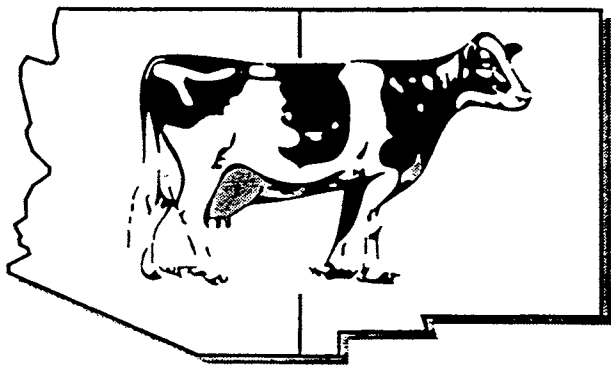


ARIZONA & NEW MEXICO DAIRY NEWSLETTER



COOPERATIVE EXTENSION

The University of Arizona®

New Mexico State University

MARCH, 2002

This Month's Article:

**“Monitor Body Temperatures To Identify
Problematic Cows After Calving”**

A.C. Fitzgerald and M.L. Looper

• New Mexico State University



Southwest Nutrition and Management Conference
Proceedings are now available on our new website:

<http://animal.cals.arizona.edu/swnmc.php>

Check it out!

New Mexico State University Extension Dairy Website:
<http://www/nmsu.edu/~dairy>

The following videos are available for checkout from Mike Looper, New Mexico State University. To obtain a video call Kathy Bustos, (505) 646-3325 or kbustos@nmsu.edu and the video will be sent in the mail, pending availability. There is only one copy of each video available, so we request that videos be returned within two weeks. Note that four of the videos contain an English and Spanish version.

1. The Milking School. Utah State University. Spanish and English. 30 minutes
2. Fitting and Showing Your Dairy Animal....A Winning Experience. Department of Dairy Science, University of Wisconsin. 20 minutes
3. Proper Milking Procedure. University of Florida. Spanish and English. 12 minutes
4. Milking Machine Maintenance. University of Florida. Spanish and English. 16 minutes
5. The Basics of Vacuum and Milking Systems. DHIA Services, 1991. 53 minutes
6. Understanding Dairy Cattle Behavior to Improve Handling and Production. Livestock Conservation Institute, 1992
7. Managing Milking/Ordenar Lecheria. Spanish and English. 1999. 33 minutes
8. Get Milk! Joining A Dairy Crew. University of New Hampshire, 1999. 45 minutes


Need to Calculate Production Costs?

University of Wisconsin dairy farm management specialist, Gary Frank, has developed a Excel spreadsheet to calculate variable cost of production and total cost of production. To access the spreadsheet, go to <http://www.wisc.edu/dairy-profit>, click on Decision Making Tools, then go to [costcwt.xls](#).

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Monitor Body Temperatures To Identify Problematic Cows After Calving

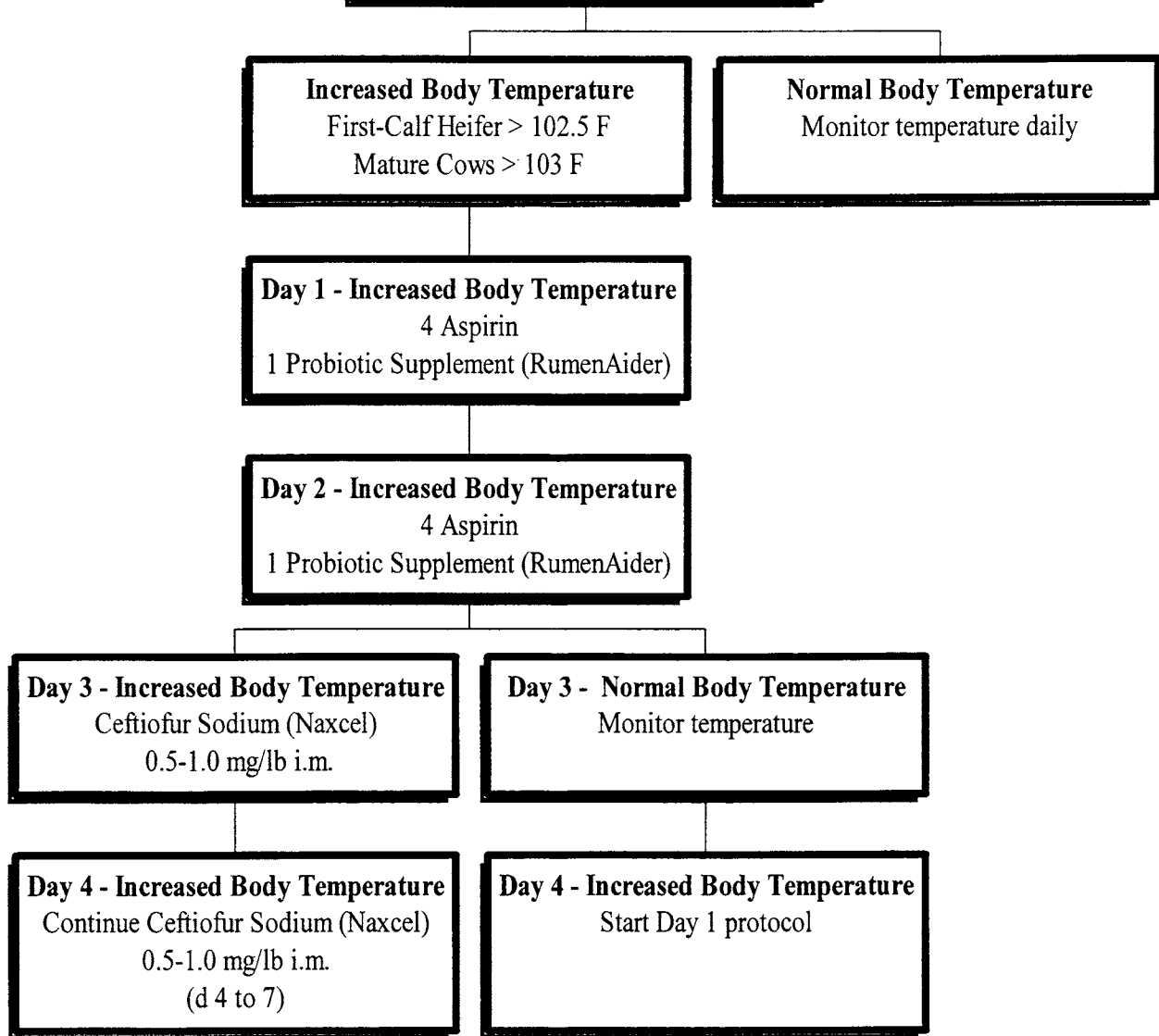
A. C. Fitzgerald and M. L. Looper

New Mexico State University

The most critical period for dairy cattle from a health and economic perspective is 3 weeks prior to calving through 3 weeks after calving (transition period). Treatment of metabolic disorders is costly, and improper management of the transition cow will reduce future reproductive performance and decrease optimal milk yield. Furthermore, antibiotic treatment of metabolic disorders increases the amount of milk that cannot be sold for human consumption. Recently, an experiment was conducted by New Mexico State University researchers at a commercial dairy to investigate treatment methods for transition cows. Objectives were 1) to monitor body temperature of first-calf heifers and mature cows to determine subclinical (visually undetectable) illness, 2) prevent the progression of metabolic illness using non-antibiotic and antibiotic medications, and 3) determine efficacy of treatments of cows with increased body temperatures and metabolic disorders. Body temperatures (using a digital rectal thermometer) were monitored every morning (7:30 a.m.) on 45 first-calf heifers and 96 mature cows for seven days after calving during October and November. Medication was administered if body temperature was greater than 102.5° F for first-calf heifers and greater than 103° F for mature cows. Normal body temperature in cattle is 101.5° F. All cows with increased body temperatures were orally administered four aspirin boluses to reduce fever, and one probiotic capsule to supplement beneficial microbial and nutritional components to the rumen. This treatment regime was continued in cattle with increased body

temperatures for two consecutive days. If the cattle continued to display an increased body temperature on Day 3, a broad-spectrum antibiotic (Naxcel™) with zero-day withdrawal time was given to cattle (Figure). Seventy-six percent of first-calf heifers and 29% of mature cows had fever at some time during the first 7 days after calving, demonstrating the importance of monitoring first-calf heifers daily. Day 4 after calving for first-calf heifers and Day 2 after calving for mature cows was the most prevalent day for increased temperatures. The aspirin/probiotic treatment did not prevent the recurrence of increased temperatures in first-calf heifers during the first 7 days after calving. However, administration of aspirin/probiotic treatments did prevent the recurrence of increased temperatures in mature cows. First-calf heifers are probably more stressed at calving and were less responsive to a non-antibiotic (aspirin/probiotic) treatment regime. All cattle with metabolic disorders had increased body temperatures for at least two days. Day-to-day visual observations of dairy cattle after calving along with monitoring body temperature are beneficial management tools for dairy producers to identify problematic cows with special emphasis on first-calf heifers. Solely monitoring temperatures of cows after calving should not replace daily observations of “whole cow” health. Observing all aspects of the cow including dry matter intake, cud chewing, milk yield, manure characteristics and overall health/appearance is necessary for a successful transition period.

Check Body Temperature



High Cow Report

February, 2002

MILK

<u>Arizona Owner</u>	<u>BarnNum.</u>	<u>Age</u>	<u>Milk</u>	<u>New Mexico Owner</u>	<u>BarnNum.</u>	<u>Age</u>	<u>Milk</u>
* Stotz Dairy West	10320	3-7	38,120	* Hafliger Dairy	3711	6-06	38,370
* Stotz Dairy West	12740	3-11	35,780	Goff Dairy	5034	5-06	38,290
* Saddle Mountain Dairy	9829	3-1	35,410	S.A.S. Dairy	13	4-00	38,133
* Hillcrest Dairy	9889	6-4	35,373	* Hafliger Dairy	6536	4-03	36,060
* Stotz Dairy West	11882	4-5	35,090	* Hafliger Dairy	775	6-06	35,700
* Stotz Dairy West	13778	3-2	34,980	* Hafliger Dairy	6409	4-03	35,560
* Stotz Dairy West	19541	3-9	34,280	McCatharn Dairy	2110	6-02	35,545
Martha Linda Dairy	5727	4-1	33,909	S.A.S. Dairy	189	8-02	35,474
* Rio Blanco Dairy	1097	7-4	33,610	Goff Dairy	5400	4-03	35,410
* Stotz Dairy West	13254	3-6	33,520	Ken Miller Dairy	628	4-05	35,185

FAT

<u>Arizona Owner</u>	<u>Barn Num</u>	<u>Age</u>	<u>Fat</u>	<u>New Mexico Owner</u>	<u>Barn Num</u>	<u>Age</u>	<u>Fat</u>
* Stotz Dairy West	12820	3-10	1375	* Hafliger Dairy	6432	4-03	1612
* Arizona Dairy South	60260	3-0	1401	Pareo Dairy	773	5-00	1579
* Wigwam Dairy	300	4-1	1393	* Hafliger Dairy	2190	7-06	1460
* Stotz Dairy West	12820	3-10	1375	* Hafliger Dairy	6456	4-03	1436
* Stotz Dairy West		3-2	1288	S.A.S. Dairy	1560	8-05	1412
Desert Ridge L.L.C.2	2136	4-9	1282	* Hafliger Dairy	2636	7-06	1345
* Stotz Dairy West		6-3	1278	* Hafliger Dairy	3711	6-06	1324
* Withrow Dairy		-10	1261	* Hafliger Dairy	6300	4-03	1321
* Hillcrest Dairy	9889	6-4	1230	* Hafliger Dairy	544	5-06	1309
				* Hafliger Dairy	6357	4-03	1301

PROTEIN

<u>Arizona Owner</u>	<u>Barn Num</u>	<u>Age</u>	<u>Protein</u>	<u>New Mexico Owner</u>	<u>Barn Num</u>	<u>Age</u>	<u>Protein</u>
* Saddle Mountain Dairy	9061	3-0	1121	S.A.S. Dairy	13	4-00	1167
* Rio Blanco Dairy	1760	5-7	1025	Goff Dairy	5034	5-06	1155
* Stotz Dairy West	12740	3-11	1002	Wayne Palla Dairy	5612	3-08	1086
* Stotz Dairy West	13778	3-2	999	Goff Dairy	5400	4-03	1084
Chilcott Dairy	1331	3-0	996	* Hafliger Dairy	6536	4-03	1076
* Stotz Dairy West	12820	3-10	995	Pareo Dairy	1525	4-11	1074
* Hillcrest Dairy	9889	6-4	989	Wayne Palla Dairy	1875	5-09	1055
Martha Linda Dairy	5727	4-1	985	S.A.S. Dairy	1735	6-09	1054
* Stotz Dairy West	19539	3-9	974	* Hafliger Dairy	3711	6-06	1052
* Dutch View Dairy	187	3-3	969	Goff Dairy	14083	3-04	1047

* 3X day milking

FEBRUARY, 2002
ARIZONA - TOP 50% FOR F.C.M.^b

OWNERS NAME	Number of Cows	MILK	FAT	3.5 FCM	C.I.
* Stotz Dairy West	2113	26,893	933	26,759	14.7
University of Arizona Holsteins	149	25,905	926	26,219	13.9
* Red River Dairy	3913	26,074	916	26,130	13.4
Martha Linda Dairy	1858	24,998	915	25,648	13.2
* Mike Pylman Dairy	2544	25,263	867	24,983	14.3
Paul Rovey Dairy	451	24,488	869	24,681	12.9
* Stotz Dairy East	1408	25,087	850	24,631	13.5
* Hillcrest Dairy	2418	25,015	839	24,423	13.8
Desert Ridge Dairy, LLC2	487	24,457	829	24,010	13.1
* Zimmerman Dairy	1160	23,779	835	23,823	14.4
University of Arizona Brown Swiss	138	22,250	859	23,552	14.8
* Arizona Dairy Company North	2642	23,203	818	23,305	14.3
* Arizona Dairy Company South	3238	22,868	808	22,992	13.9
DC Dairy, LLC	1078	22,408	816	22,923	13.5
* Del Rio Holsteins	1258	22,578	810	22,900	13.3
* Saddle Mountain Dairy	2269	23,806	762	22,650	13.2
* Wigwam Dairy	1461	22,771	786	22,592	15.0
* Dutch View Dairy	1521	21,876	767	21,897	14.0
* Danzeisen Dairy, LLC	1214	20,670	769	21,409	13.1
* Del Rio Brown Swiss	159	20,418	761	21,171	13.0
Butler Dairy	629	22,186	774	22,146	14.4
* Gladtime West Holsteins	333	21,048	742	21,135	15.0

TOP 50% ACTUAL MILK - OFFICIAL & UNOFFICIAL HERDS FOR NEW MEXICO

OWNERS NAME	Number of Cows	MILK	FAT	3.5 FCM	R.R.
* Pareo Dairy #1	1341	24,998	936	25,989	14.0
Ken Miller Dairy	309	24,791	836	24,278	13.6
* Do-Rene Dairy	2354	24,609	839	24,248	13.9
McCatharn North Dairy	1105	24,529	838	24,197	13.3
* Pareo Dairy #2	2509	24,369	922	25,490	13.0
Price's Roswell Farm	2718	24,301	892	24,974	13.6
* S.A.S. Dairy	1863	24,112	855	24,292	13.3
* Hafliger Dairy	1756	24,102	904	25,083	13.2
* Tallmon Dairy	537	23,630	828	23,646	14.8
* Vaz Dairy	1494	23,271	803	23,085	13.8
* Wayne Palla Dairy	3322	22,005	809	22,636	13.6
Desperado Dairy	1443	21,911	831	22,951	13.4
* Break-Away Dairy	1276	21,893	740	21,468	14.2
* High Plains Dairy	1624	21,747	774	21,956	13.9
Baca Linda Dairy	1281	21,426	773	21,801	14.0

*3X a day milking

^b Average Milk & Fat figure may be different from monthly herd summary; figures used are last day/mo.

**ARIZONA & NEW MEXICO HERD IMPROVEMENT SUMMARY FOR
OFFICIAL HERDS TESTED FEBRUARY, 2002**

		ARIZONA	NEW MEXICO
1.	Number of Herds	51	30
2.	Total Cows in Herd	76,880	45,366
3.	Average Herd Size	1,507	1,512
4.	Percent Days in Milk	90	86
5.	Average Days in Milk	185	192
6.	Average Milk - All Cows Per Day	65.3	58.7
7.	Average Percent Fat - All Cows	3.6	3.7
8.	Total Cows in Milk	69,192	39,220
9.	Average Daily Milk for Milking Cows	72.7	67.8
10.	Average Days in Milk 1 st Breeding	84	77
11.	Average Days Open	156	152
12.	Average Calving Interval	13.9	13.9
13.	Percent Somatic Cell - Linear 0-4	84	77
14.	Percent Somatic Cell - Linear 5-6	8	15
15.	Percent Somatic Cell - Linear 7 & above	8	6
16.	Average Previous Days Dry	64	68
17.	Percent Cows Leaving Herd	32	34.5
	*****	*****	*****
		STATE AVERAGE	
	MILK	21,718	21,773
	Percent Butterfat	3.6	3.7
	Percent Protein	2.9	3.0
	Lbs. Fat	775	789
	Lbs. Protein	630	644

ARIZONA COOPERATIVE EXTENSION
U.S. DEPARTMENT OF AGRICULTURE
THE UNIVERSITY OF ARIZONA
TUCSON, ARIZONA 85721

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PENALTY FOR PRIVATE USE, \$300

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