

New Jersey Grazing Calendar

2011 Pasture Planner



United States Department of Agriculture
Natural Resources Conservation Service

www.nj.nrcs.usda.gov

General Tips

Feeding and Grazing:

- When tall fescue is primary pasture, fall calving is recommended due to potential breeding problems.
- Feed hay in areas that will benefit from the seed in the hay.
- When conditions are right feed hay in remote areas.
- Unroll hay daily or use hay rings to reduce waste,
- Unrolling hay in front of temporary fence reduces waste.
- Locate feed areas 300' from water on uplands surrounded by grass.,
- During wet times feed on heavy use areas.
- Young calves can be trampled around hay rings.
- Provide a high quality diet for late gestation animals.
- Evaluate Body Condition Score (BCS) and separate as needed.

Water

- Never allow trough to overflow; install overflow pipe to drainageway.
- Reduce freezing by allowing 1/16" of water to flow through trough
- For ball waterers, set slight gap around balls, and drain when not in use.
- Check heat lamps and tightness of pump house.
- Break ice. Painting tank black with 1/2 tank covered reduces freezing.

Shelter

- Wet muddy cattle are most vulnerable to wind and cold.
- Cattle in good body condition tolerate cold weather best.
- Round hay bales can be strategically placed to provide wind break.
- A living barn is a small clearing facing east surrounded by trees, preferably cedar or evergreen.

Herding

- Move slowly, speak calmly.
- It is best if one person calls and another keeps the group together.
- To get livestock to herd up, rear person should zigzag back and forth at edge of flight (recognition) zone. (Edge of flight zone is when animal begins movement.)
- Ease in and out of flight zone, apply pressure then release pressure.
- Position yourself so the animal can see both you and calf.
- Movement draws movement.
- Direct the lead animal not the rear animal.



Animal health issues that show up at calving are a symptom of stress the animal was subjected to 60 days or more prior to calving.

January

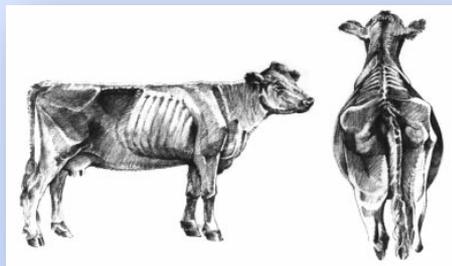
2011

SUNDAY							MONDAY							TUESDAY							WEDNESDAY							THURSDAY							FRIDAY							SATURDAY						
December							February																																									
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Monitor Body Condition Score

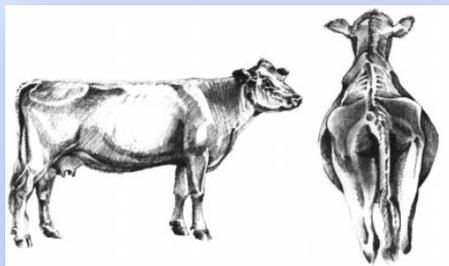
Benefits include:

- Increased reproductive performance and increased conception rates
- Reduced feed costs through maximum feed efficiency
- Better overall animal health



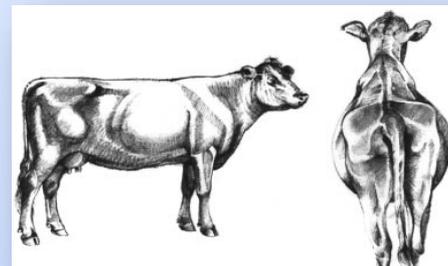
Body Condition Score 3:

Very thin, no fat on ribs or brisket, and some muscle still visible. Backbone easily visible. Cattle under BCS 3 are in life-threatening conditions.



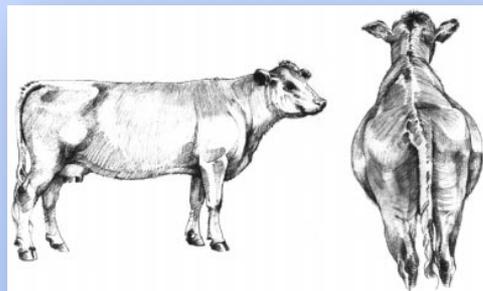
Body Condition Score 4:

Thin, with ribs easily visible, but shoulders and hindquarters still showing fair muscling. Backbone visible.

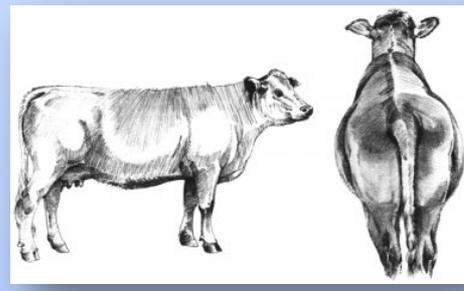


Body Condition Score 5:

Moderate to thin. Last two or three ribs can not be seen unless animal has been shrunk. Little evidence of fat in brisket, over ribs or around tailhead. Ideal score for calving.



Body Condition Score 6: Good smooth appearance throughout. Some fat deposits in brisket and over tailhead. Ribs covered and back appears rounded.



Body Condition Score 7: Very good flesh, brisket full. Fat cover is thick and spongy, and patchiness is likely. Ribs very smooth. BCS 8-9 cows are the most costly to maintain and most common to encounter dystocia.

Body condition should be evaluated and recorded a minimum of three times a year: at weaning, 60-90 days before calving, and at calving.

February

2011

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
January S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	March S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	1	2	3	4	5
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20	21	22	23	24	25	26
	Washington's Birthday					
27	28	Notes:				

March...The Time to Think of Clovers!

Benefits of Frost-Seeding:

- Easiest and most economical way to improve pasture yield with minimal disturbance to the soil
- Minimal equipment needed
- Shortened 'hold-off' period before able to be safely grazed

Lacking legume in your pastures?

Begin planning for frost seeding clover. Ideal conditions are when the soil thaws during the day but still freezes over night. Broadcasted seed can fall into these cracks and will germinate when the weather warms.



Frost seed white clover at 2-3 lbs/ac, red clover at 5-10 lbs/ac, or birdsfoot trefoil at 4-6 lbs/ac if seeded alone. Graze pastures closely in the fall that are to be frost-seeded, to allow good seed-to-soil contact. Cattle hoof pressure can also increase seed-to-soil contact by running them on the newly frost seeded pasture for a short duration.

March

2011

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
February S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	April S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
Daylight Saving Time Begins						
20	21	22	23	24	25	26
First Day of Spring						
27	28	29	30	31	Notes:	

Spring Activities



Spring Calving

Calving in March and April will have your cows rebreeding in May and June when pastures should be of high quality, requiring lowest inputs. If you typical wean at 6 months of age, spring calves will be weaning off in the fall. If sold off, this will require less winter feed and housing. Another benefit is better calf health since calves are born in a milder climate.

Multi-Species Grazing

Mixing sheep or goats with cattle will reduce negative impact of parasites, and adding cattle to a small ruminant herd may actually reduce predation. Adding goats will help decrease weed pressure, including invasive species such as multi-flora rose.

Each animal species has their forage preferences, so a mix of animals leads to less selective grazing.

Stock Density (AU/acre/day) Powerful tool, applying pressure to paddocks then turning it off and resting pastures

- High concentration of animals results in uniform grazing, higher utilization, consumption of weeds, uniform manure distribution and pulsing of nutrients
- Vary stock density according to forage growth and utilization needs. Stock density can be varied by changing: animal number, weight, and paddock size
- Best rule-of-thumb is ***“Take Half, Leave Half”***. Never graze cool-season grasses below 3-4 inches.
- Benefits from high stock density begin about 4000 lbs/ac

Grazing Systems Guidelines

- Rotate prior to impacting any resource (forage, animal, water, or soil)
- Follow landscape lines for paddock boundaries
- Keep paddocks square to rectangular if possible
- Locate water so paddocks can be further subdivided
- Location of water trough should be moved often to prevent mucking up of pasture, or if stationary, a stone pad on top of geo-textile should be installed.
- The paddock ahead should be of higher quality than the one animals are leaving
- Monthly rotations changed to weekly rotations increases carrying capacity up to 20%
- Move cattle fast when growth is fast



"Livestock are the ultimate machine; they run on solar energy and reproduce themselves."

-Greg Judy

Stockpiled grass is 2 to 5 times cheaper than hay. Ration Pasture like you do hay.

May

2011

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Weed Control

If you are constantly having to spray, you need to change your management.



- Consider spot spraying weeds instead of whole field treatment.
- Multi-species and high density grazing helps control weeds. Consider adding goats or sheep to your herd.
- Grazing weeds in a vegetative stage increases consumption by cattle; small ruminants tend to prefer weeds in late season
- Managing soil fertility should be the first step in weed management. Soil test once every 3 years or prior to just seeding.
- Mowing weeds when blooming before seed forms is best; earlier mowing can result in tillering
- If you apply pesticides yearly, your management is not breaking the cycle of the pest. The best weed control is good pasture management.
- High density grazing reduces or eliminates clipping needs.

Attend Pasture Walks and Field Days to:

- Provide opportunities to meet others in the business
- Hear their successes and failures
- Meet others who may be able to provide a service, i.e. no-till seeding, custom harvesting, fertilizer application, etc.

Warm Season Grasses

Extend Your Grazing Season With Warm Season Grasses

- They thrive during hot dry weather when cool season grasses go dormant
- Require little to no fertilization, ideal pH around 5.5
- Allow up to 3 years for full establishment, but once established they will persist for many years.
- It is not recommended to seed warm season grasses with cool season grasses. Instead convert one-fourth to one-third of the cool-season grass pasture acreage to a warm-season grass to increase pasture efficiency.
- Most common pasture species are Switchgrass, Big Bluestem and Indiangrass

Summer Annuals – annual crops (most common Sorghum, Sudangrass, Millet) that will also provide July/August pasture.

- Should be planted 2 weeks after planting corn, with 2 seedings made 3 weeks apart.
- Do not graze after a frost- be cautious of prussic acid poisoning!



Drought Management

Drought management begins by managing what you have when you have it!



Drought Management

- Consider holding acreage out of the normal rotation to begin stockpiling forage for late-season grazing.
- Close gates, feed hay or supplement on one field till other fields recover
- Dividing one paddock into multiple paddocks can conserve forage for slow growth periods, by rotating slower, you will need bigger paddocks which will allow longer rest periods
- Consider creep grazing, allowing calves to graze ahead of cows, or early weaning

Water: the most important nutrient!

- If you won't drink out of the trough, don't expect your cows to.
- The taste of the water will reduce intake, and when water intake drops, forage intake drops.
- Cattle should not have to walk more than 900 feet to get a drink. Not only will this increase energy needs, but it will also determine whether the herd will drink as a herd or individually, which will influence the size of the waterer needed.
- Cattle consume on average 12 gallons per day.

August

2011

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Fall Activities

Grazing Management reduces inputs and increases income while improving the environment



- Withhold pastures in mid-August to begin to stockpile for fall grazing in October.
- Fall is a good time to seed cool season grasses. When interseeding into an already established pasture, plant at the following rates:
 - Orchardgrass 5-6 #/ac
 - E- Tall Fescue 4-5 #/ac
 - Smooth Bromegrass 10#/ac
 - Perennial Ryegrass 6-8#/ac
- Begin to plan where to best apply stored manure. Consult Nutrient Management Plan. Manure is best applied when the crop is ready to utilize the nutrients, and one last application of Nitrogen will extend grass growth into fall.
- Corn residue can make excellent fall supplemental pasture. One acre of corn residue will provide 60 days of grazing for 1 Animal Unit. Strip-grazing will increase this time. Livestock should not be turned onto corn residue on an empty stomach.
- Post-harvest corn residue: 65.85% TDN, 6.5% CP, 65% NDF

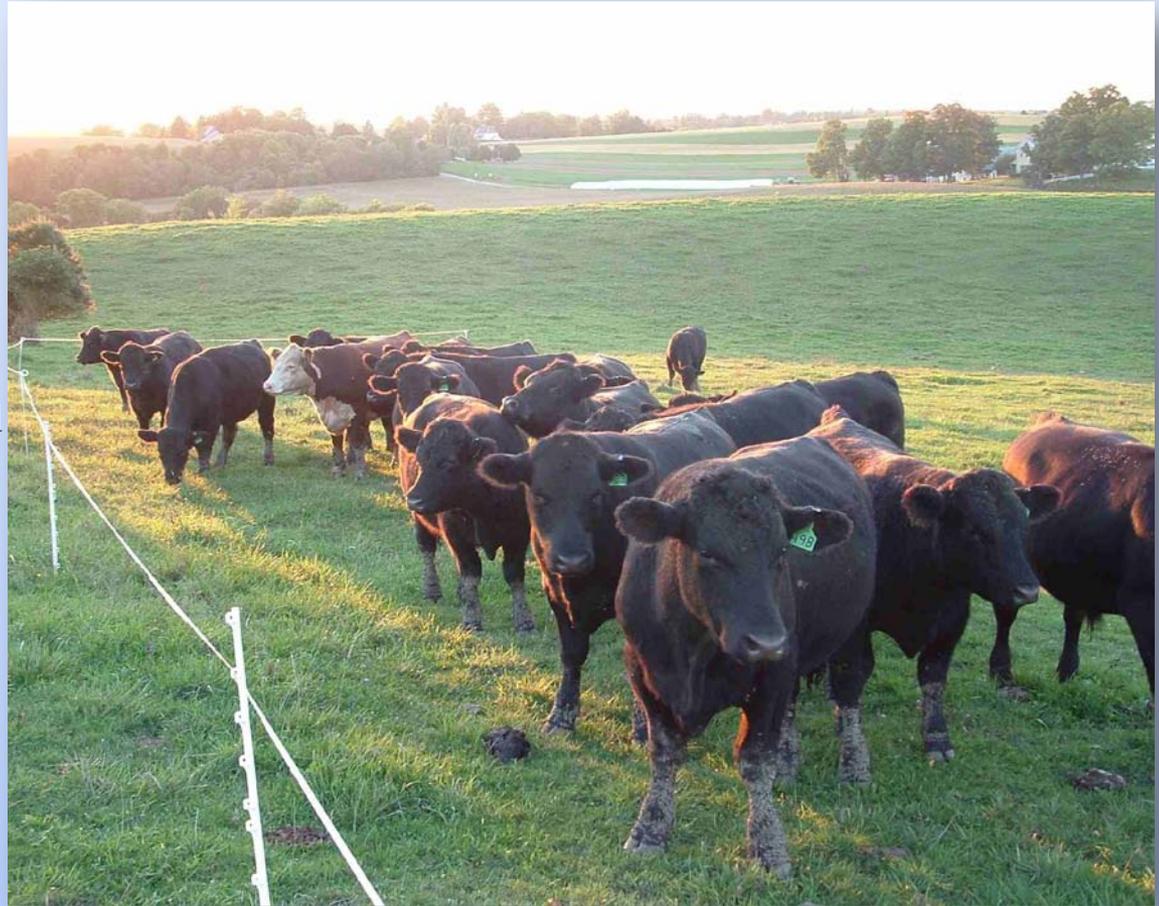
Stockpiling Forage:

- E- Tall Fescue and Birdsfoot Trefoil are best suited for stockpiling because they continue to grow into the fall and do not lose leaves as readily as other forages after frost.
- Apply 50lb nitrogen/ac and allow growth to accumulate for fall/winter use.
- Stockpiling forages will delay recovery in the spring.
- Stockpiled grass is 2 to 5 times cheaper than hay
- Ration pasture like you do hay.

Soil Testing

Fall is a good time to Soil Test

- Soil tests should be updated every 3 years, or prior to pasture renovation.
- Sample each pasture separately, or group according to similar management.
- Lime is best applied in the fall. Access to fields should be firm, and lime will have several months to react in the soil, ready to benefit plants in the spring.
- Lime increases plant uptake of nitrogen, potassium, phosphorus, calcium and magnesium as well as micronutrients.
- Cool-season grasses like an ideal pH at 6.0-6.5



Be aware of prussic acid (cyanide poisoning) from grazing sorghums and Johnsongrass after frost. Grazing is safe 10 days after frost unless re-growth and freezing occurs again.

October

2011

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	Columbus Day Observed					
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31	Notes:				

Extending the Grazing Season



Brassicas

Cool-season grasses typically become less productive as the grazing advances from June to November. Forage brassicas such as turnips, rape and kale can be summer seeded to extend the grazing season in November and December. Brassicas are annual crops which are highly productive and digestible and can be grazed 80-150 days after seeding. In addition, quality levels are highly varying from 15-25% CP and 70-80%TDN.

Extending the grazing season

- Begin strip-grazing stockpiled tall fescue at water point
- After frost, sweetness and palatability increase in tall fescue.
- Forage will last longer strip-grazed allowing animals access to 3-4 days of grazing time.
- When grazing crop residue, leave 50% of surface covered with residue and graze only in dry times

November

2011

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
October S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	December S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	1	2	3	4	5
6	7	8	9	10	11	12
Daylight Saving Time Ends					Veterans Day	
13	14	15	16	17	18	19
20	21	22	23	24	25	26
				Thanksgiving		
27	28	29	30	Notes:		

Heavy Use Area Protection (HUAP)

- Concrete pad with curb used to confine livestock when weather is not ideal for grazing cattle. Room is allocated to accommodate bale feeder, feeder wagons, and other feeding equipment. Fenceline feeding is also an option.
- Manure storage component on the end of the HUAP allows for storage of accumulated manure. Sized to hold manure until crops are at ideal time to utilize nutrients.
- Roof keeps clean rain water from mixing with manure, and gutters and underground pipe divert clean water to a safe outlet. Roof is kept high to allow for adequate ventilation and clearance of high equipment used to empty storage.
- Automatic, insulated waterers are usually installed on the pad for a year-round watering source.



December

2011

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
November S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	January S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31			1	2	3
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18	19	20	21	22	23	24
				First Day of Winter		
25	26	27	28	29	30	31
Christmas Day						

Cattle Gestation Table

Based on 283 Days

Breeding Date	Calving Date	Breeding Date	Calving Date	Breeding Date	Calving Date
1-Jan	13-Oct	7-May	16-Feb	10-Sep	22-Jun
8-Jan	20-Oct	14-May	23-Feb	17-Sep	29-Jun
15-Jan	27-Oct	21-May	2-Mar	24-Sep	6-Jul
22-Jan	3-Nov	28-May	9-Mar	1-Oct	13-Jul
29-Jan	10-Nov	4-Jun	16-Mar	8-Oct	20-Jul
5-Feb	17-Nov	11-Jun	23-Mar	15-Oct	27-Jul
12-Feb	24-Nov	18-Jun	30-Mar	22-Oct	3-Aug
19-Feb	1-Dec	25-Jun	6-Apr	29-Oct	10-Aug
26-Feb	8-Dec	2-Jul	13-Apr	5-Nov	17-Aug
5-Mar	15-Dec	9-Jul	20-Apr	12-Nov	24-Aug
12-Mar	22-Dec	16-Jul	27-Apr	19-Nov	31-Aug
19-Mar	29-Dec	23-Jul	4-May	26-Nov	7-Sep
26-Mar	5-Jan	30-Jul	11-May	3-Dec	14-Sep
2-Apr	12-Jan	6-Aug	18-May	10-Dec	21-Sep
9-Apr	19-Jan	13-Aug	25-May	17-Dec	28-Sep
16-Apr	26-Jan	20-Aug	1-Jun	24-Dec	5-Oct
23-Apr	2-Feb	27-Aug	8-Jun	31-Dec	12-Oct
30-Apr	9-Feb	3-Sep	15-Jun		

Special thanks to:

River Bend Farm
 Cherry Grove Farm
 Holland Valley Farm
 Storm Acres Farm
 Valley Shepherd Creamery
 Bishopp Family Farm

Original layout done by Tennessee Grazing Coalition, edited by Jill Ott, NJ NRCS Grazing Land Specialist

Cover Photo: River Bend Farm, Hunterdon Co.

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