

# 2020 Georgia Dairy Conf

## Precision Maternity Care on a Large Dairy

Don Niles DVM

Dairy Dreams LLC







# Pre-fresh Care

- Vaccinations
  - Anti-clostridial bacterin
  - Scour prevention vaccine
- Stocking density
  - <1 head/lockup pre-fresh pens
- Prefresh nutrition
  - Urine pH (pre-fresh)
  - Oral Calcium bolus protocol
  - Propylene glycol – pre treat on over conditioned cows/heifers
  - BHBA blood test (post-fresh)

# Maternity jobs

- Calving
- Processing cows
- Processing calves
- Cleaning Maternity
- Scraping prefresh pens
- Pushing feed up every hr all pens (5-10 min)
- Fresh cow checks
- Soak Feet/Lame Cows
- Rumen juice pumps on sick cows
- Clean more 😊

# Maternity Philosophy

- Strive for maternity perfection
  - Sexed semen, TAI meds, ET, breeders all cost \$
  - **Most important reason-** because we can and we should. Culture of continuous improvement
- Mimic human maternity care as our model

# Maternity Performance

- DOAs
  - Goal < 2%
  - Each DOA is an event that needs to be investigated
    - Interview
    - Camera
    - Post Mortem?













- Walk prefresh pen 30 -45 min
- Move when fully engaged – feet, etc

# Protocol

- Wash
- Check position
- Both arms help dilate
- Release
- Monitor for progress  
– 20 min
- On recheck – sanitize
- Distress more action





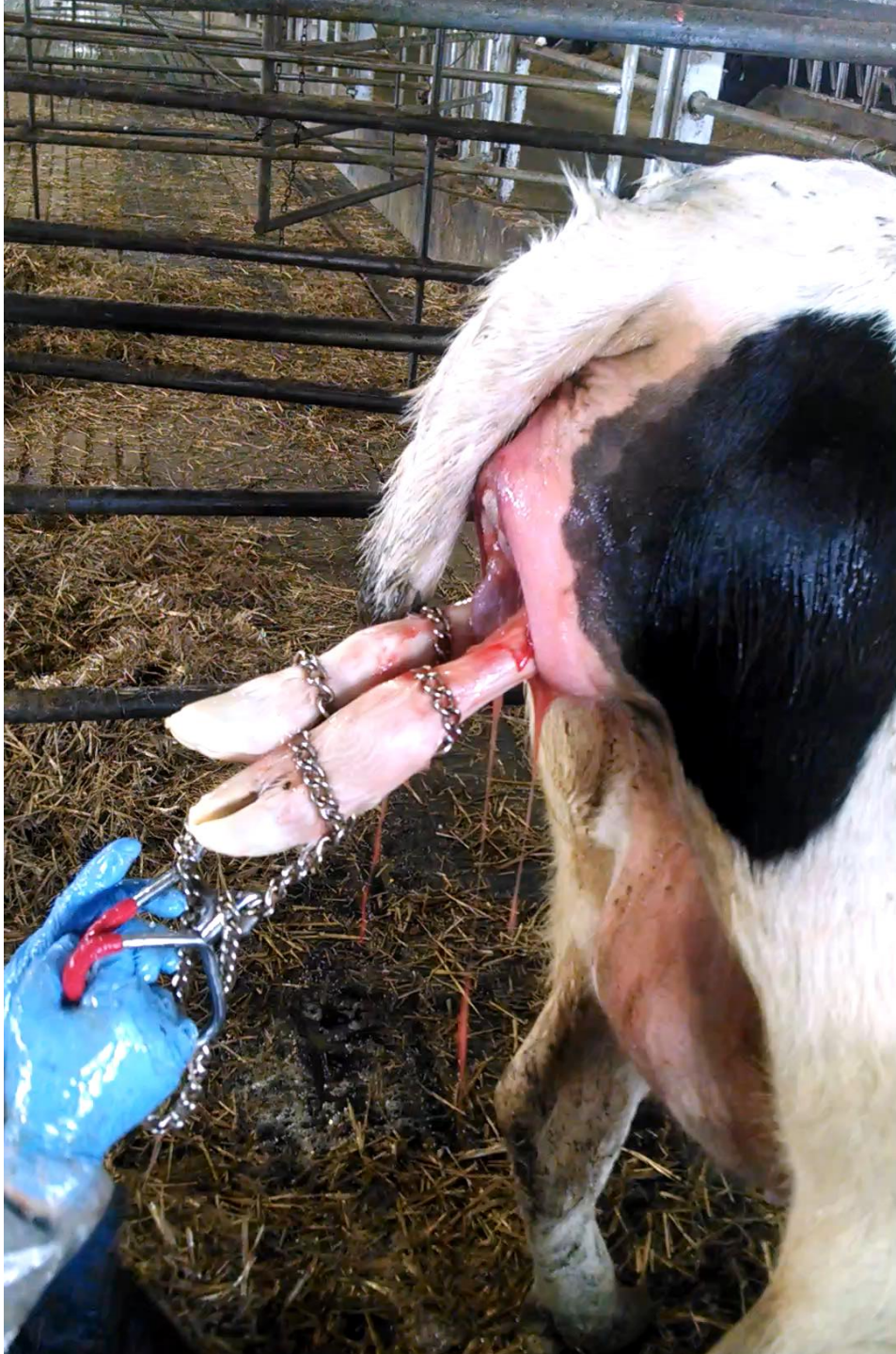


























































	Cow ID/Identida Arete	Pen/corral	M/F - sexo	Calf ID	Casa de vecerras	Difficulty - Dificultad	Time Born - horan	Time Fed - comir	Colostrum - total leche	Colostrum Meter Reading - mide leche	Feeder - quien comir	Puller - quien saca	Teats - teta	Calf Weight	Calcium bolus
12	11255	11	M		15	1	2:00	2:20	2	60	0	0	4	96	B.C
	4471	11	M		14	1	3:35	4:10	2	60	0	0	1	90	B.C
	7263	11	M		13	1	3:40	4:15	2	60	0	0	1	82	B.C.
	11051	11	f	15213	11	1	6:15	6:40	2	60	Ju	Ju	1	88	B.C.
	12587	9	f	15214	12	1	6:30	7:00	2	70	Ju	Ju	1	79	
	10519	11	M		16	1	6:40	7:20	2	60	Ju	Ju	3	83	B.C.
	9772	11	f	15215	10	1	9:00	9:20	2	60	Ju	Ju	4	90	B.C.
	7571	11	f	15216	8	1	10:10	10:20	2	60	Ju	Ju	4	104	B.C
-12	12521	9	M		7	1	1:55	2:20	2	70	Ju	Ju	4	91	
	9627	11	M		3	1	4:50		2	60	Ju	Ju	3	69	
	10636	11	M		2	2	9:50	10:10	2	80	0	0/5	4	101	

269

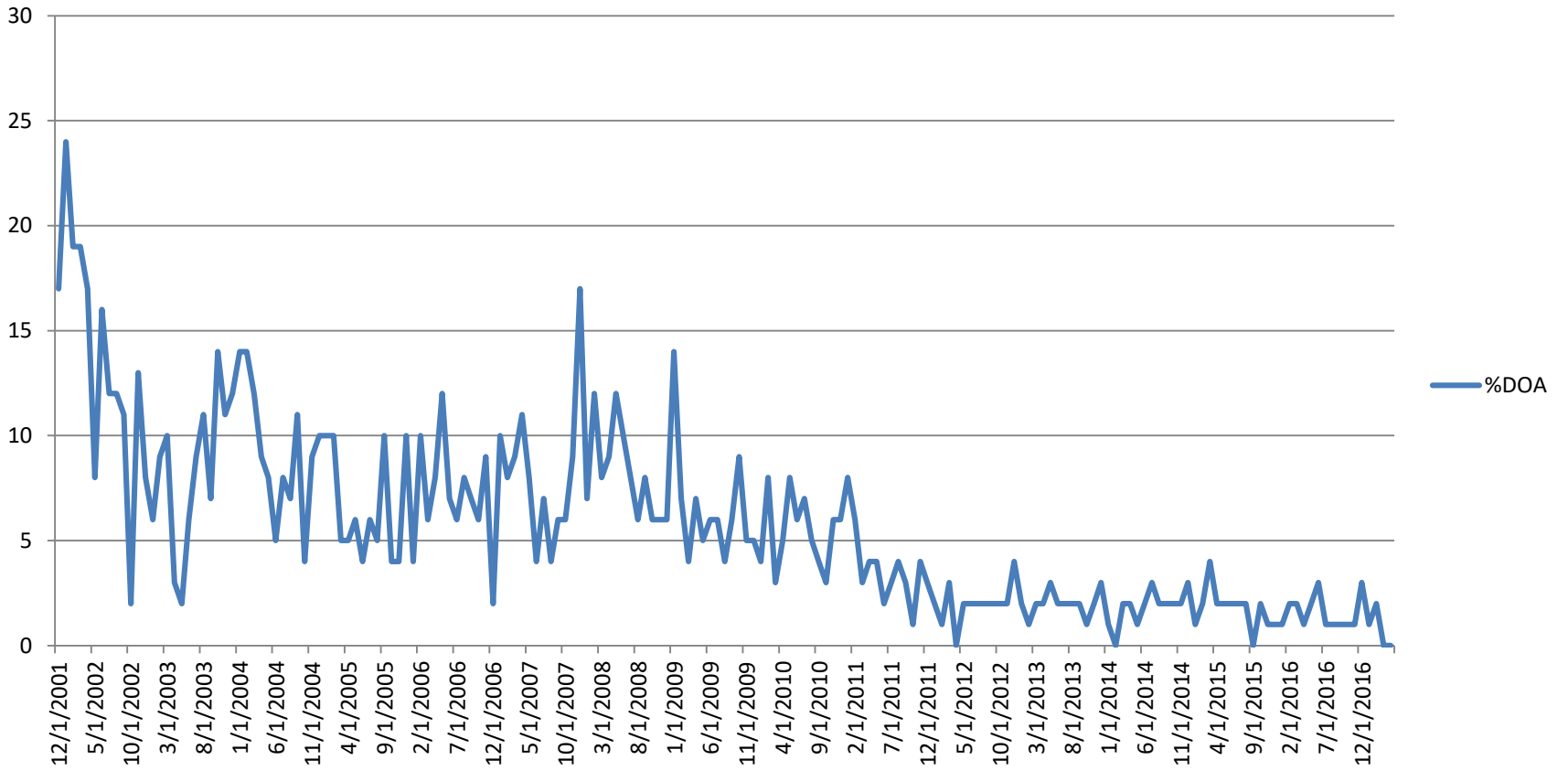
- Dairy Comp 305 ----- Dairy Dreams, LLC. -----  
 - Command : LIST ID CPROT BDAT CMTR CMAN DID FOR BDAT>6/1/12  
 - Expanded:  
 -  
 - 35310637 -----

ID	CPROT	BDAT	CMTR	CMAN	DID
=====	=====	=====	=====	=====	=====
15134	5.6	6/ 2/12	60	O	12574
15135	6.0	6/ 2/12	60	R	11223
15136	5.4	6/ 2/12	60	R	11206
15137	6.0	6/ 2/12	70	E	12423
15138	6.6	6/ 2/12	70	E	11062
15139	6.6	6/ 2/12	70	E	12603
15140	5.6	6/ 2/12	1	E	9366
15141	5.6	6/ 2/12	60	O	10992
15142	7.0	6/ 3/12	70	O	11199
15143	7.6	6/ 3/12	60	R	10631
15144	6.0	6/ 3/12	70	E	12508
15145	7.0	6/ 4/12	60	O	11039
15146	6.6	6/ 4/12	70	O	12518
15147	7.0	6/ 4/12	60	O	6429
15148	5.0	6/ 4/12	60	J	8944
15149	4.6	6/ 4/12	80	O	7962
15150	6.0	6/ 5/12	60	O	8335
15151	6.4	6/ 5/12	60	R	12578
15152	5.8	6/ 5/12	1	R	11196
15153	5.6	6/ 5/12	60	J	11155
15154	5.4	6/ 5/12	70	J	12364
15155	5.2	6/ 5/12	60	J	11201
15156	6.6	6/ 5/12	60	J	11117
15157	5.8	6/ 5/12	70	J	12541
15158	6.0	6/ 5/12	60	J	10949
15159	5.4	6/ 5/12	60	J	8992

# Calf Report for 04/03/16 - 04/03/17

Month	Fresh	None	Twins	%T	Male	Female	%F	Alive	Dead	%D	M:Dead	%M	F:Dead	%F	Sold	DCC
Apr16	294	1	15	5	156	151	49	304	3	1	2	1	1	1	135	7
May16	317	1	11	3	151	171	53	317	5	2	3	2	2	1	134	4
Jun16	309	1	15	5	141	179	56	311	9	3	4	3	5	3	131	7
Jul16	339	0	22	6	156	198	56	350	4	1	1	1	3	2	147	8
Aug16	311	0	15	5	143	177	55	318	2	1	0	0	2	1	126	12
Sep16	266	0	8	3	106	162	60	264	4	1	2	2	2	1	92	12
Oct16	244	0	11	5	120	133	53	251	2	1	2	2	0	0	106	8
Nov16	262	2	14	5	109	162	60	269	2	1	2	2	0	0	98	10
Dec16	297	0	11	4	138	167	55	296	9	3	4	3	5	3	102	7
Jan17	265	0	13	5	113	162	59	271	4	1	1	1	3	2	84	6
Feb17	227	0	4	2	117	112	49	224	5	2	3	3	2	2	88	3
Mar17	213	0	3	1	99	115	54	214	0	0	0	0	0	0	80	7
Apr17	6	0	0	0	1	5	83	6	0	0	0	0	0	0	1	0
<b>TOTAL</b>	<b>3350</b>	<b>5</b>	<b>142</b>	<b>4</b>	<b>1550</b>	<b>1894</b>	<b>55</b>	<b>3395</b>	<b>49</b>	<b>1</b>	<b>24</b>	<b>2</b>	<b>25</b>	<b>1</b>	<b>1324</b>	<b>91</b>

# %DOA



# Human/Bovine Procedures

- 24 hr, round the clock, dedicated maternity care
- Clean sheets/clean straw
- Initial exam followed by natural progression unless assistance required
- Clean instruments/clean instruments
- Ice chips, IV electrolytes/bucket of electrolytes

# Thank you!

- Questions/comments

# **Milk Quality Tips**

## **Looking at the Whole Picture**

**2020 Georgia Dairy Conference**  
**Savannah Georgia**

**Dr. Andy Johnson**  
**[drandy@theudderdoctor.com](mailto:drandy@theudderdoctor.com)**  
**920-621-3604**





**OK Lets get this out of the way first!**



## **Contact Information**

**Dr. Andrew Johnson**

**1705 Coronation Court**

**Green Bay, Wisconsin 54313**

**Cell: 920-621-3604**

**Email: [drandy@theudderdoctor.com](mailto:drandy@theudderdoctor.com)**





*"The Udder Doctor"*



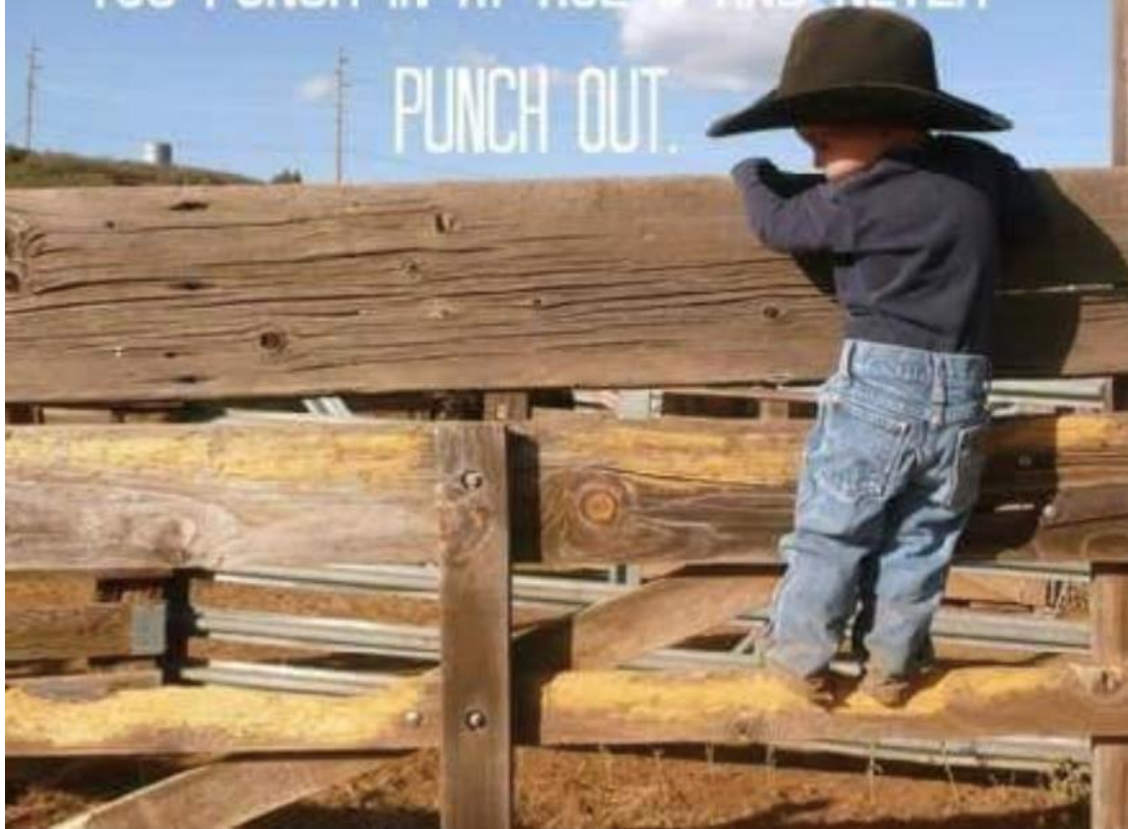
# **The Udder Doctor**

**Work on milk quality  
and cow comfort  
in 28 countries and 47 states**

**Work on herds ranging from  
20 cows to over 22,000 cows**



FARMING IS LIKE ANY OTHER JOB. ONLY  
YOU PUNCH IN AT AGE 5 AND NEVER  
PUNCH OUT.



**This is definitely true!**



**THE PROBLEM WITH  
POLITICAL JOKES  
IS THAT THEY  
SOMETIMES  
GET ELECTED**

# Has the world passed me by?



Keys to my 40 plus year  
successful career!





No one really cares how much  
**YOU** know until they understand  
how much **YOU** care



If your client survives  
**YOU** survive!

The key statement for  
**EVERYONE'S SUCCESS:**

Whenever you lose interest in  
being better at something,  
chances are **YOU** already have  
stopped being good at it

This is true for dairy farms as well.

# The Dairy Industry Is Changing Rapidly

You Need to Change to  
Stay Competitive

Those with quality milk will  
be competitive!



# **Our Milk Quality My Clients**

**100 dairy farms milk  
approximately 58,000 cows**

**For last 6 months  
which includes every load being  
tested, the average SCC is  
112,000 with 88.5 pounds of milk**



# Milk Quality

**The biggest opportunity on any farm with low milk prices to make the biggest impact on the price paid for their milk.**

**Many milk markets are cutting dairies and there is no where for many dairies to go. The key to keeping a milk market moving forward is quality.**



# The Quality of Milk is Determined at the Dairy







**Why Low SCC Is So Important!!**

**NOT  
EVERY BODY  
NEEDS  
MILK**





# Milk Quality:

## A World Wide Issue



**QUALITY MILK**  
**IS IMPORTANT**  
**TO ALL FARMS**  
**REGARDLESS OF**  
**HERD SIZE!**



# SCC of Each Dairy

1. Is exactly what they have decided it should be
2. **Reflects the management decisions of the dairy (housing, milking routine, milking equipment)**
3. **Truthfully, It reflects the true attitude of the dairy**



# Herd SCC

Every herd even in SE is  
capable of producing milk  
with an SCC in the bulk tank  
less than 200,000

Size doesn't matter,  
attitude does!!



# A Top Herd

4,850 cows through parlor

93 pounds/head/day

106,000 SCC

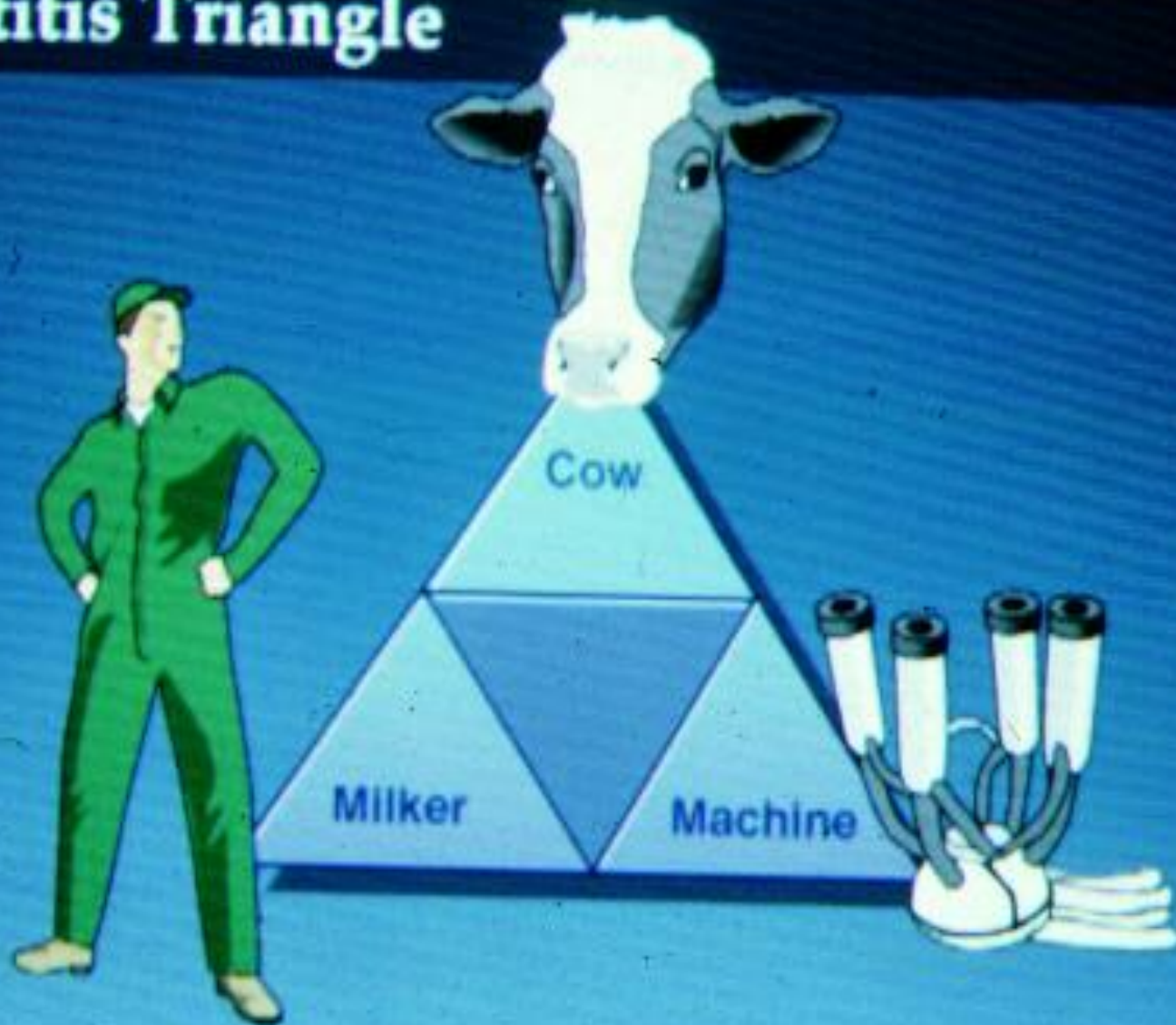
5.5 to 6 turns per hour

7 cows being treated for mastitis

preg rate for year 28% no shots



# The Mastitis Triangle





# Quality Milk Programs

Need a well organized plan to produce quality milk on the dairy and sell more milk to the milk plant vs. dumping down the drain



# Quality Milk Programs

## Two Critical Rules

1. Do what is best for the cow
2. Do what is best for the dairy



# Milk quality starts with the Cow and her environment

Cows in a dirty environment will  
Have a higher risk to new infections  
Keep the cow clean, dry and  
Comfortable 24 hours a day!



# Milk Quality Priorities

- Environment
- Bacteria
- Milking Routine
- Milking Equipment



**Most SCC and Clinical Mastitis  
issues are coming from the  
cow's environment**

**Not the milking routine or  
milking equipment**



# **LISTEN TO THE COW!**



**They always tell the truth or the real story!!**



**Does a dirty foot really matter?**

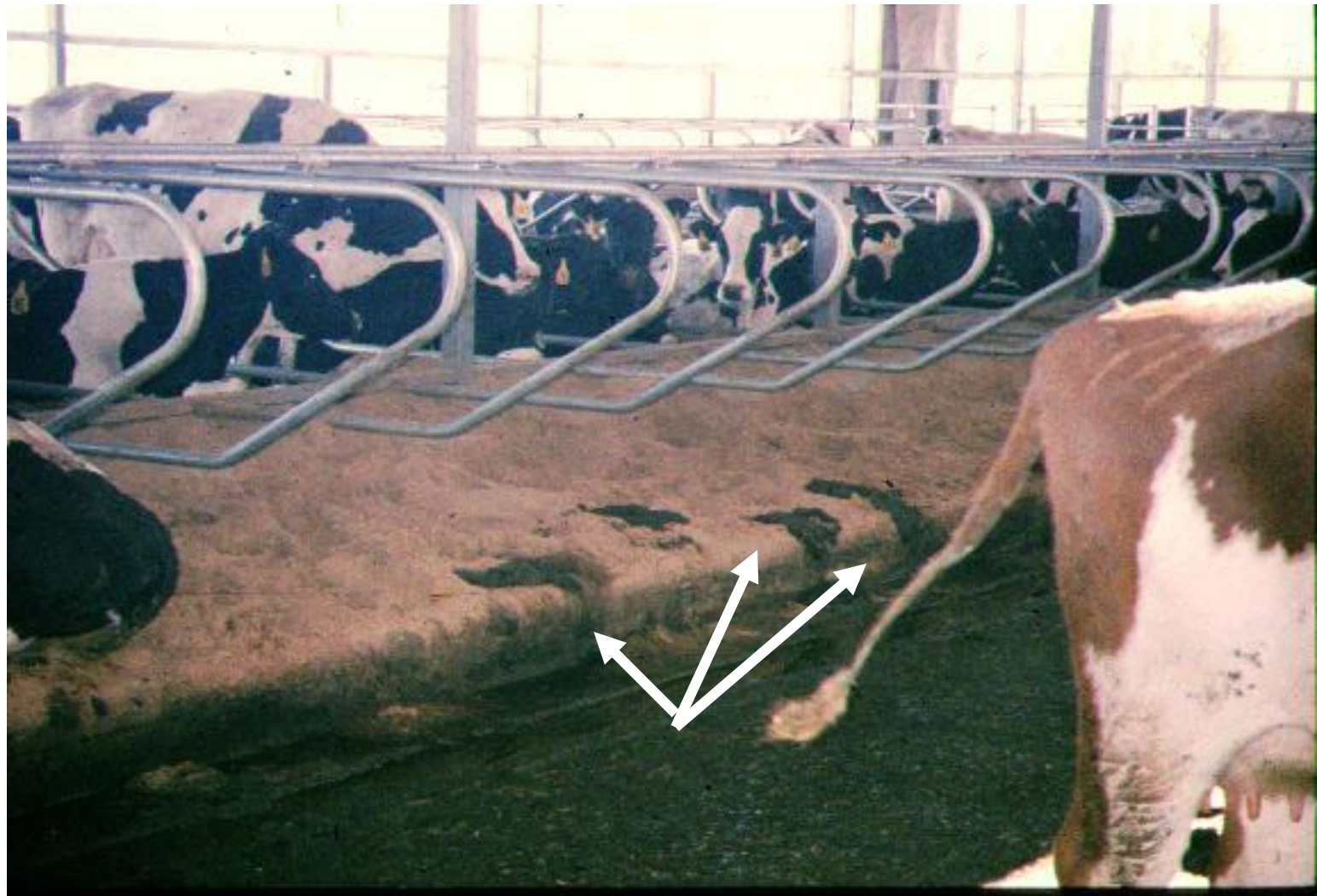
# Where is the leg located?



Right By the Udder!!







What Are The Stalls Telling You??  
Less Than 5% Is The Goal!!

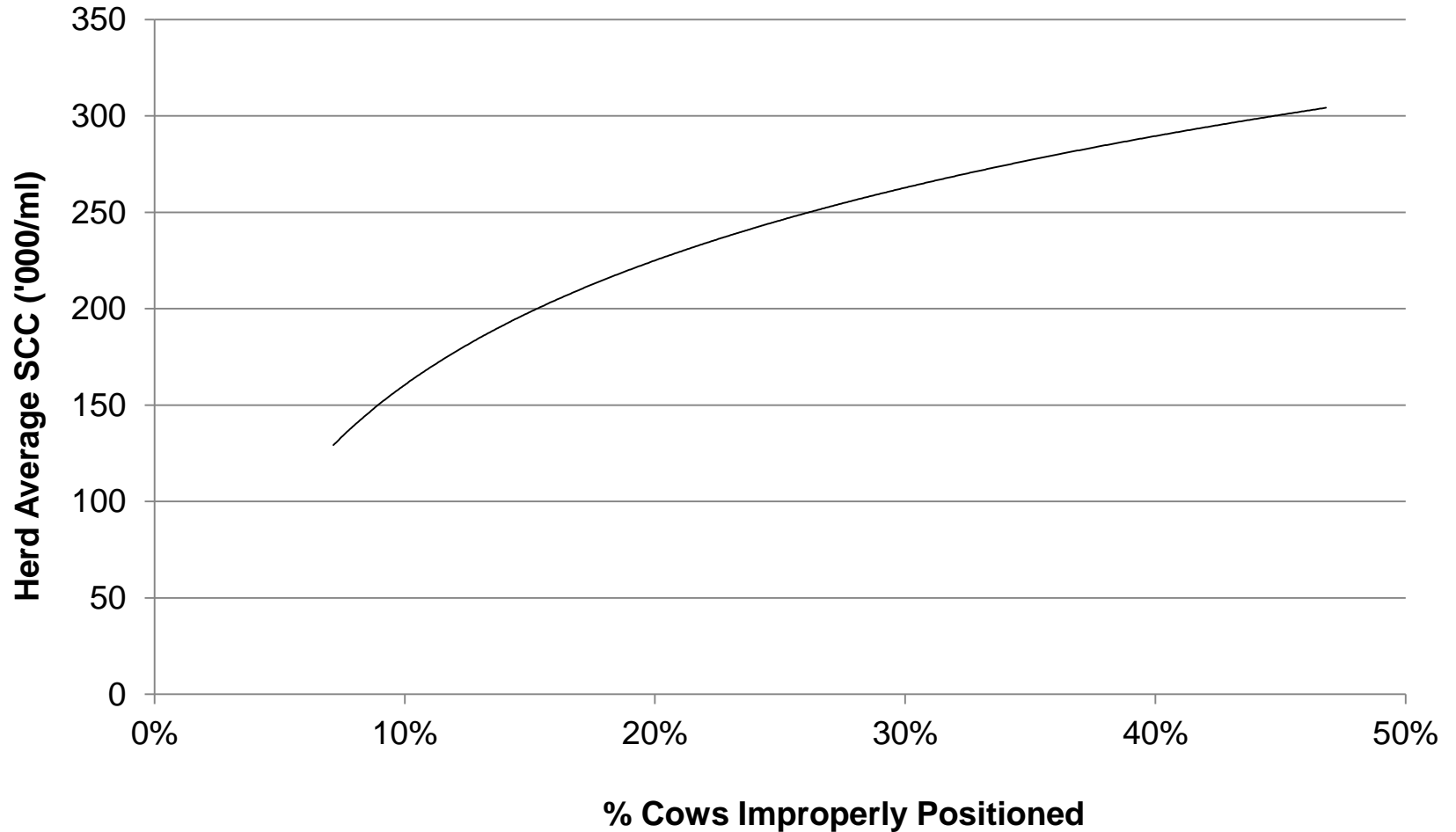


# “Butt Test or Bum Test”



# Butt Test vs. SCC

**Relationship Between Cow Position and Herd Average SCC**



# Probe the Beds



# Bedding Cultures

- Bacteria and organic load
- Lab used is critical
- New bedding
- Stall bedding prior to new bedding



# Proper Loop Design

## The Key Fact:

Must assure that the  
cow's lie straight in  
the stalls



# Cow Comfort

## Neck Rail Location

Stops Cow From Going  
TOO far into stall

Encourages her to lie down



# Free Stall Maintenance



**MODIFIED RAKE/SCRAPER MAKES IT EASIER!**







**Cross Over Alleys Major Cause Of Dirty Cows**



# Modified Rake



**MODIFIED RAKE/SCRAPER MAKES IT EASIER!**



# Heavy Bristle Broom



**Best for Mattress Stalls**





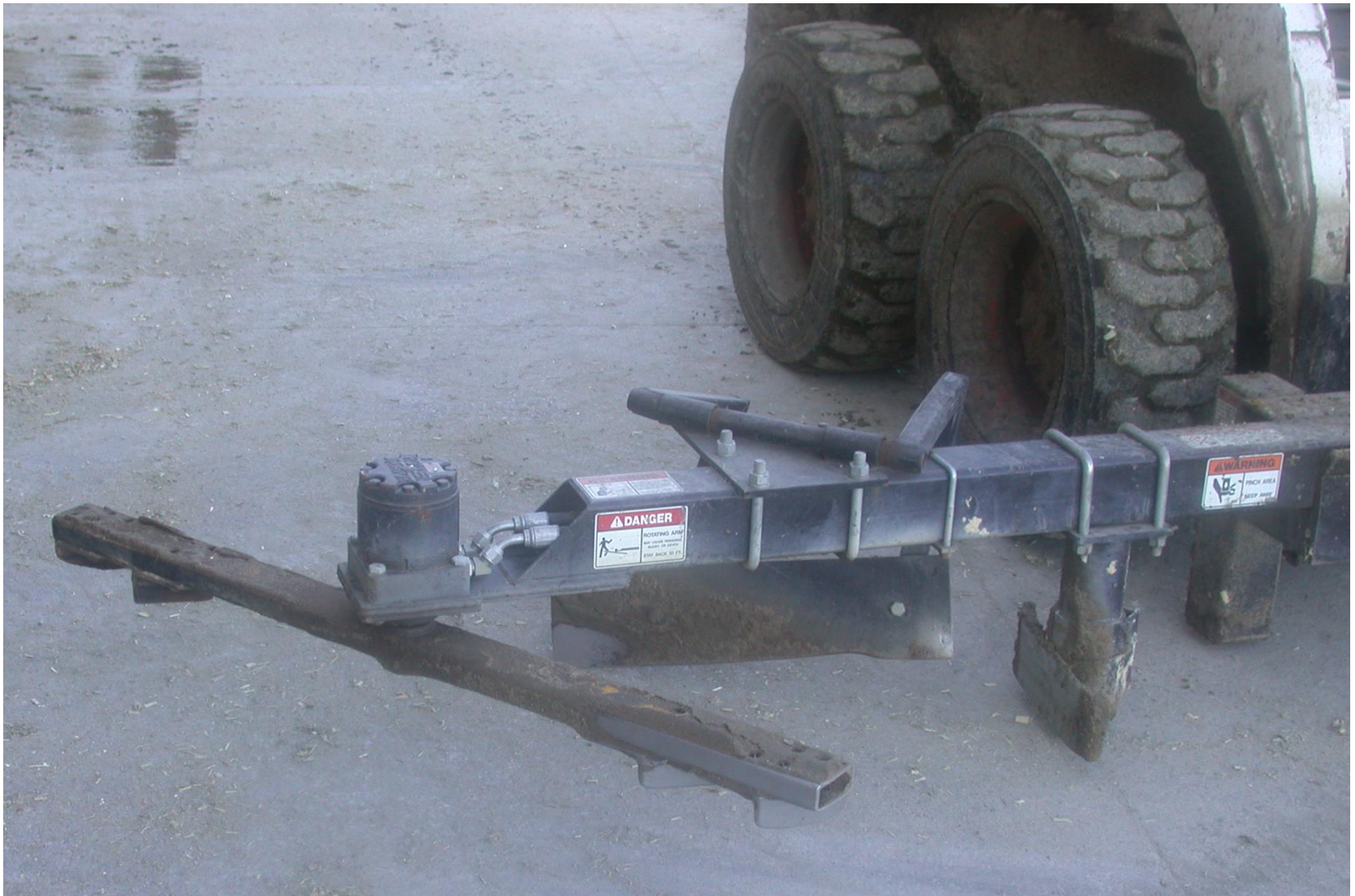
# Grooming Stalls

**Mechanical Grooming  
Needed for sand and bio-solid  
Stalls to keep dry and comfortable**

**Minimum 1X day while some  
dairies groom 3X a day**

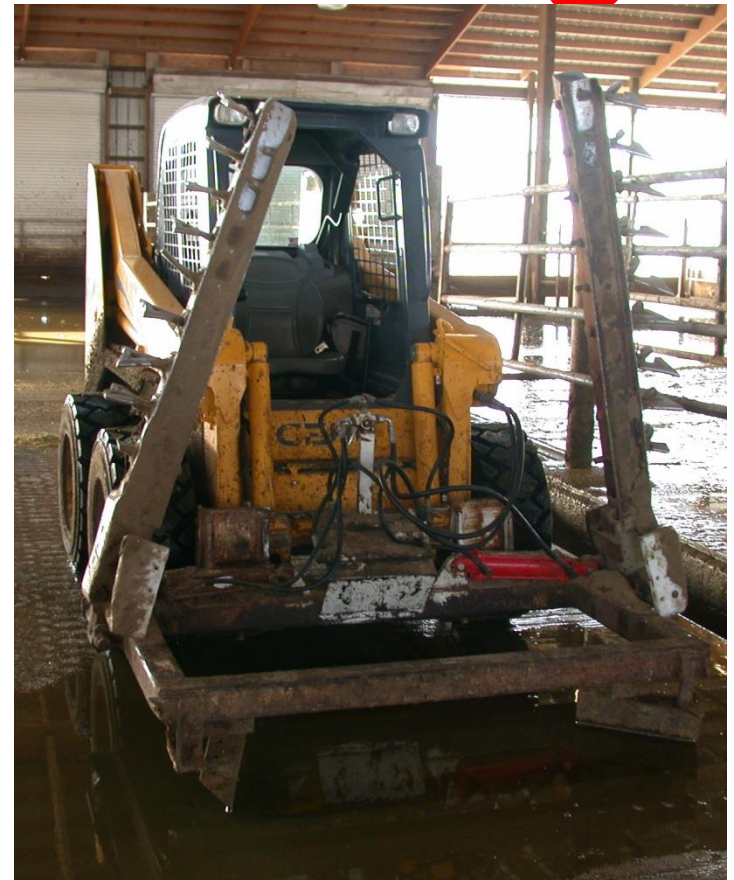
**Sandman groomer works great  
Brush for mattress herds**







# Free Stall Grooming



Mechanical methods





# Free Stall Leveling



Mechanical methods



# Free Stall Leveling



Mechanical methods



# Free Stall Deep Digging



# Tails Still Bad



Can't be in milkers face and expect them to do a good job!  
Cows are dirtier with long switches



# Tails Switch Trimming



- Battery operated clipper
- Cutco Scissors

**Cows are cleaner and there are less flies in summer  
Trim at day of calving and 5 months later**



# Udder Hair Matters



**Flame day of calving and then every other month**  
**Key source of Strep species mastitis**  
**Critical in robot herds for attachment**



# Contagious Bacteria

Strep ag Controlled

Staph aureus Controlled

Mycoplasma Mostly controlled

Prototheca Newest Monster



# Contagious Bacteria

## Prototheca

- Very Contagious
- Causes high bulk tank SCC
- No treatment cull or isolate
- Algae
- Common in clinicals
- Common in fresh animals
- Shed on and off





# Contagious Bacteria Prototheca

- Bulk tank culture excellent way to monitor
- Colony count the key  $<10$
- When increases rapidly  $>10$  need to find the positive cows
- Culture high SCC, any cow with clinical last 30 days, all fresh animals last 30 days



# Contagious Bacteria Prototheca

- Do not know the “trigger”
- Weather, stress event, high fresh cow numbers
- Takes huge commitment to solve
- Can be eliminated if willing to do all the necessary steps



# Contagious Bacteria Prototheca

- Eliminating the positive cows
  - Culture and sell or isolate
  - Do not move animals during culture process
  - Culture all cows in and out of the hospital
  - Culture all fresh animals



# Environmental Bacteria

Strep species Number 1 issue  
(Strep species equals feces)

E. Coli hot nasty mastitis  
(water and manure source)

Klebsiella Bedding, manure



# Environmental Bacteria

Bulk tank culture will give you the best picture of what the cows are being exposed to and may be infected with

High Strep species means milking dirty teats



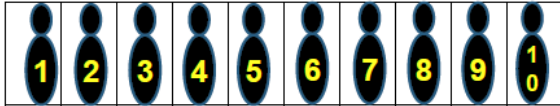
# Milking Protocol

- Must be consistent between every milker at every milking
- Must understand why the procedure is being done
- Procedure should be posted to promote consistency among all employees



## Rutina de Ordeño / Milking Routine

Sala Doble 20 – Grupos de DIEZ (10 vacas) /  
Parlor Double 20 – Groups of TEN (10) cows



### 1. Limpiado con toalla seca y Pre-Sellado 1. Dry wipe & Pre-Dipping

Regrese a la vaca 1 / Go back to cow 1

### 2. Despunte y secado 2. Fore-stripping and wiping

Regrese a la vaca 1 / Go back to cow 1

### 3. Colocar la unidad y alinear 3. Attach and align unit

Regrese a la vaca 1 / Go back to cow 1

### 4. Post- Sellado 4. Post-dipping

#### Notas / Notes:

- ✓ La preparación debe comenzar cuando el ordeñador tiene las primeras tres de sus diez vacas en su lugar / Milking prep should begin when a milker has the first three of his ten cows in place
- ✓ Enjuagar con el aspersor de la plataforma despues de terminar de ordeñar cada lado / Deck flush after each line
- ✓ Lavar la plataforma con la manguera a presion despues de cada corral / Pressure hose platform after each pen
- ✓ Enjuagar las unidades con la manguera “medicada” cuando esten sucias / Rinse off units with drop hose when dirty

GRANDE

6/30/2013

White Gold Dairy

## 1. Limpiado con toalla seca y Pre-Sellado 1. Dry wipe & Pre-Dipping

**Purpose:** Dry wipe to remove any loose dirt and reduce the organic load to make pre-dip more effective. Pre-dip to clean and disinfect teat surface and eliminate bacteria present before attaching the unit.

**Propósito:** Limpiar con toalla seca para remover la suciedad, y reducir la carga orgánica para hacer el pre-sello mas efectivo. Pre-sellar para limpiar y desinfectar la superficie del pezón y eliminar las bacterias presentes antes de colocar la unidad.



- ✓ Always start with the left front teat and continue clockwise
- ✓ Dry wipe each teat starting at the base of the udder with a clean towel and doing a downward twist (use one towel per 10 cows)
- ✓ Spray each teat. Make sure each teat is completely covered
- ✓ Pre-dip contact time should be at least 30 seconds
- ✓ Siempre comience con el pezón delantero izquierdo y continúe en el sentido de las manecillas del reloj
- ✓ Limpie cada pezón con una toalla limpia y seca desde la base de la ubre haciendo un movimiento circular (una toalla por cada 10 vacas)
- ✓ Aplique el spray en cada pezón. Asegúrese de que cada pezón esté completamente cubierto
- ✓ El tiempo de contacto del sellador debe ser al menos de 30 segundos

GRANDE

6/30/2013

White Gold Dairy

## 3. Colocar la unidad y alinear 3. Attach and align unit

**Purpose:** Milking unit should be attached to a clean, dry and well stimulated teats to remove milk from the udder. Units should be aligned to have an even and complete milking

**Propósito:** La unidad se debe colocar en pezones limpios, secos y bien estimulados para remover la leche de la ubre. La unidad debe estar bien alineada para permitir un ordeño parejo y completo



Use support / Utilice el soporte. Correct / Correcto. Incorrect (pushed forward) / Incorrecto (hacia adelante)

- ✓ When attaching the unit, bend inflation to avoid air entering
- ✓ Use hose support and align unit
- ✓ Be careful not to touch dirty legs or floor with the inflations to avoid contamination
- ✓ Make sure unit hangs squared under the udder
- ✓ Al colocar la unidad doble las pezoneras para evitar la entrada de aire
- ✓ Use el soporte de la manguera y alinee la unidad
- ✓ Tenga cuidado de no tocar las piernas sucias de las vacas o el piso con las pezoneras para evitar contaminación
- ✓ Asegúrese que la unidad cuelgue centrada bajo la ubre

GRANDE

6/30/2013

White Gold Dairy

## 2. Despunte y secado 2. Fore-stripping and wiping

**Purpose:** Fore-stripping is done to identify clinical mastitis, to stimulate milk letdown and to remove first milk that is high in SCC and bacteria. Teats are wiped to remove pre-dip and dirt before attaching the unit.

**Propósito:** El despunte se hace para identificar mastitis clínica, estimular la bajada de la leche y remover la primera leche que es alta en células somáticas y bacteria. Limpiar los pezones para quitar el pre-sello y la suciedad antes de poner las unidades.



- ✓ Always start with the left front teat and continue clockwise
- ✓ Strip five (5) squirts of milk from each teat. Always observe the milk, paying attention for abnormal milk (mastitis).
- ✓ Do not milk cows with abnormal milk in the line, mark cow, move to hospital pen and write down cow number on dry erase board.
- ✓ When wiping, starting at the base of the udder, do a downward twist of each teat with the towel, then flip the towel and rub the teat ends
- ✓ Siempre comience con el pezón delantero izquierdo y continúe en el sentido de las manecillas del reloj
- ✓ Despunte cinco (5) chorros de leche por pezón. Siempre observe la leche, ponga atención a la presencia de leche anormal (mastitis).
- ✓ No ordeñe vacas con leche anormal en la línea, marque la vaca, muevala al hospital y escriba el número en el tablero.
- ✓ Para secar, gire la toalla con movimientos circulares desde la base del pezón (no la tire hacia abajo), voltee la toalla y frote las puntas de todos los pezones.

GRANDE

6/30/2013

White Gold Dairy

## 4. Post- Sellado 4. Post-dipping

**Purpose:** The teat opening stays open after milking, also the teats are bathed in milk during the milking process. Post dipping removes milk film and kills the bacteria present on the teat skin for mastitis prevention.

**Propósito:** El orificio del pezón se mantiene abierto después del ordeño, además los pezones son bañados en leche durante el proceso de ordeño. El post-sellado remueve la capa de leche que queda en el pezón después del ordeño y mata las bacterias presentes para prevenir la mastitis.



- ✓ Post dip all teats
- ✓ Make sure coverage is complete
- ✓ Keep dip cups clean

- ✓ Sumerja todos los pezones en el sellador
- ✓ Asegúrese que la cobertura sea completa
- ✓ Mantenga las copas limpias

GRANDE

7/09/2013

Spring Grove Dairy

# Best Milking Routine

## What I recommend

- ☞ Step 1: Dry wipe and Predip
  - ☞ Step 2: Strip and dry
  - ☞ Step 3: Attach and Align
- 
- ☞ Highest flow rates, fastest milking, and best milk quality
  - ☞ Big parlors getting 5 to 6.5 turns with this routine





# Biggest Challenge for Success

To know the difference  
between  
normal and abnormal.

This is where your veterinarian is so important



# Poor Advice

Is as worthless as a parachute that  
opens on the second bounce!



# Proper Lag Time

The single biggest factor  
to rapid and complete milk outs.

**GOAL = 90+ SECONDS**

**(Fore Strip to Unit Attachment)**



# Proper Lag Time

**Goal: 90-180 seconds**

Research shows up to 5  
minutes without negative issues



# Over Milking

Greater than 75% of  
all over milking occurs  
at the beginning of milking

**NOT THE END OF MILKING!!**



# Proper Predip and Post Dip

**Fast kill on predip**

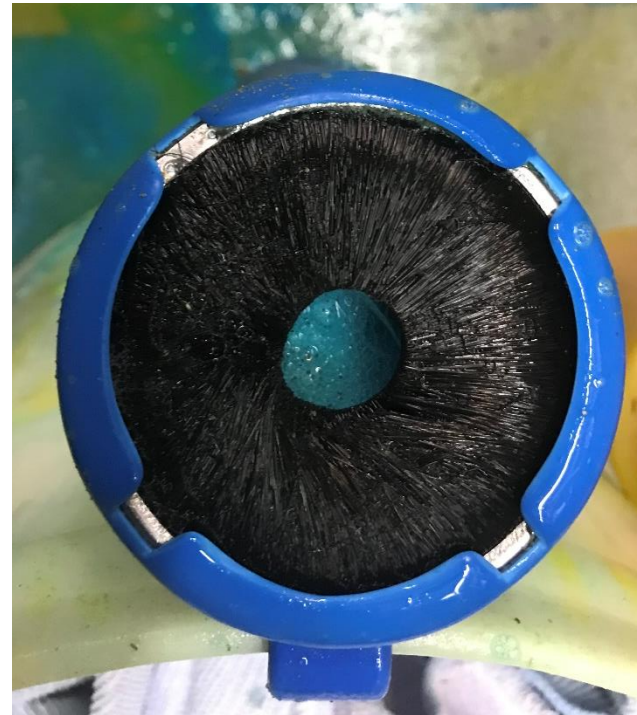
**Long protection Post Dip**

Pick products that fit your bacteria  
On your dairy Gram + vs. Gram -



# Proper Predip and Post Dip

Coverage still the secret



**Proper Predip and Post Dip**

**Proper Storage Critical**

**Proper mixing**

**Proper age**





# Proper Predip and Post Dip

## Proper Storage Critical



# Proper Predip and Post Dip

## Proper Mixing Critical



# **Proper Predip and Post Dip** **Age after mixing Critical**

**Many dips maximum life of 24-48  
hours then kill decreases**



# Keep Gloves Clean

**Dirty hands are common  
source of bacteria on teats**

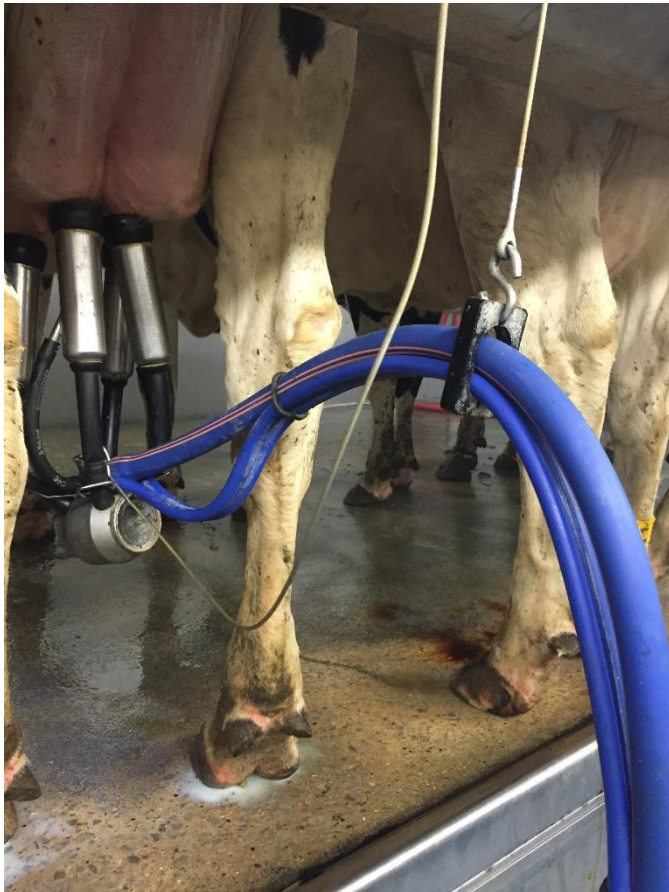
Gloves are important but  
Keeping clean more important





**Feces equals Strep species**

# Unit Alignment Still Critical to milk outs and liner slips



**Never want lift**



**Twist equals uneven milkout**

# Monitor the Results of Good Udder Prep





Might be some issues with teat cleaning??



# Dirty Filters Affect Plate Counts

EVALUATION OF MILK FILTERS

Filter#	M	T	W	Th	F	S	S
1	1	1	1	1	3	3	2
2	1	2	3	1	3	1	2
3	2	1	2	1	2	2	2
4	3	2	3	1	3	3	3

Filter#	M	T	W	Th	F	S	S
1	2	2	3	3	1	1	1
2	1	1	2	3	2	1	3
3	1	2	1	1	3	1	2
4	1	2	2	2	3	1	3

Filter#	M	T	W	Th	F	S	S
1	1	1	2				
2	1	1	1				
3	1	1	1				
4	1	1	1				

Oct-18

Filter#	M	T	W	Th	F	S	S
1	2	1	1	1	2	3	1
2	2	3	1	1	1	3	2
3	1	2	1	1	1	3	3
4	2	3	2	1	1	3	3

Filter#	M	T	W	Th	F	S	S
1	1	1	2	2	2	1	1
2	1	2	1	2	1	1	1
3	1	1	1	1	1	1	1
4	1	1	1	1	3	2	1

1 Clean  
2 Slight dirty  
3 Very dirty



# Keep Units Clean During Milking

- Use drop hose with detergent/sanitizer
- At minimum after each pen of cows
- Use like manual back flush
  - After High SCC Animal
  - After Animal with Abnormal Milk
  - Known contagious cow
  - After Animal that has been treated





**Strep species equals feces!!**



# Dirty Inflations



# Dirty Inflations



Units on floor before they retract – a common cause



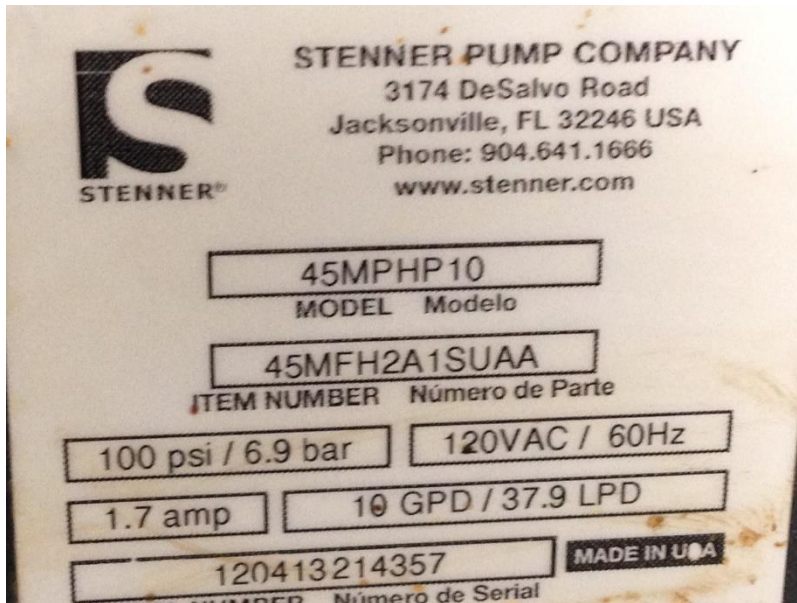
# Dirty Inflations



# Dirty Inflations



# Keep Exterior Of Units Clean

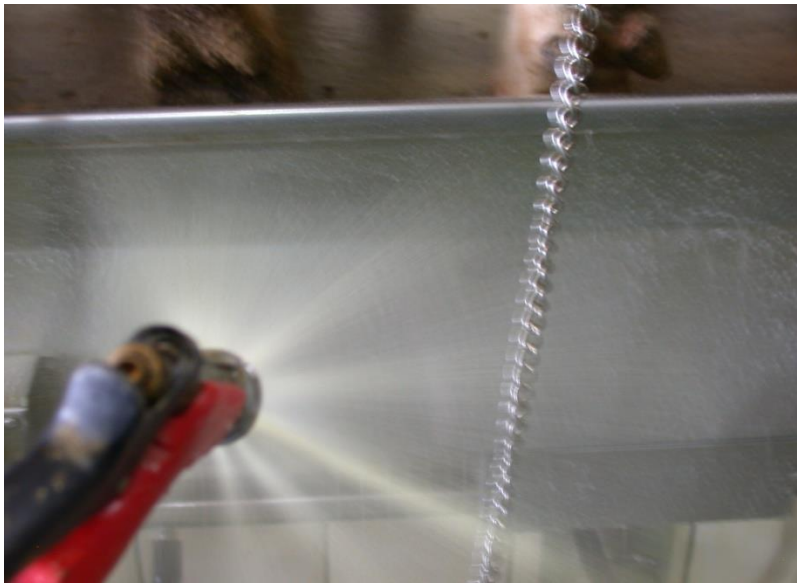


**Stenner Pump System**





# Keep Exterior Of Units Clean



**Drop hoses should show suds**  
**Significant drop in clinical cases**  
**Effective Manual Backflush**

