DCHA Past President Lane Sollenberger shares ‘big 4’ in China

Organization’s Gold Standards take center stage

“A healthy calf today is a better lactating cow tomorrow,” wrote Zhijun Cao, Calf and Heifer Association of China secretary general. The first International Conference of Calf and Heifer, held in Boading, Hebei, China, provided opportunities to share the latest research progress on raising calves and heifers.

Making it truly an international affair, speakers represented seven countries (China, Denmark, Germany, Iran, Israel, the Netherlands and United States) and gave presentations at the gathering that included 350-plus attendees. Lane Sollenberger, three-year Dairy Calf and Heifer Association president, Newburg, Pa., and Corey Geiger, Hoard’s Dairyman, Fort Atkinson, Wis., managing editor, attended and spoke during the inaugural event.

During his talk, “Raising Gold Standard Calves and Heifers,” Sollenberger discussed strides the United States has made in raising calves and heifers. “If you want 99-plus percent of calves to live, follow the ‘big 4’ at calving,” shared Sollenberger. “This must be done right at birth if you want calves to thrive.”

The big four include:
- knee test
- colostrum
- navel care
- housing

“The road to success, there are no shortcuts,” said Sollenberger. “You must follow these steps to raise healthy calves.”

Geiger’s presentation – Breeding Better Heifers – focused on genetics and genomics. The discussion highlighted how the power of studying DNA has helped the industry, collectively, breed better dairy cows and improve sire selection accuracy.

Cao presented “The White Paper on China Dairy Replacements.” The 2012 to 2016 research followed heifers on 244 Chinese farms located in 19 provinces. In all, 760,000 heifers were included in the study. The research focused on colostrum management, growth and development, first breeding and successful entry into the milking herd.
New dairy training templates make it easier to draft and implement SOPs

By Lowell Midla, V.M.D., technical services manager, Merck Animal Health

Well-written standard operating procedures (SOPs) are an important tool in a dairy farm’s arsenal. Standardizing job training processes by providing best practices will help ensure your labor force is trained effectively, animals are receiving consistent, top-quality care and your margins are increased. However, for many farms, the most difficult part to drafting SOPs often is getting started.

That is why Merck Animal Health recently has made available five templates to help dairy producers customize SOPs. The templates, which complement Merck Animal Health's Dairy Care 365® training modules, serve as the basis for written guidelines on how tasks are to be completed to ensure herd health needs are achieved. The new SOP templates cover the following topics: Calf Handling and Stockmanship, Dairy Animal Handling; Humane Euthanasia; Newborn Care and Handling; and Handling Non-Ambulatory Cows. The templates begin with guiding principles for each topic and are followed with sections to help dairies work with their veterinarians to develop best practices based on their unique set-ups, experiences and goals.

Merck Animal Health is collaborating with the National Milk Producers Federation’s Farmers Assuring Responsible Management” (FARM) Animal Care Program to help producers meet the National Dairy FARM Program requirements. It is important to work with your veterinarian to build SOP protocols, as well as to annually review them. The role of the veterinarian is to make sure the dairy’s needs are met while, at the same time, the health and treatment protocols are thorough and up to date.

Setting aside time for your staff to watch the Dairy Care 365® training modules that accompany the SOP templates provides an opportunity to discuss expectations, answer questions and foster a deeper understanding of why specific processes are in place. The SOPs are available in English and Spanish, and posted with their respective training module at www.DairyCare365.com.


Gain valuable insights and hands-on experience

Mark your calendar to attend the 2019 Dairy Calf and Heifer Association (DCHA) Conference, April 9-11, 2019, in Madison, Wis. The conference attracts more than 600 custom calf and heifer growers, along with dairy producers who raise their own calves, researchers, academicians, veterinarians and allied industry partners.

On April 9, the conference kicks off with an optional tour of ABS Global (DeForest and Payette locations) and Crave Brothers Farm LLC, Waterloo, Wis. In addition to viewing semen collection and sorting, and a historic barn, ABS Global guests will learn about biosecurity practices and tour a state-of-the-art calf facility where the company houses its young bulls.

The Crave Brothers and their families embrace innovation, technology, continuing education and sustainability. Recent building additions include three all-in, all-out calf nursery barns. They raise 1,200 heifers on site. Besides touring the calf barns, visitors will see their milking facility, cattle barns and manure digester. The Craves will share insights regarding their intentional breeding program, which includes genomic testing, timed artificial insemination and breeding with gender-sorted dairy semen and conventional beef semen.

Pre-conference seminars, held at the Madison Marriott West, follow the optional tours. SCCL and Champion Animal Health are providing resources for the Tuesday afternoon programming.

Featured presentation topics include “Managing Fly Control for Growth and Health,” “How Colostrum Can Be Used Post-Day One to Help Support the Calf’s Developing Immune System” and “Managing Fly Control for Growth and Health.” The first DCHA conference day wraps up with an evening reception, sponsored by Dairy Tech, and trade show.

On April 10, Keith Poulsen, Wisconsin Veterinary Diagnostic Laboratory director, delivers the keynote address, which features a crystal ball look into dairy calf and heifer raising. A dynamic speaker, he’s sure to deliver insightful information that will help calf and heifer growers reach new heights.

Breakout sessions scheduled for the conference include:

• The Business of Dairy Heifers
• Lessons Learned from a Disease Outbreak
• Dairy Work Force Training
• Increasing Your Operation’s Positive Impact on the Environment
• Xs and Os of Custom Heifer Raising: Contracts, Economics and Customer Relations
• Impact of Dry Cow Heat Stress on Lactating Cow and Calf
• Gut Physiology
• Alternative Milk Sources for Calves
• Increasing Your Operation’s Positive Impact on the Environment
• Xs and Os of Custom Heifer Raising: Contracts, Economics and Customer Relations
• Impact of Dry Cow Heat Stress on Lactating Cow and Calf
• Gut Physiology
• Alternative Milk Sources for Calves
• Rounding out the program are Robert Hagevoort, New Mexico State University associate professor and extension dairy specialist, and Jennifer Van Os, University of Wisconsin (UW) assistant professor and extension animal welfare specialist. Hagevoort will address best practices for dairy beef quality assurance, and Van Os will discuss the welfare of dairy animals from a biological perspective.

Following the conference, DCHA is offering two “wet lab” sessions, delivered by Donald Sockett and Theresa (Terri) Ollivett from the UW School of Veterinary Medicine. These sessions feature deep nasopharyngeal swab and lung ultrasound.

Cutting costs in your calf program may not be a wise decision

Look beyond daily costs when evaluating calf-rearing strategies

By Robert Jones, Virginia Tech dairy science professor emeritus

Everyone agrees that milk prices are low and the prospects for higher milk prices in the near future are not the best. One place that requires careful consideration during these financially challenging times is the preweaned calf program.

Admittedly, it’s expensive feeding calves on a per-day basis. Cost estimates range from $3 to more than $6 per day. However, before making any changes, carefully consider the decision to make cuts with this group of animals on the dairy. A 2012 study of 17 New York dairy farms revealed that although cost per day was highest for preweaned calves ($3.13), the cost was only 8 percent of the total growth or 15 percent of total rearing costs. This occurs because the preweaned period only lasts about 60 days.

The goal for cutting costs in rearing calves is to have a low cost per pound of gain and not low cost per day. The two primary nutrient requirements for the young calf are to support maintenance and growth. Calves use nutrients to support maintenance first. Maintenance includes processes for normal body metabolism at rest and staying warm. Any remaining nutrients are used to support growth. When producers limit the amount of feed for young calves, there’s not much left over for growth, making the cost per unit of gain very expensive.

Feed adequate, quality milk

Historically, producers have attempted to reduce calf-rearing expenses by limiting the amount of milk fed or using “cheap” milk replacers; thereby, “forcing” them to eat calf starter sooner. However, this practice severely penalizes the calf less than 1 month of age that won’t eat much calf starter, regardless of the amount of milk or milk replacer fed. These “starvation” diets rarely meet maintenance requirements when the temperature is warm. And when it’s less than 50°F, the calf will lose weight to stay warm. Under these low milk intake conditions, the cost per day may be low, but the cost per pound of gain can become infinitely expensive. This relationship is illustrated in Table 1.

The most recent National Research Council nutrient requirements were used to calculate expected energy allowable gain at different environmental temperatures and levels of milk intake. Note that the predictions of allowable gain at higher intakes and higher environmental temperatures are probably optimistic. However, this table illustrates that the cost of gain is especially expensive at low milk intakes and colder temperatures, because a great percentage of nutrients is used to support maintenance – rather than growth. This illustration doesn’t depict additional stresses, which might occur with insufficient bedding and/or poor calf facility ventilation.

In addition to low feed efficiency and expensive body weight gains, the nutritionally stressed calf will be more susceptible to disease. Calves that experience pneumonia will seldom make productive cows. More recent research has conclusively shown that calves fed more milk or high-quality milk replacer make better cows (they produce more milk) through improvements in mammary gland development. In summary, young calves, particularly those less than 45 days old, should be fed liberal amounts of milk (2 gallons or more per day) to encourage growth and deposition of some body fat, which can be used as a reserve when the weather is cold or when they might lose their appetite. If feeding milk replacer, then it should contain at least 24 percent protein and a fat percentage appropriate for the environmental conditions – up to 25 percent fat for smaller calves or during winter.

Larger calves readily increase intake

Calf starter is equally important for stimulating intake of nutrients by the young calf. Calves fed milk or milk replacer more liberally during the first 30 days won’t eat much calf starter; but they will be larger at a younger age. And when they begin consuming starter, these larger calves will readily increase their intake.

Now is not the time to feed a least-cost calf starter! The starter should contain at least 20 percent protein and be highly palatable, with recommended levels of minerals and vitamins. Starters can be either textured or pelleted, but they should be consistent in composition and contain minimal dustiness and fines. Achieving economical growth means feeding calves sufficient nutrients from milk or milk replacer, particularly during the first month to 45 days of life, to enable them to reach their genetic potential for growth. Preweaned calves should double their birth weight in 56 days. Excellent early growth will result in higher feed efficiency and a lower cost of growth per unit of body weight, improved health and development of a more productive cow.

Table 1. Impact of feeding level on cost per day and cost per pound of gain with 88-pound calf fed whole milk at 2 different feeding levels and 3 different environmental temperatures

<table>
<thead>
<tr>
<th>Ambient temperature</th>
<th>Energy allowable gain</th>
<th>Ambient temperature</th>
<th>Energy allowable gain</th>
</tr>
</thead>
<tbody>
<tr>
<td>20°F</td>
<td>1 gallon of milk</td>
<td>40°F</td>
<td>2 gallons of milk</td>
</tr>
<tr>
<td></td>
<td>$1.38</td>
<td>0.0 pound gained</td>
<td>$2.75</td>
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<tr>
<td></td>
<td>(calves lose weight)</td>
<td>$0.4 pound gained</td>
<td>1.88 pound gained</td>
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<tr>
<td></td>
<td>$0.4 pound gained</td>
<td>$3.45/pound gain</td>
<td>$1.46/pound gain</td>
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<tr>
<td></td>
<td>0.88 pound gained</td>
<td>$3.45/pound gain</td>
<td>2.15 pound gained</td>
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<tr>
<td></td>
<td>$1.09/pound gain</td>
<td></td>
<td>2.52 pound gained</td>
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</tbody>
</table>

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