


10th Mid-Atlantic Dairy Grazing Conference

Management Practices of Pasture-based Dairies in Florida/Georgia

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Management Practices of Pasture-based Dairies in Florida/Georgia

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Characteristics of Pasture-based Farms

- The management of pasture-based dairy farms in FL and GA varies widely.
- This study was designed to characterize the following aspects of FL/GA pasture-based dairies:
 - Herd management
 - Milk production
 - Reproduction management
 - Use of facilities
 - Pasture management
 - Supplemental feeding




Materials and Methods

- This study is part of a large SARE project
 - *LS11-243 Improving the Welfare of Southeastern Dairy Families Through the Adoption of Sustainable Production Systems*
 - U of Georgia, U of Florida, Fort Valley State U.



Materials and Methods

- An 18-page survey was designed consisting of 62 questions covering 7 primary areas:
 - farm business structure, young stock, milking herd, pasture and crop, feeding, manure and nutrients, and sustainability



Data Collection

- Dairy farms were invited by phone calls, emails, letters and announcements
 - Recruitment by Extension agents
 - Farm visits to complete survey
 - \$100 for completed survey
- Target time period:
 - Summer 2011 through Spring 2012
- Data collection:
 - 42 farms were contacted
 - 23 farms completed surveys
 - September 2012 – April 2013

Results



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Farm Description

Characteristic	Georgia	North Florida	South Florida	Total	P-value (regions)
# of farms	4	13	6	23	
# of FTE	5.1 ± 1.4	7.1 ± 4.2	43.2 ± 60.6	372	0.063
# of heifers	363 ± 25	306 ± 274	1976 ± 3439	17,288	0.158
# of cows*	588 ± 63	569 ± 589	3169 ± 3397	28,768	0.020

* ≈15% of all dairy cows in FL and GA (NASS, 2012)

Record Keeping

- 11 farms participated in DHIA program

Dairy Breeds Distribution

Breed or cross	% of total herd			Farms #	Cows #	Cows %
	<25	25-75	>75			
Brown Swiss	4	0	0	4	11	<0.1
Holstein (H)	3	5	9	17	20,328	70.7
Jersey (J)	5	1	0	6	1,257	4.4
Holstein x Jersey	3	3	0	6	608	2.1
Jersey x Holstein	2	7	1	10	4,464	15.5
Montbeliard x H	1	0	0	1	20	0.1
Norwegian Red x H	1	0	0	1	30	0.1
J x Milking Shorthorn	0	0	1	1	31	0.1
Unsp. crossbreed	1	1	0	2	296	1.0
H x J x Swedish Red	1	0	0	1	6	<0.1
J x H x Swedish Red	0	1	0	1	125	0.4
J x H x S/M/A	0	2	0	2	300	1.0
Other unspecified	1	0	1	2	570	2.0

75% purebreds, 25% crossbreds;
19 farms > 1 breed or cross

Annual Cull Rate

Breed or cross	Annual cull rate (%)
Brown Swiss	14 ± 10
Holstein	28 ± 10
Jersey	24 ± 6
Holstein x Jersey	21 ± 2
Jersey x Holstein	22 ± 12
Montbeliard x H	20
Norwegian Red x H	17
Jersey x Milking Shorthorn	5
Unspecified crossbreed	27 ± 10
H x J x Swedish Red	22
J x H x Swedish Red	16
J x H x S/M/A	25 ± 0
Other unspecified	20 ± 0
Average	22 ± 9%

Breeding Goal Traits

Breeding goals	# of farms	Importance		
		# as top 1	# as top 2	# as top 3
Reproduction	11	9	1	1
Longevity	11	5	2	4
Milk volume	9	4	3	2
Udder	8	0	2	6
Feet and legs	6	0	3	3
Calving ability	5	1	4	0
Net merit dollars	2	2	0	0
Fluid merit dollars	2	0	2	0
Body capacity	3	0	3	0
Strength	1	1	0	0
Fat and Protein	1	0	0	1
Functional type	1	0	0	1

Major Culling Reasons

Cull reasons	# of farms	Importance		
		# top 1	# top 2	# top 3
Failure to get pregnant	19	9	6	4
Low milk production	14	5	5	4
Mastitis	11	4	3	4
Poor udder conformation	8	2	4	2
Feet and leg problems	8	2	3	3
Death	5	0	2	3
Disease	3	0	0	3
Temperament	1	1	0	0

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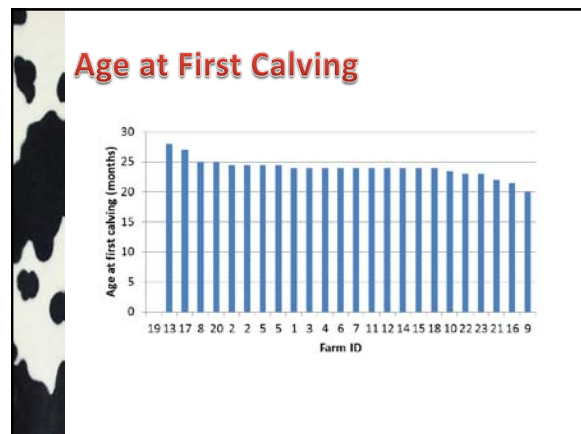
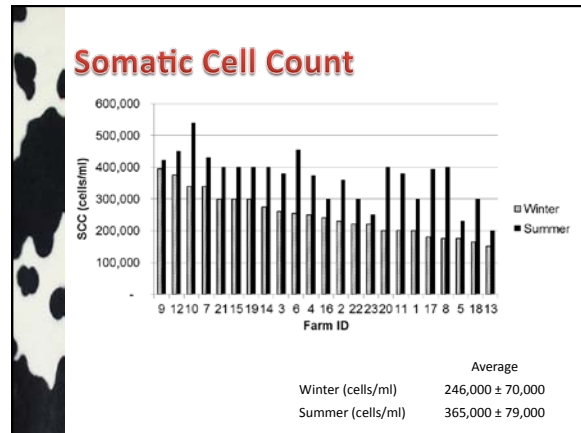
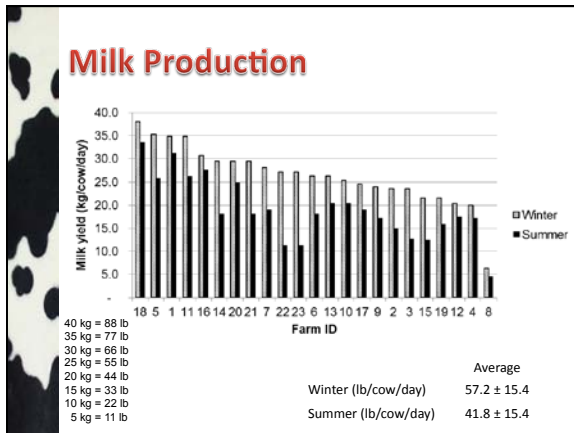
Milking Procedures

Wash udders	Strip	Pre-dip	Wipe	Post-dip	# of farms
No	Yes	Yes	Yes	Yes	7
Yes	Yes	Yes	Yes	Yes	4
No	No	Yes	Yes	Yes	4
No	No	Yes ¹	Yes ²	Yes	3
Yes	No	Yes	Yes	Yes	2
Yes	No	No	Yes	Yes	1
No	No	Yes	No	Yes	1

¹On fresh cows or during rainy weather only
²When dirty

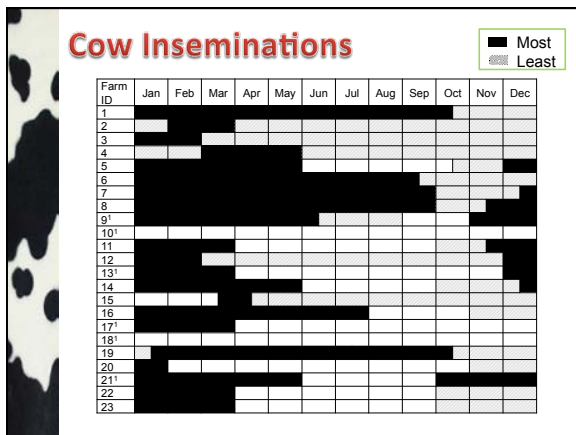
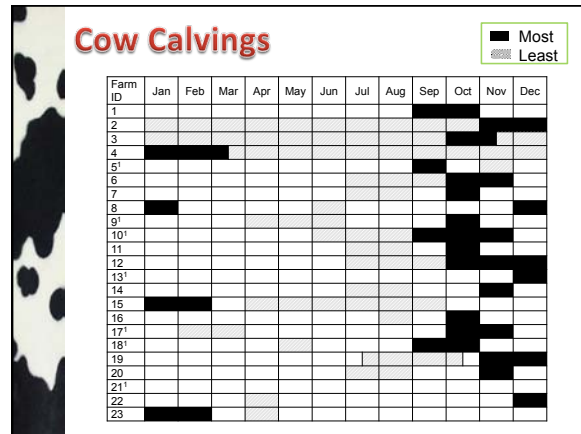
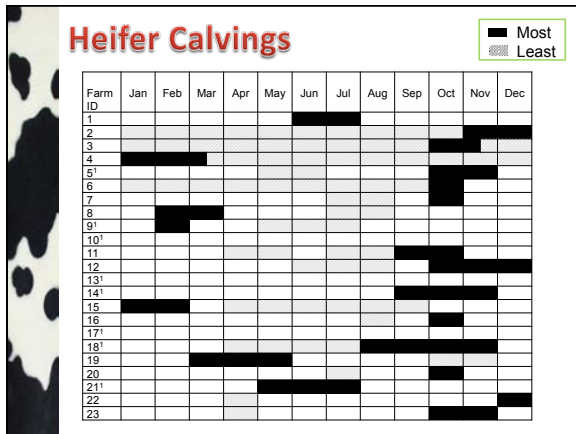
Milk frequency:

- 1 farm: 1x
- 20 farms: 2x
- 1 farm: 3x
- 1 farm: 4x



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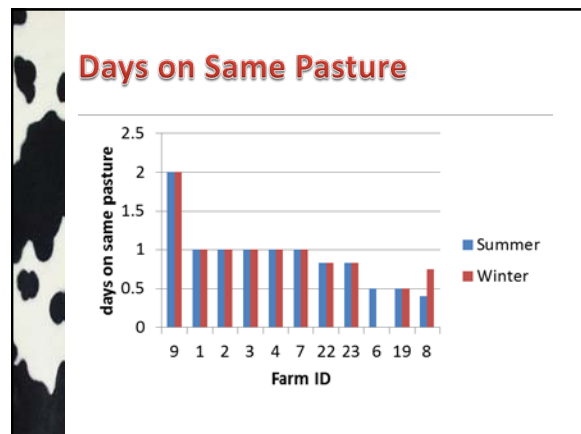


Reasons for Not Inseminating Animals

Reasons	# of farms
Calving problems in the summer	10
Failure to get cows pregnant	7
Quality and quantity of grass	4
Labor availability	4
Maintain seasonality of milk production	4
Heat stress	3
Feed availability	1
Time off or vacation	0

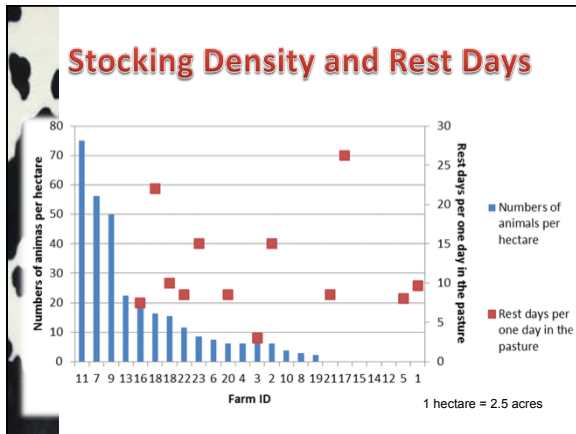
Rotational Stocking Management

- Summer: 14 (61%) farms
- Winter: 13 (57%) farms



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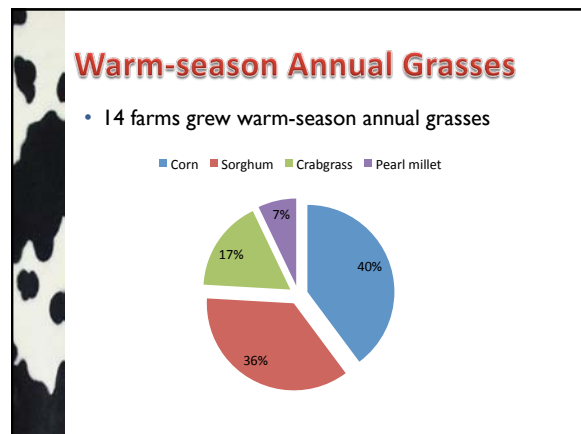
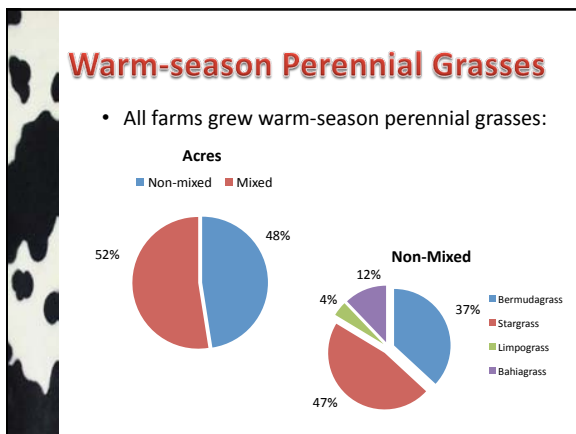


Grass Height Measurement

- Regrowth, quality and quantity of grass
- # farms
 - 10 visual estimation
 - 9 no estimation
 - 3 visual estimation + pasture plate meter
 - 1 pasture plate meter

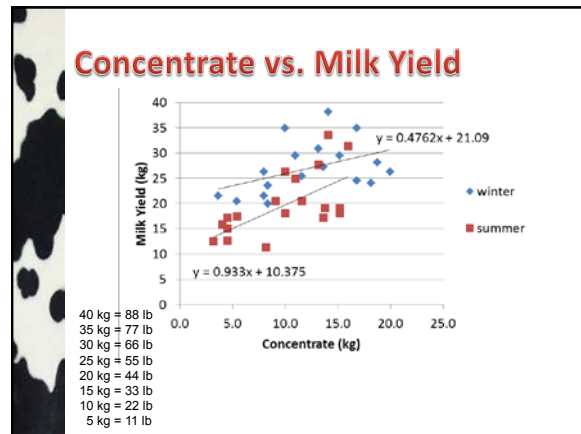
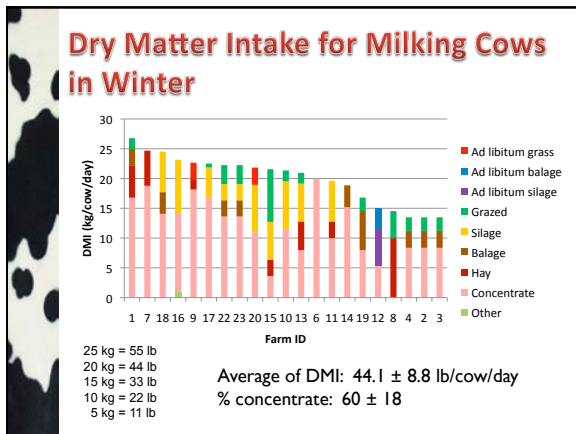
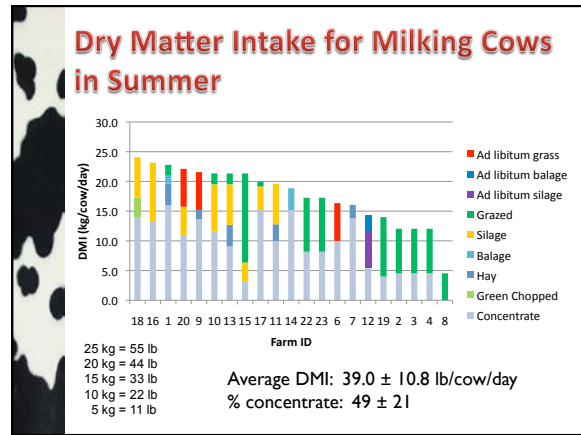
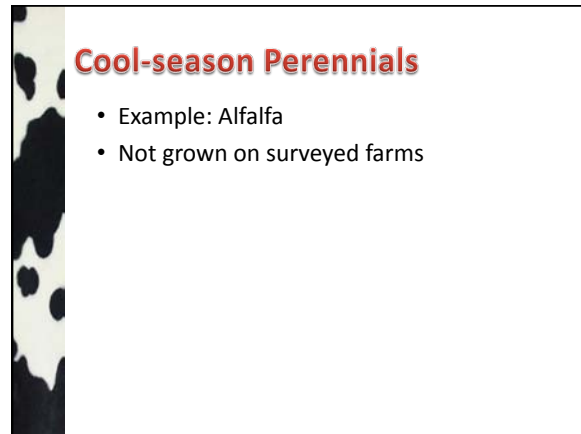
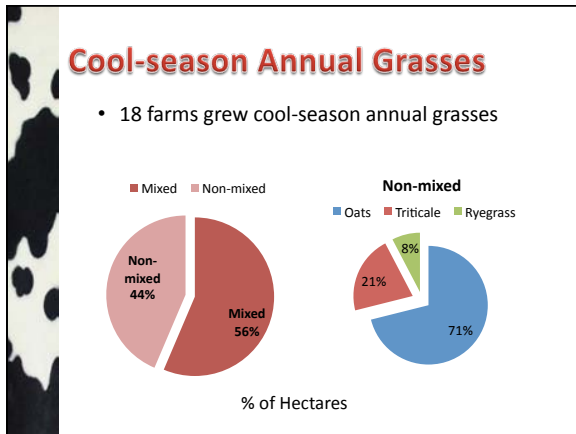


Grass/forage	# farms			Total (Acres)	
	Mixture (%) ^a	Pure ^b	Unknown ^c	Irrigated	Non-irrigated
Annual ryegrass	7 (55 ± 16)	2	2	1846	509
Argentine bahia	6 (32 ± 21)	2	0	94	3548
Arrow leaf clover	1 (7.5)	0	0	62	15
Cereal rye	1 (50)	0	0	348	49
Coastal bermuda	8 (50 ± 29)	3	0	593	951
Common bermuda	4 (43 ± 25)	1	4	1021	4458
Corn	0	8	0	2340	0
Crab grass	0	0	4	880	27
Crimson clover	0	0	2	499	0
Florakirk bermuda	0	1	0	119	54
Jiggs bermuda	1 (50)	0	1	549	1997
Limpogras	0	1	1	549	1846
Oats	5 (43 ± 7)	6	2	1960	430
Panicum	0	0	3	620	0
Pearl millet	0	3	0	378	40
Pensacola bahia	4 (27 ± 9)	2	0	519	358
Red clover	1 (7.5)	0	0	62	15
Rye	0	2	0	49	64
Smut grass	1(25)	0	0	0	2575
Sorghum	0	7	0	1633	539
Stargrass	3 (57 ± 35)	2	1	618	7282
Tifton 85 bermuda	2 (43 ± 11)	3	3	1334	193
Tifton 9 bermuda	0	1	0	30	116
Triticale	0	1	0	358	0
Wheat	0	1	0	104	119
White clover	1 (33)	0	0	0	131



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Conclusion

- Grass varieties, feed practices, milk production and reproduction all varied widely between seasons and among pasture-based dairy farms in FL and GA.



Acknowledgements

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*Thank
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Questions?



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