Large Herd Seminar

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14:15

Feeding the Dry Cow

Gordon Jones, D.V.M.

Dr. Gordon A. Jones currently lives in De Pere, WI. He attended Michigan State University and received his Bachelor of Science in Dairy Science and his Doctorate of Veterinary Medicine in 1977. He practiced, Dairy Performance Medicine, in Wisconsin for 22 years. Dr Jones was a Technical Service Specialist for Monsanto Dairy for 3 years.

Dr Jones currently is an independent dairy performance consultant and a partner of Central Sands Dairy. Central Sands Dairy is a 4,000 milk cow dairy. He also works for Quality Milk Sales, as a production consulting specialist and a nutritionist for a consortium of large dairies. Dr. Jones is the designer of Fair Oaks Dairy in Indiana. Fair Oaks is a dairy farm with more than 16,000 cows. He was also the nutritionist and on the management team for the first 7 years, until starting Central Sands Dairy.

Dr. Jones has consulted with dairy producers and veterinarians both across the U.S. and Internationally on dairy herd performance, nutrition, cow environments, dairy housing, expansion, dairy management, and cow comfort. He has placed considerable emphasis on housing design to keep, cows clean, dry, and comfortable. He has influenced the development of several cow comfort features in barn construction through work with environmental consultants and contractors.
Feeding the Dry Cow

Dr. Gordie Jones
Partner
Central Sands Dairy LLC

Central Sands Dairy

Dr. Gordie Jones
Managing Partner
Central Sands Dairy, LLC.

Location: Wisconsin
Golden Sands Area

“Pleistocene Mega fauna”
-Born during the last Ice Age

The First farmers
- Were in Mesopotamia
- Modern day Iraq
- Large headed grains
- Wheat, Barley, Triticale
- A stick in the sand
- A little water and we were farmers!
The First farmers
- Our First fences
- Were to keep the wild cows out!!
- She opened the gate
- And we now had a cow!

Only 11 species were able to be domesticated.
- Our Cow is the star!
- She Provided POWER, Protein, & Fertilizer
- She truly is the foundation of civilization.
- The foster mother of the human race
- All of the domesticated animals are "herd" species - looking for a leader
- Except the Cat!!

Covenant;
To care for, and keep

The Star of the show!

Guns, Germs & Steel
Jarred Diamond

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Vaccine

- First vaccine....
- Small Pox
- Cow Pox
- Latin Vacca = Cow
- Vaccinate

Cow-inate!!!!

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Dry Cow Programs, A new look at the old way!

In the US there has been a failure of the transition period

Dry - Fresh Cow Programs

- Close-up programs
- Steam-up programs
- "10-day" programs
- Drenching programs
- Short Dry Cow Period
- No Dry Cow Period
- Multiple Milkings
Dry - Fresh Cow Programs

- Close-up programs
- Steam-up programs
- “10-day” programs
- Drenching programs
- Short Dry Cow Period
- No Dry Cow Period
- Multiple Milkings
- Once a day Milkings

Rules that still apply

- Nutrition
- Dry Cow program
- Cow Comfort
- Reproduction
- People get everything done above!

Rules that still apply

- Cow Comfort is first
- Forage is king
- And Better Forage is better
- Preg rates means you keep cows
- Dry Cow program stops early fresh cow losses

It’s a Matter of Too Little or Too Much!

Or how do we get it just right?

Too Much.........Too Little

- Body Condition
- Weight Loss in Dry Pen
- Time in the Dry Pen
- Energy
- Too Many Lactations
- Twins / Triplets
- Grain
- Overcrowding
- Excess Soluble Protein

Too Much.........Too Little

- Body Condition
- Weight Gain in Dry Pen
- Time in the Dry Pen
- Energy
- Too Many Lactations
- Twins / Triplets
- Grain
- Overcrowding
- Excess Soluble Protein
- Body Condition
- DMI
- Fiber
- Protein
- Magnesium
Too Little

- Body Condition
- Weight Loss in Dry Pen
- Time in the Dry Pen
- Selenium
- Cow Comfort
- DMI
- Fiber
- Protein
- Magnesium

Nutrition - Ration

Rations that work best @ Central Sands

- > 50% forage
- No More than 6-8# total drymatter from feeds with 40% NDF that are not forage (by-product feeds)
- Butterfat’s > 3.75 Holstein
- Butterfat’s > 4.65 Jersey
- Rumensin @ 420mg/cow/day

Empty Bunk Feeding

Why we do Not feed to an empty Bunk

Or why “just in time” feeding fails to get optimal production

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Across the US there has been a failure of the transition period

Dry - Fresh Cow Programs
- Close-up programs
- Steam-up programs
- "10-day" programs
- Drenching programs
- Short Dry Cow Period
- No Dry Cow Period
- Multiple Milking
- Once a day Milking
Feeding the Dry Cow

**Dry Cow Program**

- Comfort
- Low Energy - High Fiber
- Refer to Jim Drackley’s work

**Displaced Abomasums**

- US Dairy Industry
- Most Dairies have a goal of 4-6%
- Less than 1% is very achievable!
Dry Period Guidelines

• At least 6 weeks
  • shorter periods will decrease profits!
• TWO or ONE group
  • Far off
  • Close Up
  • Separate pen for
  • 3 wks before calving

INTAKE, INTAKE, INTAKE!

DMI On Ration Changes from Milk to Dry Cow Ration

• Milk Cow 50#DMI .80 NeL = 40 Mcals
• Milk Cow 50#DMI 24% NDF-f = 12# NDF
• Far Off 50%NDF ~100% Forage
• Far Off 12#NDF =24% DMI
• Far Off .60 NeL *24# = 14.4 Mcals

DMI with Low Energy, High Fiber, Dry Cow Diets

• Far Off Cows 28-32# DMI (12.7-14.5 kg)
• Close-Up Cows 25-29# DMI (11.4-13.2kg)
• Far Off cows .60mcal x 30# = 18 mcal
• Close-ups .62mcal x 27# = 16.7 mcal

General Dry Cow Ration Guidelines

• No more then 8# DM (3.6kg) of Corn Silage
• 4-6 # dry straw (high quality, low energy) MUST be CHOPPED short
• 2-3Kg total grain (1.5-2.5Kg from C/S)
• No more than .5 Kg added to ration.
• No sorting!!
• When it fails.....LOWER the energy!!
Feeding the Dry Cow

Too Much

- Body Condition
- Weight Gain in Dry Pen
- Time in the Dry Pen
- Energy & Grain
- Overcrowding
- Excess Soluble Protein
- Potassium
- Molds & Mycotoxins

Body Condition

- Fat
- Thin
- Weight Gain
- Weight Loss
- Avoid Weight gain in last 4-6 wks

Displaced Abomasums

- US Dairy Industry
- Most Dairies have a goal of 4-6%
- Less than 1% is very achievable!
### DMI On Ration Changes from Milk to Dry Cow Ration

- **Milk Cow**: 50#DMI .80 NeL = 40 Mcals
- **Milk Cow**: 50#DMI 26% NDF-f = 13#NDF
- **Far Off**: 50%NDF ~100% Forage
- **Far Off**: 26# DMI @ 50% NDF = 13#NDF
- **Far Off**: .60 NeL *26# = 15.6 Mcals

### DMI with Low Energy, High Fiber, Dry Cow Diets

- Far Off Cows 28-32# DMI
- Close-Up Cows 25-29# DMI
- Far Off cows .60mcal x 28# = 16.8 Mcal
- Close-ups .62mcal x 26# = 16.1 Mcal

### DMI with Low Energy, High Fiber, Dry Cow Diets

- **Far Off - SPECIFICATIONS**
  - DMI 26-32 lb/day
  - CP 13.5-14.0%
  - UIP .35-.38%
  - NEL .58-.62 Mcal/lb
  - ADF .33-35%
  - NDF 40-50%
  - NDF forage, min. 40-44%
  - NFC 26-28%
  - NDF Forage (same as milk cow!) 11.5-12#

### Close-Up - SPECIFICATIONS

- **Close-Up Feeding**

### Troubleshooting

- **Goals**
  - Feed Bulky Forages, Adequate pe-NDF
  - Exercise the Cows
  - Cow Comfort - Well Bedded Pack or Stalls
  - Adequate Quality Water
  - Bunk Space ~ 2 Feet Per Head

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Close-up Management Troubleshooting

Acidosis Prone Ration
Inadequate Fermentable Carbohydrates
Low Protein, Excess Soluble Protein
Low High Quality Protein
Low Magnesium Levels
Excess Fat
High Positive DCAD Levels

Close-Up Management Troubleshooting

Common Pitfalls
Sorting
Poor Quality Forages are Fed
Mold & Mycotoxins A Problem
Excess Potassium, Low Blood Calcium
No Forage Wet Chem Mineral Analysis
Lack of Forage Analysis Altogether
Slug Feeding/No TMR Delivery System
Over Crowding

Rumensin all rations at 320mg intake

Dry Cow Management is the single most important phase of production
3 thinks a Cows Should Do!

- Stand to EAT & DRINK
- Stand to MILK
- LAY DOWN

Questions? Thoughts?

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