## It's More Than a Ration

There is a lot more to Agri-Basics, Inc. than a great nutrition program.

"When you bring an ABI nutritionist onto your team you get another set of eyes, another perspective on the operation," says Tom Good, Agri-Basics nutritionist in Lititz, PA. "Hopefully, you have a partner to help take out the highs and lows emotionally...someone who has been there before."

This can be especially important for the younger producer who is experiencing the emotional roller coaster of business management but equally applies to experienced operators.

"The cow does not know or care what milk prices are or what your feed costs are," Good says. "You have to treat her the same as before to maximize her production.'

"Nutrition is an important but small part of what we do," says Tim Rutledge, ABI nutritionist based in Reinholds. PA. "We consult with our producers on many things.

In fact, most ABI nutritionists will agree that they likely spend more time consulting about nonnutrition issues – like finances or equipment – than they do about rations.

"Your Agri-Basics nutritionist is not just selling a product. You get a consultant who can act as a mediator, a financial advisor, a herdsman, an animal health consultant," says Angela Breneman, ABI calf specialist in Washington Boro, PA. "You get a whole-package resource that we don't charge

"We are part of the farm's team. And we do what is needed as part of the team," Rutledge says. "If the producer needs a vet or a financial person to help with an issue, we can arrange it."

Among many other areas, Breneman consults on calf facilities. "More people today are interested in raising their own heifers on their own farm," she says. Her input includes consulting about hutches versus barns, group housing versus individual, conventional versus robotic feeding. She will walk a setup to be sure ventilation is good and the facility is draft-free. That service comes without an added fee

Keep in mind that cows are fed all raw ingredients. Continually teaching ways to put all of the parts together is one key to success – but feed is a minor part of the game. Your nutritionist's goal is to bring the least amount of feed possible up the

"We're working for you...not for a feed company or anyone else," Rutledge emphasizes. "We're on the farm for you." Those needs vary from farm to farm and even by the age and experience of the individual producer.

"You can feed a dairy cow a lot of different things. When God made the cow, he gave us a lot of alternatives," Good continues. "The key is to continue to maximize her performance."

And that's why producers can count on more than a ration from Agri-Basics.

# PA Producers Slow to Adopt New MMP

dairy producers is the latest risk management tool available to producers. By mid-January, USDA Secretary Tom Vilsack said that enrollment in the program had exceeded half the nation's dairy farms – well beyond his expectations.

He had to be a bit disappointed in enrollment

The new Margin Protection Plan (MPP) for | by the Commonwealth's dairy producers. Barely 30% of Pennsylvania's 7200 farms have signed

> The MPP was created in the 2014 Farm Bill. It replaced the Milk Income Loss Contract program, giving dairy producers more flexibility to select coverage levels best suited to their operation.

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#### The Agri-Vator - Dairy Edition - Spring 2015



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"...meeting today's challenges, pursuing tomorrow's goals.



# AGRI-VATOR

**SPRING • 2015 DAIRY EDITION** Vol. 15, No. 3

## Do's and Don'ts When Milk Prices Drop by Curt Harler

While everyone lets out a little shriek as a roller coaster dips and spins, when milk markets spin downward there is no time to panic. Rather, the goal should be to hone best-practice management decisions.

Knee-jerk changes in nutrition and similar poor management decisions will hurt long-term performance and lead to more hurdles down the road. It takes a long time to recover lost cow performance.

"Do what you did before," Robert Davis, ABI nutritionist tells his producers around Christiana, PA. "Do it right regardless of where milk prices

"Don't do anything that will hurt production or reproduction," agrees Steve Vaughan, ABI nutritionist serving the Hartville, OH area. "Keep your cows fresh and pregnant and healthy."

"Maximize your forages. Pair the forages that are on the farm for maximum nutritive value," is the key advice from ABI's James G. Longenecker, Jr., in Christiana. While not everyone has a silo or trench full of top-quality forage, Longenecker says a forage program should pair the best of both worlds: maximizing production while controlling

Most projections say dairy producers will see \$7 to \$8 less per cwt than the \$23 or \$24 they realized a year ago. The consensus projection is for 2015 milk to sell somewhere in the neighborhood he observes. of \$14 to \$16 per cwt.

While producers are right to expect a good return on investment, Longenecker cautions against over-investing. He sees too many farmers pushing grain and supplements rather than working with their existing forage program. While not all forage is tip-top quality, a producer who regularly does forage analysis can pair high-quality forage with lesser quality forage to maximize feed potential.

This is important since the current price situation is unlikely to change drastically in the near future. Many dairy economists say it will be the last half of 2015 before producers see an increase but others have a different outlook (see Dead Cat Bounce, page 2).

Vaughan notes that producers have been through lean times before and survived quite nicely. He suggests producers keep today's market in mind when things get better and avoid the temptation to over-extend themselves. "It never stays good. And it isn't bad forever, either,"

Don't focus on this month's milk check alone but look at the longer term when investing. Longenecker tells his producers. "Is the money you're spending to get a short-term response or for the long-term health of the cows and the operation?" he asks.

Davis warns producers against trying cheap, poor quality ingredients to cut costs or high priced unproven additives in attempt to boost production. Rather, he too suggests focusing on forage quality. "You produce it at home and it will have the biggest effect on your production," he

Vaughan is in complete agreement. "Focus

continued bottom of page 2

# Are Your Calves Taking or Making Money? by Sherry Bunting

Instead of thinking about calf formula feeding | real dollars to the dairy. costs, focus on getting the biggest bang for your

Known worldwide for his dairy health and nutrition consulting, Dr. Robert Corbett, DVM, was the keynote speaker at the Agri-Basics, Inc. Dairy Seminar last December.

He stressed the efficiencies to be gained feeding pre-weaned calves because "they are like hogs and chickens." Pre-ruminant calves are singlestomach animals with the ability to very efficiently convert feed into growth.

"Look at what your cost is per pound of gain not your cost per day," Corbett explained. Two good benchmarks to watch are dry matter intake at weaning and heifer size at breeding. The ideal weight for heifers at calving is 1350 to 1400 lbs. with wither height of 54.9 inches.

"Calves on whole milk or replacer fed at only 8 to 10% of bodyweight instead of 20% of bodyweight are gaining 0.5 to 1.0 lbs/day. Even at 1.3 lbs/day average daily gain, those heifers would not reach the proper breeding size until 18 months, which means they would be 27 to 28 months old at first calving. That extra time means

By getting more pounds of lean gain and frame during the pre-weaning period, the heifers are set up to consume fewer total pounds of feed on their way to finding their place in the milking string. Producers can save 30 to 50 cents per pound of gain just in animal value – never mind the higher value of cattle today and the fact that studies show an increase in first and second lactation milk yield when preweaning growth rates are rapid.

More important than mortality rates, he said, is the condition of those calves at birth. Are calves being born in good condition to set the stage for raising them profitably?

Corbett showed slides of newborn calves born too thin and lacking sufficient muscle definition due to insufficient dry cow nutrition. Without good body condition at birth, the calf will devote a major part of her early nutrition to building the fat and protein reserves she should already have.

Rob Costello of Milk Specialties Global also stressed the importance of newborn calf condi-



Dr. Robert Corbett, DVM

tion, noting the "brown fat" as a special fat in newborn calves that converts directly to heat. "Cold weather triggers norepinephrine release, which then triggers the calf's ability to use this fat," he said.

> With the winter our dairy farms have just endured, this tip should be remembered: "The nutrition of the dam has a big effect on the ability of the calf to have this fat to burn in its first day of life."

Once that calf is on the ground, Corbett said feeding adequate high quality colostrum is essential not just for the immunities, but also to transmit many signals for life. Much is being learned these days about the bovine endocrine system and how colostrum transmits information that coincides with the genetic potential of the calf in relation to growth, reproduction, and mammary

While suckling the dam is not recommended, Corbett said it is crucial to milk that animal im-

continued bottom of page 3

# Dead Cat Bounce or Cautious Optimism? by Sherry Bunting

Dr. Mark Stephenson called it the 'dead cat bounce' in his podcast at dairymarkets.org with Wisconsin dairy economist Bob Cropp a few weeks ago. In early March, however, the milk market hinted at nine lives.

While the All-Milk price for January dropped to \$17.60/cwt, the lowest since July 2012, the picture looks better than it did two months ago. February's All-Milk price will be higher than January's, and dairy economists expect a rebound later this year. Underpinning the dairy market is the long-lived high market for cull dairy cows and bull calves, which according to slaughter counts in recent weeks have prompted some culling. The U.S. total cattle herd remains historically low, even though both beef and dairy herds did some rebuilding last year.

The 50% drop in global dairy product prices during the last half of 2014 pushed prices lower but the Global Dairy Trade (GDT) biweekly auction has recovered half of that loss by advancing in the past three consecutive sessions for a cumulative gain of 26% since mid-January.

The CME spot cash and futures markets in Chicago reflect a bit of cautious optimism. While U.S. dairy product prices are certainly lower than last year, and they are lower than the uptrending global prices, they are not as low as previously forecast.

China is back on the global market for milk

powder but the buying is tempered by getting its own dairies up to speed. New Zealand's seasonal production is being cut short by drought. California's production is falling in the face of lower profit margins and drought. The U.S. dairy industry is marketing value-added instead of building commodity inventories.

Meanwhile, the continued slide in fluid milk sales, and the reported balancing issues in the Northeast are reducing the region's blend price and premiums and spurring new fees ahead of Spring flush.

Work with your ABI nutritionist to optimize your milk margin over feed cost to position your dairy for the future.

## **Dry Cow Nutrition Critical** Provide Energy, Calcium, Protein by Sherry Bunting

"How the dry cow is managed is the first step | negative protein balance? The cow canin your heifer raising program," Dr. Robert Corbett told a packed house of Agri-Basics, Inc. producers in New Holland. "If your dry cows are just out on pasture with little supplementation, that's not enough to grow calves. Dry cows need to be fed the dry matter to meet the requirements of the growing fetus."

Corbett was quick to point out that feeding dry cows for healthy, strong calves does not cause problems for birthing because it does not change the frame size of the calf, just the muscling, energy and immune system vigor of that calf.

An important consideration when cows transition toward calving is not just energy balance but also protein balance because of its impact on immunity.

"A cow fed a diet deficient in protein is not able to pass antibodies to the calf through her colostrum," he says. "All the dairy magazines talk about negative energy balance, but what about



not mobilize fat without also mobilizing protein."

Corbett advises feeding more metabolizeable protein in dry cow rations for the sake of both the cow and the unborn calf. He showed that as the cow gets closer to calving, the calf's metabolic rate becomes double that of the mama-cow in terms of glucose and amino acids going to the fetus.

"If the cow is short on protein, then the calf will be short on both protein and

energy," he says. "This is why higher protein levels should be fed in dry cow rations because if the cow does not get enough protein, she begins to mobilize muscle tissue."

Corbett explains that the total blood protein decreases as a cow approaches calving. This is because the calf is taking more of the protein and at the same time the cow is eating less. The high demand for glucose at the initiation of lactation causes another wrinkle in the cow's protein status. Thus her body's protein in the form of skeletal muscle is mobilized for glucose production.

The result of a low protein dry cow diet is calves that are born without muscle definition and mothers that are under-nourished, says Corbett.

Just as negative energy balance and low blood calcium levels leave the cow susceptible to postcalving metabolic disorders, negative protein balance leads to other post-calving problems due to



Dr. Robert Corbett, DVM

depressed immune function.

Corbett showed how the different aspects of the cow's immune system work and the effect of these antibodies circulating in the blood to clear mastitis pathogens and adapt to other threats.

"Stress can impair immunity," Corbett warns. "Immunosuppression involves the loss of neutrophil function. These are the first line of defense against bacteria and molds.'

Corbett says producers should be aware of subclinical hypocalcemia and that low blood Ca levels around calving can occur

without clinical signs. "Nearly all two-lactation-and-over cows experience some drop in blood Ca around calving," he explains. "About 50% will be below the 8.5 mg/dl

place. About 15 to 25% will be below the 8.5 mg/ dl threshold if feeding anionic salts. Some tips for optimal nutrition of close up dry cows to benefit the profitability of the cow and her

threshold if no anionic salts feeding program is in

calf are to:

- 1) Maximize dry matter intake
- 2) Minimize stress and overcrowding
- 3) Provide adequate energy and protein
- 4) Expose transition cows to the same feeds in the lactating ration
- 5) Utilize negative DCAD to improve calcium metabolism.

### **Do's and Don'ts When Milk Prices Drop** cont. from top of page 1

on high-quality, high-forage diets," he says. While some might consider making hay earlier if possible, he knows producers are at the mercy of the growing season and field drainage. In fact, cutting too early might be a negative.

"Don't make it extra early. Make the best forage you can and feed what you have," Vaughan says. That will help cap input costs.

Test the forages and feedstuffs currently being

fed with regular and accurate lab analysis. "This will help ensure appropriate ration adjustments when needed," Longenecker says.

One silver lining in this situation is that some input costs will be lower than they were last year. A big drop comes in fuel, with diesel down about \$2 per gallon against early 2014 prices. The cost of fuel may drift upward a bit as 2015 wears on (and could skyrocket to year-ago levels if there is an international crisis) but should remain comparatively low

Feed prices, too, are somewhat lower so some of the sting in milk prices will be offset by lower feed costs. None of that matters to the cows.

"High milk prices or low milk prices - stay focused on doing your best," Davis concludes.

## **Welcome Dr. Nichols and Total Herd Concepts**

Dr. Bob Nichols, DVM

Another veterinarian has joined the Agri- is "a real plus because they are not company-Basics, Inc. team of independent consultants. Dr. Bob Nichols, DVM, is a partner in the Greencastle-based Franklin Veterinary

Associates. He launched Total Herd Concepts, LLC (THC) to provide nutrition consulting in the region of Franklin County, PA and Washington County, MD.

"Dr. Nichols is a great addition to the ABI team, with a great client area that will benefit from the services he can bring. He has been very observant on client farms during the acclimation to nutrition consulting and will be a great set of eves for future clients." observes ABI nutrition consultant Tim Rutledge

From fresh cows not cleaning to ketosis and DA's, Nichols said: "The standard response as a veterinarian is to advise the dairyman to talk to the nutritionist. We saw that in a case last fall where Tim Rutledge used his nutrition expertise to help solve a difficult case for a veterinary client. He is very good at what he does, communicates well and quickly earns the trust of the dairyman. I am glad to be working with him to learn the nutrition

Being involved with independent nutritionists

driven to sell x-amount of product-x," Nichols says. "One of their goals is to have the feed truck come down the farm lane as few times as possible and to focus on helping

> clients operate their dairy businesses professionally for top-notch results while keeping costs down. They are selling their expertise more than any product, and I am glad to be part of that." Nichols is eager to work with

dairies nutritionally -- whether or not they are clients of Franklin Veterinary Service -- to leverage the natural synergies between nutrition and animal health through THC and the relationship with AB.

"The purpose is to provide better nutrition as it is closely tied to cow health," he explains. "ABI is a good fit because they are a team of independent nutritionists with a great track record and good communication. Their name speaks to their focus on keeping nutrition as basic as possible for the dairyman as they work with the forages they have on their farms to get all the milk they can, while keeping healthy cows."

"Veterinarians are called out to be fixers of a specific problem," Nichols says. "We come out

and provide a service -- a herd check, sick cow treatment, or to deliver a calf -- then we are back in the truck and on to the next call. In this relationship with AB, I aim to spend more time on farms communicating with producers and getting more involved in the consulting role, and then seeing how well their cows can perform. I think that will be very satisfying."

Growing up on a beef cow/calf operation in West Virginia, Nichols has always been interested in cows. After graduating from The Ohio State University Veterinary School, he joined FVS and became a partner in 2005. He remains a full-time veterinarian; however, as associates have joined the practice, he finds more time for consulting.

"We at THC believe agriculture is the lifeblood of this world, for without it we would fail to survive. Therefore, THC strives to provide producers with leading-edge nutritional guidance, while not overlooking the veterinary aspects of herd health. THC wants to provide these services with honest, straightforward guidance and constant support for our clients," he says about his expanded mission into nutrition consulting.

Dr. Nichols resides with his wife Ronda and son Rylan near Waynesboro, Pa. He can be reached by email at Bndvm300@gmail.com and by phone at 717-262-5013.

#### **Are Your Calves Taking or Making Money** cont. from bottom of page 1

mediately and to try to match that colostrum to her calf, wherever possible.

In the milk replacer program, Corbett advised feeding more to compensate for the effects of weather stress in the calf's environment. This goes for the extra energy the calf needs to maintain herself in cold weather as well as the extra energy she utilizes driving heat from her body in hot weather

He explained that producers can immediately improve the nutritional intake of the farm's calves by keeping an eye on the temperature and adjust calf intakes accordingly.

The ideal ambient temperature for the calf is 68 degrees F. That is the baseline where one pound of traditional 20/20 milk replacer will produce a half pound of gain. Corbett stressed much better feed conversions are possible when calves are fed more aggressive diets to achieve more rapid growth during this highly efficient pre-ruminant phase of life.

Corbett suggested feeding milk replacers that are higher in energy and protein as well as feeding a higher percentage of solids. However, he also stressed the need to avoid problems with osmolarity by keeping the solids ratio at or below 15% solids to liquid.

According to Costello, options for increasing energy intake in calves include: 1) Increase the volume of milk replacer fed; 2) Use a higher fat milk replacer; 3) Increase the concentration

also be achieved by adding an energy pack or protein encapsulated fat.

"Everything you do is to encourage a rate of gain on those calves that makes heifer raising a profit-center, not a cost, on your operation," said Corbett.

Costello also talked about alternative proteins. Today, that includes combinations of wheat and plasma proteins as the human nutrition market competes for whey protein.

Corbett noted that feeding dairy calves should not only maximize rapid

growth during the efficient pre-weaning phase, but also mimic what is biologically normal. For example, if left on the dam, a 100-lb calf would, among other things, nurse 6 to 10 times a day and consume 2 to 3 gallons of milk per day.

Since 20/20 milk replacer is 20% protein and 20% fat, it is impossible to meet the nutritional requirements of milk-fed calves with this product at the suggested feeding rate, said Corbett.

He also noted that when accelerated growth formulas are fed, labor and medicine costs are decreased, age at first calving declines, and the program does not have to be constantly altered for environmental conditions.

While capitalizing on efficient growth in the pre-ruminant calf, it's also important to make sure

according to recommended guidelines. This can | the rumen is sufficiently developed to ferment dry feeds efficiently enough to satisfy the nutrient requirement of the weaned calf, Corbett

related.

It has been well proven that feeding high quality starter grains promotes more rapid and high quality rumen development compared with reliance on hay or forage.

Starter grains are a bridge from pre-ruminant to ruminant, but very young calves do not immediately get much energy from starter intake, so it must be accounted for carefully when calf nutrition needs are highest.

As starter-grain intakes increase, and calves are seen to be continuing in their weight gain, then their consumption of milk replacer can be held steady to then economically maximize that early growth as the calf transitions from a singlestomach to a ruminant animal.

While Corbett is not a fan of early weaning, he is a fan of setting farm-specific goals to maximize the growth potential of the calves during their pre-weaning period and to get them through the transition to a ruminant animal.

Talk to your ABI consultant about nutritional strategies to get the biggest bang for your buck in calf growth on your farm.

