; and paddocks receive limited rest periods.

**TABLE 3-5. FORAGE PRODUCTION**

Pasture/Forage Type*	Percent of Total Yield Available in Each Month**														Total
	Total Yield**	%Jan	%Feb	%Mar	%Apr	%May	%Jun	%Jul	%Aug	%Sep	%Oct	%Nov	%Dec		
Southern IL (NRCS Plant Suitability Zone 3) -- Optimum Management***															
Alfalfa	5.20			2	16	21	15	15	10	12	9				100
Alfalfa/Orchardgrass	4.90			3	14	19	18	13	10	11	10	2			100
Big Bluestem	4.60					14	28	29	24	5					100
Big Bluestem/Indiangrass	4.60					10	20	25	30	15					100
Bluegrass, Kentucky/Dutch Wh. Clover	2.30			2	17	28	15	5	3	7	16	7			100
Bluegrass, KY/Tall Fescue/Ladino Cl.	5.10			7	19	21	20	5	4	6	12	5	1		100
Bluegrass, KY/Orchardgrass/Ladino CL.	4.70			7	19	20	19	5	5	6	12	7			100
Bluegrass, KY/Orchardgrass/Red Cl.	4.90			4	13	20	19	13	8	8	10	5			100
Bluegrass, KY/Tall Fescue/Red Cl.	5.20			5	13	20	18	12	7	7	12	5	1		100
Brush, (for Goat pasture)	1.60				8	25	29	25	7	5	1				100
Brush, Grass, and Forbes for Goats	3.30			2	12	21	22	12	9	10	8	4			100
Chicory	3.50				7	19	20	20	13	15	6				100
Corn (Green Grazed)	5.90					15	25	25	25	10					100
Corn Stalk Residue	2.00										100				100
Crabgrass, Annual	2.30					5	23	35	22	15					100
Eastern Gama Grass	5.20				8	21	26	25	15	5					100
Fescue, Tall (not stockpiled)	5.20			6	15	20	18	7	4	10	13	6	1		100
Fescue, Tall (stockpiled)	5.90			3	12	15	18	6	5	13	15	10	3		100
Fescue, Tall/Ladino Clover	4.90			7	17	20	19	6	5	7	13	5	1		100
Fescue, Tall/Lespedeza	4.70			4	11	17	16	13	10	11	12	5	1		100
Fescue, Tall/Red Clover	5.20			4	12	19	19	12	6	9	12	6	1		100
Fescue, Tall/Red Clover (stockpiled)	5.90			2	10	20	17	12	6	10	14	8	1		100
Fescue, Tall/Red Clover/Lespedeza	5.20			4	10	16	20	13	10	11	10	5	1		100
Indiangrass	4.60					10	15	25	30	15	5				100
Lespedeza, Annual	2.60					17	27	23	14	11	8				100
Millet, Pearl	4.60					9	25	30	25	10	1				100
Oats (August seeded)	2.00								10	35	35	20			100
Oats (March/April seeded)	2.60			5	20	40	35								100
Orchardgrass	4.20			3	16	20	17	9	6	10	13	6			100
Orchardgrass/Ladino Clover	4.60			8	18	20	20	7	5	6	11	5			100
Orchardgrass/Red Clover	4.80			4	13	20	18	14	6	10	10	5			100
Orchardgrass/Red Clover (stockpiled)	5.50			2	10	17	17	15	6	15	15	3			100
Orchardgrass/Tall Fescue/Ladino Clover	5.10			7	19	20	19	5	4	7	13	5	1		100
Orchardgrass/Tall Fescue/Red Clover	5.20			5	13	19	18	13	7	7	11	6	1		100
Red Clover	3.90			4	11	20	20	15	9	8	8	5			100
Reed Canarygrass	4.90			6	18	22	22	17	5	8	2				100
Rye, Cereal (Aug. seeded)	3.30			15	20	30	5			5	10	10	5		100
Ryegrass, Italian/Annual (Aug. seeded)	3.30			4	20	29	24			5	10	7	1		100
Ryegrass, Perennial/Ladino Clover	4.70			8	22	25	17	2	3	7	10	6			100
Ryegrass, Perennial/Red Clover	4.90			7	15	20	17	8	3	13	11	6			100
Sorghum-sudangrass	5.90					5	18	34	25	15	3				100
Switchgrass	5.20					15	39	28	13	5					100
Triticale, Fall seeded	3.30		5	10	20	30				5	15	10	5		100
Turnips (Aug. seeded)	3.90								5	35	35	20	5		100
Turnips/C. Rye (Aug. seeded)	5.60		3	20	30	7				10	15	10	5		100
Turnips/C. Rye/Oats (Aug. seeded)	5.60		5	10	30	20				5	15	10	5		100
Turnips/Oats (Aug. seeded)	4.60								5	35	35	20	5		100

\*The listing of forage species is not meant to be all inclusive, rather the listing represents species commonly grown in this region of Illinois.

\*\*Yields and monthly production figures were obtained from a wide variety of sources and should be considered a guide, and not absolute values. Differences (disease resistance, winter hardiness, environmental factors, etc.) between varieties will exist and these differences, are not reflected in the yield and monthly production.

\*\*\*Optimum Management: A high plant density exists; pH, P, & K are at optimal levels; nitrogen is applied to grass dominant paddocks; undesirable weeds are controlled; and controlled grazing (rotational or MIG) is practiced.

**TABLE 3-6. FORAGE PRODUCTION**

Pasture/Forage Type*	Percent of Total Yield Available in Each Month**													
	Total Yield**	%Jan	%Feb	%Mar	%Apr	%May	%Jun	%Jul	%Aug	%Sep	%Oct	%Nov	%Dec	Total
Southern IL (NRCS Plant Suitability Zone 3) -- Average Management***														
Alfalfa	3.40			2	16	21	15	15	10	12	9			100
Alfalfa/Orchardgrass	3.30			3	14	19	18	13	10	11	10	2		100
Big Bluestem	3.00					14	28	29	24	5				100
Big Bluestem/Indiangrass	3.00					10	20	25	30	15				100
Bluegrass, Kentucky/Dutch Wh. Clover	1.60			2	17	28	15	5	3	7	16	7		100
Bluegrass, KY/Tall Fescue/Ladino Cl.	3.30			7	19	21	20	4	5	6	13	4	1	100
Bluegrass, KY/Orchardgrass/Ladino Cl.	3.00			7	19	20	19	5	5	6	12	7		100
Bluegrass, KY/Orchardgrass/Red Cl.	3.30			4	13	20	19	13	8	8	10	5		100
Bluegrass, KY/Tall Fescue/Red Cl.	3.40			5	13	20	18	12	5	7	13	6	1	100
Brush, (for Goat pasture)	1.20				8	25	29	25	7	5	1			100
Brush, Grass, and Forbes for Goats	2.10			2	12	21	22	12	9	10	8	4		100
Chicory	2.60				7	19	20	20	13	15	6			100
Corn (Green Grazed)	5.90					15	25	25	25	10				100
Corn Stalk Residue	2.00										100			100
Crabgrass, Annual	1.60					5	23	35	22	15				100
Eastern Gama Grass	3.40				8	21	26	25	15	5				100
Fescue, Tall (not stockpiled)	3.40			6	15	20	18	7	4	10	13	6	1	100
Fescue, Tall (stockpiled)	3.80			3	12	15	18	6	5	13	15	10	3	100
Fescue, Tall/Ladino Clover	3.30			7	17	20	19	6	5	7	13	5	1	100
Fescue, Tall/Lespedeza	3.00			4	11	17	16	13	10	11	12	5	1	100
Fescue, Tall/Red Clover	3.40			4	12	19	19	12	6	9	12	6	1	100
Fescue, Tall/Red Clover (stockpiled)	3.90			2	10	20	19	12	6	10	12	8	1	100
Fescue, Tall/Red Clover/Lespedeza	3.40			4	10	16	20	13	10	11	10	5	1	100
Indiangrass	3.00					10	15	25	30	15	5			100
Lespedeza, Annual	1.70					17	27	23	14	11	8			100
Millet, Pearl	3.00					9	25	30	25	10	1			100
Oats (August seeded)	1.30								10	35	35	20		100
Oats (March/April seeded)	1.70			5	20	40	35							100
Orchardgrass	2.70			3	16	20	17	9	6	10	13	6		100
Orchardgrass/Ladino Clover	3.00			8	18	20	20	7	5	6	11	5		100
Orchardgrass/Red Clover	3.30			4	13	20	18	14	6	10	10	5		100
Orchardgrass/Red Clover (stockpiled)	3.50			2	10	17	17	15	6	15	15	3		100
Orchardgrass/Tall Fescue/Ladino Clover	3.30			7	19	20	19	5	4	7	13	5	1	100
Orchardgrass/Tall Fescue/Red Clover	3.40			5	13	19	18	13	7	7	11	6	1	100
Red Clover	2.60			4	11	20	20	15	9	8	8	5		100
Reed Canarygrass	3.30			6	18	22	22	17	5	8	2			100
Rye, Cereal (Aug. seeded)	1.70			15	20	30	5			5	10	10	5	100
Ryegrass, Italian/Annual (Aug. seeded)	2.10			4	15	29	24	5		5	10	7	1	100
Ryegrass, Perennial/Ladino Clover	3.00			8	22	25	17	2	3	7	10	6		100
Ryegrass, Perennial/Red Clover	3.30			7	15	20	17	8	3	13	11	6		100
Sorghum-sudangrass	3.80					5	18	34	25	15	3			100
Switchgrass	3.40					15	39	28	13	5			100	100
Triticale, Fall seeded	2.10				15	20	30			5	15	10	5	100
Turnips/C. Rye/Oats (Aug. seeded)	3.60		5	10	30	20				5	15	10	5	100
Turnips (Aug. seeded)	2.60								5	35	35	20	5	100
Turnips/C. Rye (Aug. seeded)	3.60		3	20	30	7				10	15	10	5	100
Turnips/Oats (Aug. seeded)	3.00								5	35	35	20	5	100

\*The listing of forage species is not meant to be all inclusive, rather the listing represents species commonly grown in this region of Illinois.

\*\*Yields and monthly production figures were obtained from a wide variety of sources and should be considered a guide, and not absolute values. Differences between varieties will exist and these differences, are not reflected in the yield and monthly production. (disease resistance, winter hardiness, environmental factors, etc.)

\*\*\*Average Management: Bare or open soil areas exist in paddocks; pH, P, & K are below optimal levels; nitrogen is not applied to grass dominant paddocks; undesirable weeds are not controlled; and paddocks receive limited rest periods.