



What A Difference A Year Makes

f you have patience and perseverance, good times will come again. A year ago World Dairy Expo

was an opportunity for dairy producers to get a break from the bad news. They could see friends and great cows and forget about their empty bank accounts.

In July 2018 the Class III milk price was \$14.10. That was about the time Mexico and China announced tariffs, and news turned what had been a hopeful year into one of despair for many producers. Wisconsin alone ended up losing almost 700 dairy farms as producers couldn't hold out any longer for prices to come around.

This year should be different for many, hopefully.

The July 2019 Class III price hit \$17.55, which is as high as it's been since December 2014. Production has been stagnant as cow numbers drop and production per cow has been lackluster. Domestic and global demand has been solid. Even though we have sent less product to China, sales to other countries have picked up most of that slack.

But as you walk the trade shows and attend cattle sales, be careful. Even though there might be a few extra dollars in the bank account, that money needs to be spent wisely. Still, there



are ample opportunities to find tools that help you make your business run smoother. New mobile applications help you manage data (page 10) and other game changers are available in the trade show for you to see (page 14). Expo is a great time to connect with friends and family, as the Achen family does every year (page 42).

So even though we have a long way to go to get to consistent profitability, congratulations on making it through what has been a long and arduous period of low milk prices. As we look cautiously to brighter days, this year at World Dairy Expo when you meet your friends, you can celebrate survival rather than sorrows.

Director, Editorial Content mopperman@farmjournal.com

SPECIAL NOTE: This marks the **22nd year Farm Journal Media** has published the World Dairy Expo Official Program, contained in the pages of this issue. We very much appreciate the relationship we have built with World Dairy Expo, and we hope you enjoy the issue. **See you at Expo!**

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Publisher's Notice: Dairy Herd Management (USPS 976320; ISSN-0011-5614) is published 10 times a year in January, February, March, April, May/June, September, August, September, October and November/December by Farm Journal, 1600 Market Street, Suite 1530, Philadelphia, PA 19103. © Copyright 2019 Farm Journal. All rights reserved. To subscribe or change a subscription address, call (800) 331-9310 or email

customerservice@farmjournal.com. Subscription rates: U.S., \$60 per year and all other countries, \$75 per year or \$125 air mail. Single copy, \$10 each. Periodicals postage paid at Philadelphia, Pa., and additional mailing offices.

Postmaster: Send address changes to: 102 MacKinlay Kantor Drive, Webster City, IA 50595



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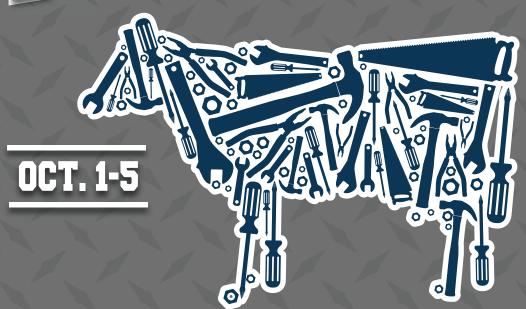












2019

WORLD DAIRY EXPO

MADISON * WI * USA

OFFICIAL 2019 PROGRAM
PUBLISHED BY DAIRY HERD MANAGEMENT

f **y** ☑ ‱ ♣ #WDE19



WECOME TO THE 2019

WORLD DAIRY EXPO

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WORLD DAIRY EXPO ADMISSION

12 & OLDER: **\$12 DAILY / \$35 SEASON**

INCLUDES FREE PARKING

TRADE SHOW HOURS

TUESDAY - FRIDAY: 9 a.m. to 5 p.m. SATURDAY: 9 a.m. to 4 p.m.





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¹Faulkner and Weiss. 2017. J. Dairy Sci. 100:5358-5367.

² Caldera et al. 2019. J. Anim. Sci. In Press. doi: 10.1093/jas/skz072.

³Miller et al. 2019. ADSA Abstract.

⁴Micronutrients trial #2017R119USCZM.

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WORLD DAIRY EXPO AMENITIES

MOBILE EVENT APP:

Explore Expo your way with World Dairy Expo's **NEW Mobile Event App!** Features include meeting scheduling, custom itinerary, event details, interactive maps and lead retrieval. Available Sept.1 in the App Store and

ATMs:

NEW

Locations:

Coliseum West Lobby

Google Play.

- Exhibition Hall Lobby
- New Holland Pavilion 1 Lobby
- Outdoor Food Court
- Sale Pavilion

ATTENDEE BAG CHECK:

Available Thursday, Friday and Saturday from 8:00 a.m. to 5:00 p.m. in the East Lobby of the Coliseum for attendees with luggage upon arrival or before departure.

EXPO FAMILY LOUNGE:

Sponsored by Dairy Girl Network This area is a place for families with small children to rest and recharge. This quiet lounge features abundant seating, a changing area and more. The lounge is located in the Madison Room.

EXPOTV:

World Dairy Expo's Dairy Cattle Show and educational programs are webcast live on worlddairyexpo.com. It's the next best thing to a ringside seat. This free coverage is made possible by the following sponsors: Boehringer Ingelheim, Madero Dairy Systems and STgenetics.

INFORMATION BOOTHS:

Locations:

- Coliseum West Lobby
- Exhibition Hall Lobby
- Fairgrounds Drive
- New Holland Pavilion 1 Lobby

MYCOGEN SEEDS ATTENDEE LEARNING LOUNGE:

Located in front of New Holland Pavilion 1, open during Trade Show hours.

PURPLE COW GIFT SHOP:

Hours: Monday

3:00 p.m. to 7:00 p.m. Tuesday through Friday 9:00 a.m. to 5:30 p.m.

Saturday

9:00 a.m. to 4:00 p.m.

Location: Exhibition Hall Lobby

TEXTING RESULTS AND CONTESTS

Text (727) 493-3976 and interact with Expo's world-renowned Dairy Cattle Show in two exciting ways! Text RAILBIRD and see how your placings match up to the official judges in Expo's Railbird Judging Contest, or text WDERESULTS for real-time results from your favorite breed shows.

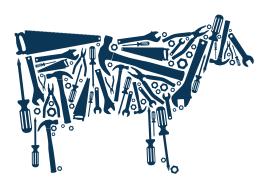
TRANSPORTATION:

Taxis are available during show hours outside the East Lobby of the Coliseum. Taxis can also be reached by calling: Badger Cab: (608) 256-5566

Green Cab: (608) 255-1234 Madison Taxi: (608) 255-8294 Union Cab: (608) 242-2000

WDE WELCOME RECEPTION:

On Wednesday, make plans to attend the WDE Welcome Reception, hosted by World Dairy Expo in the Exhibition Hall from 5:00 p.m. to 6:30 p.m. This is open to all Expo attendees and stakeholders.



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11:00 a.m. to 2:00 p.m. Bar: Tuesday through Saturday

11:00 a.m. to close

Happy Hour: Tuesday through Friday

4:00 p.m. to 6:00 p.m.

This pub-style restaurant features a specialized menu and full bar. Located on the east end of the Sale Pavilion, this bar and grill serves as the meeting place for attendees and exhibitors.

Expo Bistro:

Located in the Exhibition Hall Atrium and open from 10:30 a.m. until 1:30 p.m.

Food Courts:

Find more food options in the food court at its new location on the south end of the Outdoor Trade Mall and in the food court southeast of the Coliseum.

SEE MORE AT WORLDDAIRYEXPO.COM

- Cattle Logs and Sale Books
- Complete Schedule
- Dairy Cattle Show Results
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SHINY NEW TOOLS

Dairy producers are increasingly turning to apps on their mobile devices to step up their management game. Here's a look at some of the new apps being offered by exhibitors in the World Dairy Expo Trade Show.

PHIBRO ANIMATE

A free mobile app for Phibro Animal Health Corporation's Animate (an anionic mineral) is geared to help dairy producers track critical metrics over time and identify trends in their transition cow management programs.

Animate anionic mineral delivers the critical minerals needed to help cows optimize calcium metabolism through proper prepartum acidification. Used correctly, the results

can lead to healthier, more productive cows. The app was designed to supply dairy producers and their nutritionists with the critical information to help enhance these health benefits across the herd from the convenience of a smartphone.

Information relative to prefresh, dry cow management — such as urine pH, bunk space, stocking density, dietary cation-anion difference (DCAD) levels, temperature humidity index (THI), dry matter intake and more — is typically collected in a

number of different places on the dairy, says Owen Bewley, director of U.S. dairy business for Phibro. "With the app, information can

Phibro Animate



easily be entered by anyone working with prefresh cows on the dairy," he explains. "Once it's entered, the data is instantly shared with anyone the dairy producer believes needs to see it."

Over time, having all the relevant data collected in one place leads to generating historical graphs, charts and tables showing performance that the producer can use in making future management decisions. "You can see what happened and when it happened," Bewley notes. "If mistakes were made, you can take steps to keep

them from happening again."

To learn more about the Animate mobile app, contact your local Phibro representative.

For the full article, scan this QR code with your phone. DairyHerd.com/ShinyTools

WORLD DAIRY EXPO'S NEW MOBILE EVENT APP

Explore Expo your way with World Dairy Expo's new Mobile Event App! Features include meeting scheduling, custom itinerary, event details, interactive maps and lead retrieval. Available Sept. 1 in the App Store and Google Play.













DAIRY APPLICATIONS BV

Helping dairy producers boost efficiency in their feeding programs is the idea behind a new mobile app from Netherlands-based Dairy Applications BV.

"It's like a high-tech feed sheet for the farmer," says Edwin Van Ens, Dairy Applications BV owner and app developer. "The focus is on optimizing ration management, improving feed efficiency, tracking dry matter intake and analyzing a dairy's feed data."

Using the app is relatively straightforward. To get

started, users enter ration information for each barn or cow group on a secure personal webpage on any desktop or laptop computer. That info gets relayed to an app, which communicates with a junction box on the weigh bars of the mixer wagon. With a quick look at a smartphone or tablet, the feeder knows how much of each ingredient to load into the mixer wagon.

As each cow group is fed, the information on the dairy's web portal is updated. At the end of the day, a report on feeding activity is emailed to the producer or entered directly on the personal webpage.

In the near future, producers set up with a weigh bridge will also be able to use the system to weigh and register all the feeds brought into the feed center, giving users the ability to keep closer tabs on invoices from feed suppliers and monitor feed inventories.

Currently the app is available only for android phone or tablet users, but Van Ens hopes to have an iOS version available for Apple users soon. He will also add a feature which will allow producers to benchmark feed management performance with other producers.

Users pay a monthly subscription fee for the app. "Updates and support are included in the fee," Van Ens notes. "There's no software investment and you can end the subscription on a monthly basis."

For more info, go to **www.dairyapplications.com**.

MY DAIRY DASHBOARD

Introduced at World Dairy Expo in 2017, My Dairy Dashboard aims to give dairy producers and their advisers access to production, financial and other data from a variety of sources all on their mobile devices.

"Dairy cows may be the most monitored animals on the planet," says CEO Mitch Norby. The company is a joint venture of Virtus Nutrition and Dairy.com. "Even though producers have a lot of data, it's collected on a lot of different systems. It takes work to pull that data together and make meaningful correlations."

The My Dairy Dashboard "Essentials" module is designed around 20 key performance indicators (KPIs) related to management areas on the dairy—milk production, milk quality, feed management, financial records, health and reproduction, weather and more.

For the module, producers pay a base subscription fee of \$150 per month. With permission, nutritionists, veterinarians and other members of a dairy's advisory team can access the data. Through a partnership, members of Dairy Farmers of America can access a version of the dashboard that includes DFA and weather data in their myDFA portal at no charge.

For now, the company is focusing on adding more data sources (including management software or links to activity trackers, parlor equipment and robotics). The company is also developing benchmarking features that will allow producers to compare their management against a peer group or their own prior performance.

For more, visit **www.mydairydashboard.com**.











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GAME CHANGERS

International companies bring new perspectives, products to World Dairy Expo's Trade Show

International companies marketing products and services to dairy producers, find the World Dairy Expo Trade Show a great place to conduct business. Last year, around 17% of the nearly 900 exhibitors in the Trade Show had their headquarters outside of the U.S.

"As the world's largest dairyexclusive Trade Show, World Dairy Expo is the platform for dairy companies to showcase their products and services to a focused audience," says Crystal Ripp, WDE Trade Show Manager. "The opportunity for sales to end users — the farmers — is obvious, but companies are also establishing business to business relationships at Expo. Many internationally-based companies have commenced distributorships and marketing agreements at World Dairy Expo that have helped their business to expand globally."

The strong international presence in the Trade Show also means a heightened experience for producers attending WDE.

"As the global dairy industry continues to become more concentrated, management best practices and efficiencies are crucial

"World Dairy Expo strives to be the platform to facilitate networking."

to a dairy's survival," Ripp says. "World Dairy Expo strives to be the platform to facilitate networking and this sharing of technologies and ideas for the dairy industry. Attendees are able to come to one location to learn from the experts how to best manage their dairy operation or influence the dairies they work with as a professional in the industry."

Having an opportunity to interact face-to-face with the large number of U.S. dairy producers and others with a

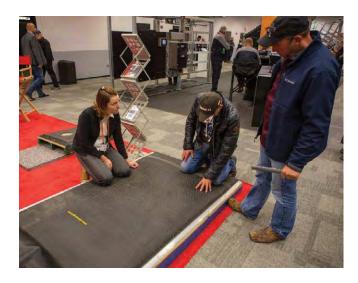
> connection to the U.S. dairy industry (last year's WDE attendance topped 65,000) goes a long way

















in explaining why UK-based Ambic Equipment has been exhibiting in the WDE Trade Show every year since 2006. The company is a leading developer and producer of dairy hygiene and livestock health management products.

"The U.S. is a key market for us where the Ambic brand is strong," says managing director Colin Kingston. "We exhibit at Expo to invest in our brand awareness, to support our U.S. distributors and to keep in touch with the market by talking to dealers and dairymen."

Likewise, the large concentration of international visitors attending Expo makes exhibiting in the Trade Show a natural fit in the company's overall marketing plan.

"We market our products internationally, selling to customers in over 50 countries," Kingston says, "Exports account for over 80% of our product sales. At Expo, we're able to talk to

farmers, dealers, wholesalers, manufacturers and competitors from all around the world. With so many visitors from South America, Central America and Asia attending Expo, it definitely complements the other shows we do, like EuroTier in Hanover, Germany, SPACE in Rennes, France and the China Dairy Expo in China, very well."

The nature of the product might be different, but the reasons for participating in the Trade Show are similar at Holstein International, based in the Netherlands. The company's flagship publication, Holstein International, is published in five languages and boasts a circulation of 40,000 readers in more than 55 countries on five continents.

"Our mission is to offer independent information to help dairymen improve and enjoy their dairy business," says publisher Berber van Amerongen. "Our

information is created for people working in the dairy business with an interest in genetics."

Having an opportunity to talk directly to North American dairy producers is a major reason for exhibiting at Expo, she adds. "World Dairy Expo is a meeting place for everyone in the dairy business, so it's a logical choice. Here, we can network with people from throughout the business and hear about the latest developments in the business."

Exhibiting at Expo also fits well with Holstein International's global marketing program. The company exhibits at farm and dairy shows throughout Europe and Canada, and has a presence at other Holstein events in 25 countries.

"World Dairy Expo has a very wide range of visitors also from abroad," van Amerongen says. "We're able to connect with people from many different places in a relatively short period of time."

In the 20-plus years it has been coming to Madison, Holstein International has also found WDE to be a good place for rolling out new products. Among the

"In the years we've been coming here, we've found new suppliers for some of the raw materials we use, and we've found complementary **products."** —Dale Gordon











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company publications launched in conjunction with Expo through the years are Dairy Breeds International, the Brown Swiss International and Holstein Hub.

"World Dairy Expo is all about the latest and most innovative trends in the dairy industry," van Amerongen says. "That makes it a great

place to introduce ourselves and our products to people in the dairy business."

Plentiful networking opportunities go a long way in explaining why Bioret Agri has been exhibiting annually in the WDE Trade Show since 2014. Doing business in 50 countries, the French company specializes in producing rubber products, free- and tiestall mattresses, rubber alley flooring and other specialty items, for dairy farm applications.

"This is a great place to make some new contacts in the U.S. and also internationally," says Dale Gordon, director of North America sales for Bioret Agri. "In the years we've been coming here, we've found new suppliers for



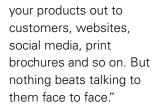
"At World Dairy Expo, we have the opportunity to visit one-on-one with dairy producers, the people who are on the farm and using our products every day."

-Julianna Albrecht

some of the raw materials we use, and we've found complementary products."

The Trade Show is also a good place for connecting with potential distributors. "I've found some very good partners here, but I still have some holes to fill on my North America map," Gordon says.

Having the chance to meet in person with dairy producer customers is also a benefit of exhibiting at WDE. "We go to several other major trade shows," Gordon says. "But this one is just so incredibly focused on dairy. It draws really, really good dairy producers from different parts of the world. There are all kinds of ways to get messages about



Potential for interacting with a large pool of dairy producer customers from throughout the world makes exhibiting in the WDE Trade Show a "no-brainer"

for Canada-based SCCL (formerly known as the Saskatoon Colostrum Company Ltd.) With markets in 14 countries, the company specializes in developing and producing innovative, natural bovine colostrum products. SCCL has been exhibiting at WDE for several years.

"Most of the trade shows we attend throughout the year are for veterinarian or dealer groups," explains Julianna Albrecht, SCCL marketing and client relations specialist. "At those shows, we spend our time visiting with sales reps and marketing teams. At World Dairy Expo, we have the opportunity to visit one-on-one with dairy producers, the people who are on the farm and using our products every day. People come to our booth because they're interested in the products and they engage with us. It gives us a chance to educate them. In turn, that helps our distribution channel."

Meeting in person with dairy producers also provides valuable feedback for the company. "When producers come to the booth, we hear about what they need in a colostrum replacement," Albrecht says. "They tell us what we're doing well and where we can improve. The interaction gives us valuable insights on how we're doing as a company."





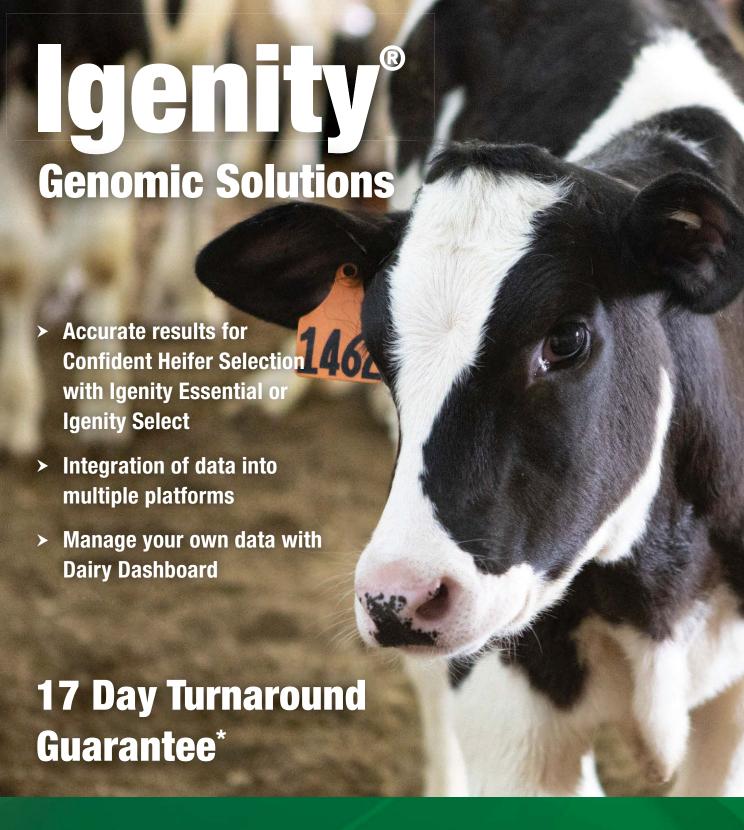


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SCHEDULE OF EVENTS

ADMISSION: 12 & OLDER: \$12 DAILY / \$35 SEASON (INCLUDES FREE PARKING)

(AR) Arena Building

(C) Coliseum

(EH) Exhibition Hall

(SP) Sale Pavilion

(TB) The Tanbark, presented by Compeer Financial

TRADE SHOW HOURS Tuesday through Friday 9:00 a.m. to 5:00 p.m. Saturday 9:00 a.m. to 4:00 p.m.

PURPLE COW GIFT SHOP (Exhibition Hall lobby) Monday 3:00 p.m. to 7:00 p.m.

Tuesday through Friday 9:00 a.m. to 5:30 p.m. 9:00 a.m. to 4:00 p.m. Food: Tuesday through Friday

11:00 a.m. to 3:00 p.m. Saturday

11:00 a.m. to 2:00 p.m. Bar: Tuesday through Saturday

11:00 a.m. to close

THE TANBARK presented by Compeer Financial Happy Hour: Tuesday through Friday **4:00 p.m.** to 6:00 p.m.

MONDAY, SEPT. 30

8:00 a.m. National 4-H, National Intercollegiate & International Post-Secondary Dairy Cattle Judging Contests (C)

2:00 p.m. Showmanship Judges Clinic (C)

7:00 p.m. National 4-H, National

> Intercollegiate and International Post-Secondary Dairy Cattle Judging Banquet (EH)

TUESDAY, OCT. 1

7:15 a.m International Junior

Holstein Show (C)

7:30 a.m. International Ayrshire Show (C)

Central National FFA Judging 8:00 a.m. Contest & Events (SP & EH)

9:00 a.m. FFA Seminars (EH)

11:30 a.m. FFA Keynote Speaker

Mark Tauscher (EH)

12:30 p.m. Knowledge Nook session (EH)

1:00 p.m. Expo Seminar (EH)

1:30 p.m. Knowledge Nook Session (EH)

2:00 p.m. Virtual Farm Tour (EH)

3:00 p.m. International Jersey

Show — Heifers (C)

International Milking Shorthorn Show — Heifers (C)

4:00 p.m. Happy Hour, sponsored by

Phibro Animal Health (TB)

WEDNESDAY, OCT. 2

7:30 a.m. International Jersey

Show — Cows/Groups (C)

9:30 a.m. Knowledge Nook Session (EH)

10:00 a.m. Dairy Forage Seminar (AR)

10:30 a.m. Knowledge Nook Session (EH)

11:00 a.m. Expo Seminar (EH)

Mycogen Seeds Forage Superbowl Luncheon (EH)

11:30 a.m. Knowledge Nook Session (EH)

12:00 p.m. Virtual Farm Tour (EH)

12:30 p.m. International Milking Shorthorn

Show — Cows/Groups (C)

Knowledge Nook Session (EH)

1:00 p.m. Expo Seminar (EH)

1:30 p.m. Dairy Forage Seminar (AR)

Knowledge Nook Session (EH)

International Brown Swiss 2:00 p.m.

Show - Heifers (C)

Virtual Farm Tour (EH)

4:00 p.m. Top of the World Jersey Sale (SP)

> Happy Hour, sponsored by Compeer Financial (TB)

5:00 p.m. WDE Welcome Reception (EH)

7:00 p.m. Dinner with the Stars

Recognition Banquet (EH)

Ticket Required

7:30 p.m. World Ayrshire Event Sale (SP)

THURSDAY, OCT. 3

7:30 a.m. International Brown Swiss Show — Cows/Groups (C)

9:30 a.m. Knowledge Nook Session (EH)

10:00 a.m. Dairy Forage Seminar (AR)

10:30 a.m. Knowledge Nook Session (EH)

11:00 a.m. Expo Seminar (EH)

11:30 a.m. Knowledge Nook Session (EH)

12:00 p.m. Virtual Farm Tour (EH)

12:30 p.m. Knowledge Nook Session (EH)

1:00 p.m. Expo Seminar (EH)

1:30 p.m. International Red & White Show - Heifers (C)

International Guernsey

Show - Heifers (C)

Dairy Forage Seminar (AR)

Knowledge Nook Session (EH)

Virtual Farm Tour (EH) 2:00 p.m.

> World Premier Brown Swiss Sale (SP)

4:00 p.m. Happy Hour, sponsored by

Compeer Financial (TB)

5:30 p.m. National Dairy Shrine Reception and Banquet (EH) Ticket Required

6:00 p.m. World Dairy Expo Youth Showmanship Contest (C)

FRIDAY, OCT. 4

7:30 a.m. International Red & White

Show — Cows/Groups (C)

International Guernsey Show — Cows/Groups (C)

8:30 a.m. The Future of Dairy Exports:

Responding to Challenges and Creating Opportunites with Former Secretary of

Agriculture Tom Vilsack (EH) Knowledge Nook Session (EH)

9:30 a.m. 10:00 a.m. Dairy Forage Seminar (AR)

10:30 a.m. Knowledge Nook Session (EH)

11:00 a.m. Expo Seminar (EH)

11:30 a.m. Knowledge Nook Session (EH)

12:00 p.m. International Holstein

Show - Heifers (C) Virtual Farm Tour (EH)

12:30 p.m. Knowledge Nook Session (EH)

1:00 p.m. Expo Seminar (EH)

1:30 p.m. Dairy Forage Seminar AR)

Knowledge Nook Session (EH)

2:00 p.m. Virtual Farm Tour (EH)

Happy Hour, sponsored by 4:00 p.m. Compeer Financial (TB)

5:00 p.m. International Reception (EH)

7:00 p.m. World Classic '19

Holstein Sale (C)

SATURDAY, OCT. 5

7:30 a.m. International Holstein

Show — Cows/Groups (C)

10:00 a.m. Dairy Forage Seminar (AR)

11:00 a.m. Expo Seminar (EH)

12:00 p.m. Virtual Farm Tour (EH)

Parade of Champions and 4:00 p.m. Selection of the 2019 Supreme Champion (C)

Trade Show Closes

5:30 p.m. World Dairy Expo 2019 Closes



NADA 055-058 Approved by FDA

Dry-Clox®

(cloxacillin benzathine) Intramammary Infusion FOR USE IN DRY COWS ONLY

Caution: Federal law restricts this drug to use by or on the order of a licensed veterinarian.

Action: In the non-lactating mammary gland, Dry-Clox* (cloxacillin benzathine) provides bactericidal levels of the active antibiotic, cloxacillin, for a prolonged period of time. This prolonged activity is due to the low solubility of the cloxacillin benzathine and to the slow-release oil-gel base. This prolonged contact between the antibiotic and the pathogenic organism enhances the probability of a bacteriological cure.

Cloxacillin is not destroyed by the enzyme penicillinase, and therefore, is active against penicillin-resistant strains of *Staphylococcus aureus*. It is also active against non-penicillinase-producing *Staphylococcus aureus* as well as *Streptococcus agalactiae*.

The class disc, methicillin 5 mcg, should be used to estimate the *in vitro* susceptibility of bacteria to cloxacillin.

Indications: For the treatment of mastitis in dairy cows during the dry period.

Dry-Clox has been shown by extensive clinical studies to be efficacious in the treatment of mastitis in dry cows, when caused by Streptococcus agalactiae and Staphylococcus aureus, including penicillin-resistant strains.

Treatment of the dry cow with Dry-Clox is indicated in any cow known to harbor any of these organisms in the udder at drying off, or which has had repeated attacks of mastitis during the previous lactation, or is affected with mastitis at drying off, if caused by susceptible organisms.

Dosage for Dry Cows: Infuse the contents of one syringe (10 mL) into each quarter following the last milking. See Directions for Use.

Directions for Use: Dry-Clox (cloxacillin benzathine) is for use in dry cows only. Administer immediately after the last milking. Use no later than 30 days prior to calving.

Completely milk out all four quarters. The udder and teats should be thoroughly washed with warm water containing a suitable dairy antiseptic and dried, preferably using individual paper towels. Carefully scrub the teat end and orifice with 70% alcohol, using a separate swab for each teat. Allow to dry.

Dry-Clox is packaged with the Opti-Sert® Protective Cap.

For partial insertion: Twist off upper portion of the Opti-Sert Protective Cap to expose 3–4 mm of the syringe tip.

For full insertion: Remove protective cap to expose the full length of the syringe tip.

Insert syringe tip into the teat canal and expel the entire contents of syringe into the quarter. Withdraw the syringe and gently massage the quarter to distribute the medication.

Do not infuse contents of the mastitis syringe into the teat canal if the Opti-Sert Protective Cap is broken or damaged.

Precautions: Because it is a derivative of 6-aminopenicillanic acid, Dry-Clox has the potential for producing allergic reactions. Such reactions are rare; however, should they occur, the subject should be treated with antihistamines or pressor amines, such as epinephrine.

Residue Warnings: 1. For use in dry cows only.
2. Not to be used within 30 days of calving. 3. Any animal infused with this product must not be slaughtered for food until 30 days after the latest infusion.

Dry-Clox® is a registered trademark of Boehringer Ingelheim Animal Health USA Inc. All other trademarks are properties of their respective owners.

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Manufactured for:

Boehringer Ingelheim Animal Health USA Inc. Duluth, GA 30096 U.S.A.

DAIRY FORAGE SEMINAR STAGE SCHEDULE

The World Forage Analysis Superbowl will once again provide educational opportunities to World Dairy Expo attendees with its Dairy Forage Seminars. These seminars, led by professors, researchers, producers and industry experts, will address various topics related to forage production, harvest, storage and feeding. Seminars are held daily on the Dairy Forage Seminar Stage at the east end of the Arena Building at the Alliant Energy Center, Madison, Wis., Wednesday, Oct. 2 through Saturday, Oct. 5.

The following is a schedule of the 2019 Dairy Forage Seminars:

WEDNESDAY, OCT. 2

10:00 a.m. Interseeding Alfalfa Into Silage Corn

John Grabber, Research Agronomist, USDA-ARS, U.S. Dairy Forage Research Center, Madison, Wis.

1:30 p.m. How We Make Dairy-Quality Hay

and Baleage

Don Hasselquist, Forage Producer, Osceola, Wis.

THURSDAY, OCT. 3

10:00 a.m. Corn Silage Hybrids: Cost of Digestible Fiber

Mike Miller, William H. Miner Agricultural Research Institute, Chazy, N.Y.

1:30 p.m.

Managing Manure on Forage Crops for Economic and Environmental Benefits

Eric Young, Research Soil Scientist, USDA-ARS, U.S. Dairy Forage Research Center, Marshfield, Wis.

FRIDAY, OCT. 4

10:00 a.m. Evaluating Reduced-Lignin Alfalfa Yield and Quality Across

the U.S.

Kim Cassida, Extension Forage Specialist, Department of Plant, Soil and Microbial Sciences, Michigan State University, East Lansing, Mich.

1:30 p.m. Incorporation of

Cereal-Grain Forages into Rations for Lactating Cows

Gonzalo Ferreira, Dairy Management Extension Specialist, Department of Dairy Science, Virginia Tech, Blacksburg, Va.

SATURDAY, OCT. 5

10:00 a.m. Getting the Most Out of Your Rations: Feed and

Your Rations: Feed and Nitrogen Efficiency

Geoff Zanton, Research Dairy Scientist, USDA-ARS, U.S. Dairy Forage Research Center, Madison, Wis.

Compliments of broadcast sponsor, Protexia, the Dairy Forage Seminars will be broadcast on "ExpoTV" during World Dairy Expo 2019.

The World Forage Analysis Superbowl is organized in partnership with Dairyland Laboratories Inc., Hay & Forage Grower, US Dairy Forage Research Center, University of Wisconsin-Madison and World Dairy Expo. To learn more or to download a 2019 entry form, visit *foragesuperbowl.org*.



Cattle First.



WASTE. ZERO WORRY.



Use Dry-Clox® to get zero milk withhold.

DRY-CLOX (*cloxacillin benzathine*) works triple time for your herd, your peace of mind, and your bottom line. That's because it gets cows back to the tank soon after calving — while giving you more milk to sell, and saving you more than 33% per cow than Spectramast DC[®]. To learn more about how you can achieve zero waste and zero worry using DRY-CLOX, talk with your veterinarian or visit **bi-vetmedica.com/dryclox**.

Dry-Clox® (cloxacillin benzathine)

*Residue Warnings: For use in dry cows only. Not to be used within 30 days of calving. Any animal infused with this product must not be slaughtered for food until 30 days after the latest infusion.

¹Source: Manufacturer pricing to veterinary clinics. Published Feb. 2018 for Spectramast* DC.

2019 EXPO SEMINARS

World Dairy Expo features the best and brightest during its worldclass Expo Seminars. This year's Expo Seminars delve into market trends, dairy finances, management practices and the environment. Seminars will be presented Tuesday through Saturday in the Mendota 2 meeting room, located in the Exhibition Hall.

Continuing education credits can be earned by

members of the American Registry of Professional Animal Scientists (ARPAS) and the American Association

of State Veterinary Boards - RACE Program (RACE).

A special thank you to these sponsors for making the Expo Seminars possible: Dairy Management Inc., Page & Pedersen International Ltd., SOP S.r.I., Diamond V, Quality Liquid Feeds, Inc., McLanahan Corporation and Feed Supervisor Software.

TUESDAY, OCT. 1 AT 1 P.M.

"Domestic and Global Beverage Trends: How U.S. **Dairy Innovation Can Seize the Opportunity**"



Paul Ziemnisky, **Executive Vice** President of Global Innovation Partnerships, DMI



Kristina Alexander, Manaaer. Knowledae and Insights of Global Innovation Partnerships, DMI

Sponsored by: Dairy Management Inc.

Continuing Education Credits:

ARPAS (1), RACE (1)

DAIRY MANAGEMENT INC."

Today's beverage and food environment is rapidly evolving as consumers look for choices that reflect their needs, values and desires. Buying decisions are made based on wants for innovation, health and wellness, sustainability and taste preferences. For U.S. dairy to remain relevant and thrive in this market, both in the short and long term, dairy product innovation must meet changing consumer product preferences. Kristiana Alexander and Paul Ziemnisky, executive vice president of Dairy Management Inc.'s Global Innovation Partnership team, will explore the latest in domestic and global beverage trends driven by consumer needs to inspire new dairy beverage innovation for retailers and foodservice partners. This discussion presents an opportunity to have your consumer and market questions answered by experts. Learn more about these trends and how the dairy checkoff is helping drive innovation.

WEDNESDAY, OCT. 2 AT 11 A.M.

"What Drives Financial Success on a Dairy"



Steve Bodart, Senior Dairy Lending Specialist, Compeer Financial

Sponsored by: McLanahan Corporation



Continuing Education Credits: ARPAS (1), RACE (1)

Dairy farmers strive to find financial success through milk production and can determine their results by evaluating the net income per cow on their farm. Starting with 2006 financial results, Compeer Financial and Zoetis began a research study to determine what distinguished the most successful dairies from their peers based on net income per cow. After reviewing data that was collected for a decade from farms averaging 1,071 milking cows, the researchers determined six key factors that separate the top performance herds from their peers. Learn what sets these dairies apart from Steve Bodart, Compeer Financial senior dairy consultant, who focuses his work on commercial dairy operations that have grown and expanded their business. In his role, Bodart assists farmers with business and financial planning, performance monitoring, and integrating production and financial management together. He also brings two decades of knowledge as the former CFO of a commercial dairy in Wisconsin and a deep understanding of family dairy businesses to this discussion.







WEDNESDAY, OCT. 2 AT 1 P.M.

"The Makeup of Your Milk Check"



Calvin Covington, CEO (retired), Southeast Milk Inc.

Sponsored by: Page & Pedersen International Ltd

Continuing Education Credits: ARPAS (1), RACE (1)

Many factors, including dairy commodity prices, component levels, milk utilization, location, milk supply and demand factor into the price a dairy farmer receives

for milk production. Calvin Covington, well-known for his national and international expertise in milk pricing. will help farmers better understand their milk check by discussing the primary factors that are considered in the pricing system. Covington is a former CEO of Southeast Milk Inc. and played an instrumental role in the national acceptance of multiple component pricing during his time with the American Jersey Cattle Association. A trusted adviser on milk pricing, Covington has testified at congressional hearings, authored milk marketing articles for various publications, and has prepared and presented proposals at Federal Order hearings. In retirement, Covington continues to provide consulting services to dairy companies, farmers and cooperatives.

THURSDAY, OCT. 3 AT 11 A.M.





Michael Capel, DVM, Partner, Perry Veterinary Clinic

Continuing Education Credits: ARPAS (1), RACE (1)

The implementation of the Veterinary Feed Directive has led dairy farmers and researchers to

discovering new ways to reduce antimicrobial use on farms. New research findings that will be discussed dur-

ing this seminar identify potential ways to significantly reduce the use of antimicrobials on dairy farms without negatively impacting individual animals or herd health. These findings complement well-documented measures already known for reducing antimicrobial use such as the importance of disease prevention, proper employee training, development of on-farm treatment guidelines and judicious use of therapeutic interventions. Michael Capel is a dairy cattle veterinarian in western New York who plays an active role in a variety of research including pharmaceutical industry, academic and on-farm projects pertaining to transition cow health, judicious antimicrobial use and effective treatment regimens.

THURSDAY, OCT. 3 AT 1 P.M.

"Climate Change – Reducing the Dairy **Industry's Carbon Footprint, Greenhouse Gas Emissions in the Dairy Industry**"



Frank Mitloehner, Professor, University of California, Davis

Sponsored by: SOP S.r.I

Save Our Planet

Continuing Education

Credits: ARPAS (1), RACE (1)

Climate change continues to be a topic of great importance in today's society and due to political

leaders discussing the impact agriculture and dairy, in particular, play in the current situation, the spotlight is on the dairy industry. Frank Mitloehner is a professor in the department of animal science at the University of California, Davis and is an air quality specialist in cooperative Extension. Widely recognized as an expert in agricultural air quality, livestock housing and husbandry, Mitloehner will discuss the overarching issues around a changing climate as well as the role the dairy sector plays, both in the U.S. and globally. Mitloehner received his master's degree in animal science and agricultural engineering from the University of Leipzig in Germany and his doctorate in animal science from Texas Technical University.

FRIDAY, OCT. 4 AT 11 A.M.

"Why Heifer Maturity Matters"



Gavin Staley, Technical Services Specialist, Diamond V

Sponsored by: Diamond V



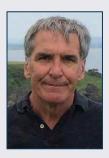
Continuing Education Credits: ARPAS (1), RACE (1)

For the past decade, a trend of breeding heifers at a younger age has developed in the dairy industry. While there are economic benefits to doing so, the evaluation of dairy herds across the country reveals that if heifers do not achieve desired maturity goals, there is a significant lasting impact on subsequent milk production. As the average cow in the U.S. stays in the milking herd for 2.2 lactations, it is of the utmost importance that the genetic potential of these animals is maximized during the first two lactations. However, the evaluation Gavin Staley will discuss reveals heifer immaturity is a major barrier in herd milk production in the U.S. Staley is a 1984 graduate of the University of Pretoria, South Africa. He is a board certified theriogenologist (DiplACT) and has worked in academia, private practice and industry over the past 35 years.

FRIDAY, OCT. 4 AT 1 P.M.



"Are You Buying Your Milk Production?"



Bill Weiss, Professor, Department of Animal Science, Ohio Agricultural and Research Center, Ohio State University

Sponsored by: **Quality Liquid Feeds, Inc.**



Continuing Education Credits: ARPAS (1), RACE (1)

As the largest single cost on a dairy farm, feed and its impact on milk production are front of mind for dairy

producers. While feed costs, in dollars per pound of feed, and milk production are positively correlated, the relationship is not strong. This means feed costs vary substantially among farms who have similar production levels. Bill Weiss, a professor in dairy nutrition, will discuss different means of keeping feed costs in check without adversely affecting milk production while uncovering opportunities when spending a little more on feed can result in large returns. Weiss has 30 years of experience conducting research in diet formulation methods, vitamin and mineral nutrition and feed evaluation. During his career, he has also authored more than 500 scientific and popular press articles in many areas of dairy cow nutrition and management.

SATURDAY, OCT. 5 AT 11 A.M.



"Dairy Farm Financial Decision Making in **Turbulent Times**"



Chris Wolf, Professor, Agricultural Economics in the Dyson School of Applied Economics and Management, Cornell University

Sponsored by:

Feed Supervisor Software

Continuing Education

Credits: ARPAS (1), RACE (1)

The compounded financial stress of the past few years is wearing on dairy farmers, and every day decisions

are made that will either save their business or not. As a professor of agricultural economics at the Dyson School of Applied Economics and Management at Cornell University, Chris Wolf conducts research and Extension training focused on farm business management, dairy markets and policy, farm animal welfare and animal health management. With his research experience and expert knowledge of agricultural economics, Wolf will examine the financial decision-making benchmarks for dairy farms from whole farm to longterm investments to management changes. A widelypublished academic and industry author, he will focus his discussion on decisions that address efficiency, risk management and farm financial resiliency, particularly in cash constrained environments.









It's a special thing, being in the business of growing and producing the products people depend on every day.

But it's not easy. Recognition is scarce. Profit margins are fickle.

That's why we're proud to offer a feed that provides high levels of energy, protein and effective fiber. A feed that can increase your milk production and butterfat content at an affordable price.

Because you shouldn't have to pay an arm and a leg for a ration that works as hard as you do.

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2019 YIRTUAL FARM TOURS

World Dairy Expo Virtual Farm Tours have brought the best dairy operations in North America to Madison for more than 15 years. The eight dairies to be featured during WDE 2019 excel in a variety of farm aspects including genetics, technology, community engagement, environmental stewardship, and cow comfort, while also representing a wide variety of sizes, locations and breeds. Virtual Farm Tours are presented daily

during World Dairy Expo in Mendota Room 1 of the Exhibition Hall, and are led by the farm's owner or manager with time for questions and an open discussion to follow.

Sponsors of the 2019 Virtual Farm Tours include: Allflex Livestock Intelligence, American Jersey Cattle Association, GEA, Kansas Department of Agriculture, Lely, Select Sires Inc., Semex and Quality Liquid Feeds Inc.

TUESDAY, OCT. 1 AT 2 P.M.

Hosted by: Kieler Farms, Platteville, Wis.

Highlights: 1,800 milking/ **Labor Efficiency**

Sponsored by: GEA

For 72 years, the Kieler family has focused on caring





for their land, animals and employees in Platteville, Wis. Kieler Farms uses a new, 50-stall GEA rotary parlor equipped with FutureCow automated teat prep and Apollo postdipping systems. This technology has allowed the Kielers to keep the same number of employees while tripling their herd size to 1,800 cows. Primarily consisting of Holsteins, the herd maintains a 91-lb. daily milk production average with 3.65% fat and 3.05% protein along with a somatic cell count of 95,000. The farm features a cross-ventilated freestall barn for the milking herd with individual hutches, group housing and freestall facilities to care for the heifers. Kieler Farms is owned and operated by nine members of the Kieler Family and includes 3.500 acres of farm land.

The Kielers are committed to the success of their community through involvement with local FFA chapters, town boards and promotion committees. The farm has been awarded an honorary chapter degree from Platteville FFA as well as the Arthur J. Virtue Award for outstanding contributions in the field of agriculture.

WEDNESDAY, OCT. 2 AT NOON

Hosted by: Moo-Riah Dairy, Melba, Idaho

Highlights: 1,250 milking/ Community Engagement



Sponsored by: Quality Liquid Feeds, Inc.

Founded in 1999, Moo-Riah Dairy in Melba, Idaho, was built by Bert and Trina De Winkle and their six children, of which



Rudi and Anne-Marije De Winkle and Justin and Siska Reece are still involved today. Home to 1,250 milking Jerseys, Moo-Riah Dairy maintains a 55-lb. per day tank average with 5.25% fat and 3.9% protein.

The entire family is very involved with their communities and the dairy industry. Bert volunteers with Love In the Name of Christ and Trina has served on the DFA Board and volunteers with Love Inc. and serves on the board of Arrow Homeschool Co-op. Rudi is an FFA and 4-H volunteer and board chair of Grace Bible Church and Love Inc. He also serves on the IDEAL Board for Idaho Dairymen's Association. Siska is a graduate of Leadership Idaho Agriculture, an ambassador for Dairy West and co-founder/board chair of Arrow Homeschool Co-op. Justin and Siska plan to promote the dairy industry through an agritourism program that showcases dairy products, animal welfare, environmental stewardship and commitment to safe milk.









New Banamine® Transdermal. The first FDA-approved pour-on for pain control in cattle.

Pain and fever can cause cattle to go off feed. But new, easy-to-use Banamine® Transdermal (flunixin transdermal solution) helps get 'em back where they belong.

FDA-approved to control pain due to foot rot and fever due to BRD, Banamine Transdermal is the only non-steroidal anti-inflammatory (NSAID) cattle product available with a convenient pour-on route of administration. Visit **BanamineTD.com** to learn more.

IMPORTANT SAFETY INFORMATION: NOT FOR HUMAN USE. KEEP OUT OF REACH OF CHILDREN. Only for topical use in beef and dairy cattle. Do not use Banamine Transdermal pour-on within 48 hours of expected parturition. Do not use in animals showing hypersensitivity to flunixin meglumine. Cattle must not be slaughtered for human consumption within 8 days of the last treatment. Not for use in female dairy cattle 20 months of age or older, including dry dairy cows; use in these cattle may cause drug residues in milk and/or in calves born to these cows or heifers. Not for use in suckling beef calves, dairy calves, and veal calves. A withdrawal period has not been established for this product in pre-ruminating calves. Not for use in dairy or beef bulls intended for breeding because reproductive safety has not been evaluated.

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PRODUCT INFORMATION

NADA #141-450, Approved by FDA

Banamine®

Transdermal

Pour-On for Beef and Dairy Cattle 50 mg/mL

BRIEF SUMMARY: (For full prescribing information, see package insert)

Non-Steroidal Anti-inflammatory Drug

Only for topical use in beef and dairy cattle. Not for use in beef bulls intended for breeding; dairy bulls; female dairy cattle 20 months of age or older, including dry dairy cows; and suckling beef calves, dairy calves, and veal calves.

CAUTION: Federal law restricts this drug to use by or on the order of a licensed veterinarian.

DESCRIPTION: Each milliliter of Banamine Transdermal pour-on contains 50 mg flunixin (equivalent to 83 mg flunixin meglumine), 150 mg pyrrolidone, 50 mg L-menthol, 500 mg propylene glycol dicaprylate/dicaprate NF, 0.2 mg FD&C Red No. 40, and glycerol monocaprylate NF qs.

INDICATIONS: Banamine Transdermal pour-on is indicated for the control of pyrexia associated with bovine respiratory disease and the control of pain associated with foot rot in steers, beef heifers, beef cows, beef bulls intended for slaughter, and replacement dairy heifers under 20 months of ane.

CONTRAINDICATIONS: NSAIDs inhibit production of prostaglandins which are important in signaling the initiation of parturition. The use of flunixin can delay parturition and prolong labor which may increase the risk of stillbirth. Do not use Banamine Transdermal pour-on within 48 hours of expected parturition. Do not use in animals showing hypersensitivity to flunixin medlumine.

USER SAFETY WARNINGS: Not for use in humans. Keep out of reach of children. Flunixin transdermal solution is a potent non-steroidal anti-inflammatory drug (NSAID), and ingestion may cause gastrointestinal irritation and bleeding, kidney, and central nervous system effects.

This product has been shown to cause severe and potentially irreversible eye damage (conjunctivitis, iritis, and corneal opacity) and irritation to skin in laboratory animals. Users should wear suitable eye protection (face shields, safety glasses, or goggles) to prevent eye contact; and chemical-resistant gloves and appropriate clothing (such as long-sleeve shirt and pants) to prevent skin contact and/or drug absorption. Wash hands after use.

In case of accidental eye contact, flush eyes immediately with water and seek medical attention. If wearing contact lenses, flush eyes immediately with water before removing lenses. In case of accidental skin contact and/or clothing contamination, wash skin thoroughly with soap and water and launder clothing with detergent. In case of ingestion do not induce vomiting and seek medical attention immediately. Probable mucosal damage may contraindicate the use of gastric lavage. Provide product label and/or package insert to medical personnel.

RESIDUE WARNINGS: Cattle must not be slaughtered for human consumption within 8 days of the last treatment. Not for use in female dairy cattle 20 months of age or older, including dry dairy cows; use in these cattle may cause drug residues in milk and/or in calves born to these cows or heifers. Not for use in suckling beef calves, dairy calves, and veal calves. A withdrawal period has not been established for this product in pre-ruminating calves.

PRECAUTIONS: As a class, cyclo-oxygenase inhibitory NSAIDs may be associated with gastrointestinal, renal, and hepatic toxicity. Sensitivity to drug-associated adverse events varies with the individual patient. Patients at greatest risk for adverse events are those that are dehydrated, on concomitant diuretic therapy, or those with renal, cardiovascular, and/or hepatic dysfunction. Banamine transdermal should be used with caution in animals with suspected pre-existing gastric erosions or ulcerations. Concurrent administration of other NSAIDs, corticosteroids, or potentially nephrotoxic drugs should be avoided or used only with careful monitoring because of the potential increase of adverse events.

NSAIDs are known to have potential effects on both parturition (see Contraindications) and the estrous cycle. There may be a delay in the onset of estrus if flunkin is administered during the prostaglandin phase of the estrous cycle. NSAIDs are known to have the potential to delay parturition through a tocolytic effect. The use of NSAIDs in the immediate post-partum period may interfere with uterine involution and expulsion of fetal membranes. Cows should be monitored carefully for placental retention and metritis if Banamine Transdermal pour-on is used within 24 hours after parturition.

Not for use in dairy or beef bulls intended for breeding because reproductive safety has not been evaluated.

HOW SUPPLIED: Banamine Transdermal pour-on, is available in 100-mL (NDC 0061-4363-01), 250-mL (NDC 0061-4363-02), and 1-L (NDC 0061-4363-03) bottles.

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WEDNESDAY, OCT. 2 AT 2 P.M.

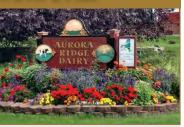
Hosted by: Aurora Ridge Dairy, Aurora, N.Y.

Highlights: 2,075 milking/Genetics

Sponsored by: Semex

Aurora Ridge Dairy in Aurora, N.Y. is home





to a milking herd of 2,075 registered Holsteins and owned by partners Bill Cook, Jason Burroughs, Dave Harvatine and Dan Westfall. The farm began in 1985 with 65 cows and 35 heifers. Through continuous internal growth and construction of new facilities, they have grown the herd to its current size. The milking herd maintains a 30,065-lb. rolling herd average with 3.9% fat and 3.1% protein with a somatic cell count between 110,000 and 140,000. A methane digester produces 600 kilowatts of power per hour, supplying 100% of the farm's needs.

The entire herd at Aurora Ridge Dairy is genomic tested with the results determining the breeding program for each animal. The farm's genetic plan includes in-vitro fertilization, embryo transfer, sexed semen, beef semen and conventional breeding. Genetics are exported to Japan, Germany and Canada and can be found in Al company programs. The farm has been awarded a Progressive Genetics Herd Award from Holstein USA, and dairy herd manager Dave Harvatine was recognized as a 2018 Holstein USA Distinguished Young Holstein Breeder.

THURSDAY, OCT. 3 AT NOON

Hosted by: Albright Jerseys LLC, Willard, Ohio

Highlights: 580 milking/Technology

Sponsored by: American Jersey
Cattle Association



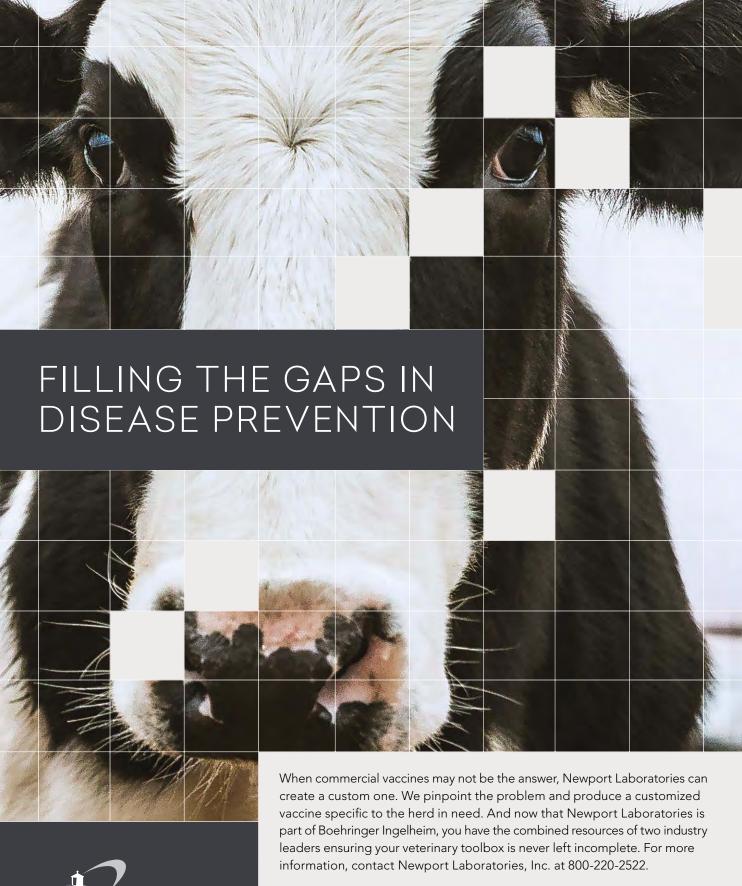
Fred and Becky Albright and their son, Joel, embrace new technology at Albright Jerseys

bunded in 1947 by Fred's ansitioned from a stanchion

LLC in Willard, Ohio to remain profitable. Founded in 1947 by Fred's father, Allen, over the years the farm has transitioned from a stanchion barn to a double-four parlor an expanded parlor to nine Lely A4 robots in 2018. During the most recent changes, Albright Jerseys increased their herd size from 340 to 650 cows, internally, in just six years.

The breeding philosophy focuses on profitable cows based on production and health traits. The rolling herd average is 20,443 lb. of milk with 4.6% fat and 3.7% protein. Along with top-ranking Jersey Performance Index cows, the Albrights have received numerous production awards. In 2016 they were the American Jersey Cattle Association's Young Jersey Breeder.

Prior to installing robots, Joel worked full time at the dairy and full time as a vocational agriculture teacher. Once the robots were installed, he chose to focus on the profitability of the dairy and using technology to improve the quality of life for all involved with the operation.





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THURSDAY, OCT. 3 AT 2 P.M.

Hosted by: Richland Dairy, LLC, Kenyon, Minn.

Highlights: 115 cows/Technology and Environmental Stewardship

Sponsored by: Lely



Richland Dairy of Kenyon, Minn., operated by Alan and Sharon Meyer and their son and daughter-in-law,

Andy and Samantha, and family, were early adapters of automatic milking systems, installing their first two systems in 2010. However, a tornado destroyed several buildings, including the robot room and freestall barn. With a desire to continue dairy farming, the Meyers installed two Lely A5 robots and were back milking a short three-and-a-half months later.

The robots have granted the Meyer's an enhanced work-life balance, while running nearly 700 acres of owned and rented land. Enhancing the land for future generations is important to the Meyers, as recognized by the 28 basins throughout their acreage to reduce soil loss. They also use cover crops and no-till management to further reduce their impact on the land.

FRIDAY, OCT. 4 AT NOON

Hosted by: Ratliff Jerseys, Garnett, Kan.

Highlights: 55 milking/Genetics

Sponsored by:

Kansas Department of Agriculture





Ratliff Jerseys of Garnett, Kansas is known around the world for its Jersey genetics. For two decades Christy and Ron Ratliff and Christy's brother Mike Kennedy, have been breeding show-winning cattle in the heart of Kansas. The 55-cow herd has a rolling herd average of 19,695 lb. of milk with 5.4% fat and 3.7% protein.

As a nine-time WDE Premier Breeder and four-time WDE Premier Exhibitor, Ratliff Jerseys has made a significant impact in the Showring at World Dairy Expo and other national and state shows. Top cattle are involved in an intensive embryo transfer program.

The Ratliffs are members of the REAP program, received the DFA Milk Drop Quality Award and were the 2010 Kansas Distinguished Dairy Family. In 2018 they received the American Jersey Cattle Association's Master Breeder award and their Young Jersey Breeder award in 2008. In 35 years, Christy has bred more than 175 cows scored Excellent-90% or higher.

FRIDAY, OCT. 4 AT 2 P.M.



Highlights: 1,550 milking/Managing for Sustainability

Sponsored by: Select Sires Inc.

Beginning in 1975 as a 35-cow herd



in a stanchion barn to building two freestall barns and a

double-20 parallel parlor to accommodate 1,550 cows, Paulus Dairy LLC in Fredonia, Wis., has seen many changes. Owned by Mike and Lori Paulus, their son, Andy, and daughter, Tiffany Schneider, Paulus Dairy LLC has grown most recently through the acquisitions of five different herds.

People and community are at the heart of Paulus Dairy. A founding member of the Milwaukee River Watershed Clean Farm Families group, Paulus Dairy strives to minimize its environmental impact. The organization works with the Milwaukee River Watershed Conservation Partnership to provide a platform for producers and landowners to share ideas, concerns, priorities and lessons learned about agricultural conservation efforts within the Milwaukee River Watershed.

SATURDAY, OCT. 5 AT NOON

Hosted by: Fischer Clark Dairy, Hatley, Wis.

Highlights: 911 milking/ Cow Comfort

Sponsored by: Allflex Livestock Intelligence

Mike and Sue Fischer of Hatley. Wisconsin founded





Fischer-Clark Dairy Farm Inc. in

1972 with eight cows. Today, in partnership with their son, Jon, and his wife, Heidi, the family cares for a milking herd of 911 Holsteins. The cows at Fischer-Clark Dairy maintain a rolling herd average of 32,651 lb. of milk, 4.25% fat and 3.25% protein all while averaging a somatic cell count below 100,000. These high components garnered the Fischer family Sartori Cheese Yield Awards in 2016, 2017 and 2018.

The facilities have been updated to match the growth patterns of Fischer-Clark Dairy. Most recently, this included the construction of a tunnel ventilated barn to complement the existing naturally ventilated barn that now both house milking cows. A new heifer facility was constructed in 2012 and then expanded in 2015 in preparation for the latest milking herd growth in 2016.









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Reference: 1. Arruda AG, Godden S, Rapnicki P, Gorden P, Timms L, Aly SS, Lehenbauer TW, Champagne J. Randomized noninferiority clinical trial evaluating 3 commercial dry cow mastitis preparations: I. Quarter-level outcomes. J Dairy Sci. 2013;96:4419–4435.

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Rev. 8/2019

MINGLING WITH THE BEST

The World Forage Analysis Superbowl offers forage producers a chance to connect with, and learn from, the best in the business

If you want to get better at something, find ways to rub shoulders with the best. The World Forage Analysis Superbowl (WFAS), held in conjunction with World Dairy Expo for the past 36 years, gives dairy producers looking to improve their forage management game a way to do just that.

Forage samples are submitted in eight categories: commercial hay, dairy hay, grass hay, alfalfa haylage, mixed/grass haylage, baleage, brown midrib corn silage and standard corn silage.

"The contest has been growing pretty steadily over the years," says Doug Harland, a member of the WFAS organizing committee and manager of Dairyland Laboratories in DePere, Wis. Dairyland handles the forage analysis for contest entries.

"I think a lot of that growth has come about because people see the Superbowl as a networking opportunity," Harland says. "At the Mycogen Seeds Forage Superbowl Luncheon, contestants have a chance to talk to other producers, including many multiyear winners

who are considered some of the best forage growers in the country. They can find out what these people are doing to manage high-quality forages and get some ideas that will help them improve in their own operations."

isual Evaluation

In 2018, 843 samples from 27 states were entered in the WFAS. The 2019 contest is set to award more than \$26,000 in cash prizes.

"It all works together," he says. "People can come in, listen to the seminar speakers and then go over to the displays to get a close up look at the best samples. The seminars are always well-attended, so there are opportunities to strike up a conversation with people who have an interest in forages."

Kendall and Katherine Guither, Walnut, III., are representative of the top-notch forage producers in attendance. Depending on the weather, 90% to 98% of the alfalfa grown on their 400 to 450 acres is put up as baleage, with the rest harvested as dry hay. Dairy farms, both cattle and goats, in northern Illinois and southern Wisconsin are their market.

The Guithers have been participating in the WFAS contest for 21 years. They've captured first-place honors in the baleage category four times and finished in the top five 10 times.

While "a whole package of things" goes into making highquality baleage, staying on an aggressive cutting schedule tops the list. Typically, they take five cuttings from May through August plus another cutting in November. "You hear people talking about multileaf varieties," Kendall says. "That's fine. But if it's cut late, say 40 days, you're not going to get the quality no matter how many leaves are out there."

> Focusing on moisture management postcutting is another mainstay of the Guithers' production strategy. "With baleage, if it's baled too wet, you can get butyric acid formation," Kendall

"We use eight layers of a 1-mil plastic so that we get plenty of overlap."

-Kendall Guither







explains. "That makes it sour. If you get it too dry, you won't have proper fermentation. Then there's a chance for molds to come in."

Kendall says using the right kind of plastic for wrapping can't be over-emphasized. "You want a good quality film with the right tackifier so it seals well," he says. "We use eight layers of a 1-mil plastic so that we get plenty of overlap. If you cheat on the layers, you can end up with garbage as forage."

Like the Guithers, the Hinman family of Wheatland, Wyo. — David, his wife, Teri, and daughter, Kellie — are more than just a little familiar with the WFAS winner's circle.

Combined, the family's two operations, Hardrock Farms and Lazy2K Livestock, have been participating in the contest for 12 years. Along with capturing numerous first-place awards in the commercial hay category, the Hinmans also won the contest's Grand Champion Forage Producer award in 2011 and Quality Counts Hay/Haylage Award in 2013.

The family puts up alfalfa and alfalfa/grass hay on 1,000 irrigated acres. Their primary customers include dairy goat farms in lowa, dairies in Colorado and beef producers in Wyoming and neighboring states.

David Hinman pegs staying patient between cutting and baling as a critical component in putting up the kind of premium alfalfa hay that dairy producer customers want. "With our drier climate, there's a tendency to let the alfalfa get too dry before it's baled," he explains. "But once it's dry, all the stem moisture has left. We'll wait two or three days for the right dew conditions so we keep [leaf] retention. It helps that we don't get a lot of rain during the growing



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season. The hay stays green because we don't have dew to bleach it."

Two mobile weather apps, WeatherBug and AccuWeather, help the Hinmans with harvest timing. Fields are spread out over 13 miles. "Weather conditions will vary from one place to another," Hinman says. "The apps give us an hour-to-hour forecast of wind and humidity for each location. That gives an idea of when and where we'll need to bale."

Variety selection is another important component of the Hinmans' program. In a typical year, they'll have 10 to 15 varieties in place. They take samples to monitor quality information from each cutting then put the results



"With our drier climate in Wyoming, there's a tendency to let the alfalfa get too dry before it's baled."

—David Hinman

in a record book. They couple that with spring soil samples to make decisions about which varieties to plant the following year.

"We'll put in one number that I've used before and know is good and then put in three others that have been coming on in trials and looking good or have some new traits like disease control that we might benefit from," Hinman says. "We end up with a good idea of how

each variety performs and where we could improve production."

A series of cuttingedge Dairy Forage Seminars, held daily in the Arena Building, and a display of finalists' forage samples complement the

networking. This year's seminar topics include interseeding alfalfa into corn silage, managing manure, corn silage hybrids, evaluating low lignin alfalfa and maximizing feed efficiency. A full schedule is available on page 22.

For more information on forage production, scan this QR code with your phone. DairyHerd.com/Forage





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WINNERS WILL **BE ANNOUNCED:** Wednesday, Oct. 2, 2019











2019 DEKALB® CORN SILAGE GUIDE

Presented by the DEKALB brand and Dairy Herd Management



PANGOR Choosing the Right Corn Silage for Your Operation

The corn silage hybrid you choose dictates your management style and the options available to you, according to Joe Lauer, Ph.D. and agronomy professor at the University of Wisconsin.

The right hybrid is a balance between two key factors:

- **1. Silage Yield** Consider foliage yield and grain yield; high-grain yield offers the flexibility to sell corn for grain as well as harvesting for silage.
- 2. Quality Some hybrids, like BMR, are designed to offer quality corn silage. However, gains in quality are often sacrificed in grain yield.

"Bottom line, there's a lot of variation, so check out local plots or test hybrid performance in your own fields," says Lauer.

Plant Population

Corn for grain: 34,000 plants per acre Corn for silage: 38,000 plants per acre "Growers are planting corn for silage about 3,000 to 4,000 plants per acre higher plant density to achieve a higher yield," says Lauer. "You're giving up 2-4% in overall quality per ton, but it's possible to gain 5-10% yield."

Soil Type and Health

Plan your hybrid around soil type and health, and know the levels of your macronutrients, especially nitrogen.

Corn for grain: Potassium and phosphorus are often left in the field in remaining corn stover.

University of Wisconsin

Corn for silage: Harvest removes significant nitrogen, potassium and phosphorus from the field, so more nutrients may need to be replaced.

Contract Silage Growers

Some dairies contract with grain producers to grow corn silage.

- There is no boiler plate contract; it's highly variable between the dairy producer and the corn silage grower.
- Both parties should be conscious of the contract specifics as it can influence each party's management decisions, such as hybrid choice, manure handling and quality adjustments.

KEY TRAITS FOR GRAIN VERSUS SILAGE HYBRIDS

Trait	Grain	Forage		
Grain yield	High	Adequate		
Forage yield	Adequate	High		
Hybrid range	3.2 T DM/A	10,700 lbs. Milk/A		
Stalks	Standability	Digestibility		
Leaves	Unknown	Digestibility		
Plant maturity	Full Season	5-10 Days Longer		
Plant drydown	Stay Green	Synchronous		
Kernel hardness	Hard	Soft		

PLANTO GROWA

Growing High-Quality Corn Silage

Joe Lawrence Cornell University



Planning for your high-quality silage crop includes taking a close look at soil health and nitrogen management, according to Joe Lawrence, dairy forage systems specialist at Cornell University.

Nitrogen availability and mobility —

Compacted soils affect the microbes that work to convert the nitrogen to the plant-available forms. It can also impact the potential for denitrification in water-logged soils. Having healthy soil with the proper ratio of pore spaces with air, as well as water that can drain properly when it rains, provides an environment for the microbes to convert the nitrogen and limit denitrification.

Organic matter and manure — These provide a slow release of nitrogen, like an IV drip. Instead of applying nitrogen that's available all at once in the form of fertilizer, organic matter and manure keep nitrogen in a stable form prior to conversion to a plant-available form by microbes. This allows for the release of nitrogen at different times throughout the season when plants can utilize it.

Fertilizer applications — The recommendation in the Northeast is to apply a small amount of nitrogen as a starter fertilizer at planting. Then, if needed, come back with a side-dress application. Applying all the nitrogen at planting is discouraged due to the potential for leaching losses. Nitrogen stabilizer products should also be considered to reduce losses to the environment.

Nitrogen deficiency — A crop that is nitrogen-deficient can reduce yield and quality. It can reduce protein content and may limit ear size, negatively affecting starch content.

Excess nitrogen — Nitrogen that's not taken up by the plant is susceptible to leaching losses during the fall and winter, offering motivation to be more precise with applications. Also consider planting cover crops as a way to protect soils and store excess nutrients over the winter. Excesses in the plant tend to delay maturity and harvest.

WHAT IS TAR SPOT?

- New corn fungal disease first identified in 2015
- Yield limiting in 2018 in the Midwest
- Survives in soil and on corn residue
- Carried by the wind
- Scout weekly



Photo courtesy of Martin Chilvers, Michigan State University



DEKALB Corn Silage Products	Value Added To	ait silage vield @	e Whitigo	olo Statch
DKC39-07RIB BRAND BLEND	VT2PRIB	2	4	3
DKC45-07RIB BRAND BLEND	SSRIB	2	1	3
DKC48-56RIB BRAND BLEND	SSRIB	2	2	3
DKC53-45RIB BRAND BLEND	SSRIB	2	1	2
DKC54-38RIB BRAND BLEND	SSRIB	2	3	1
(NEW) DKC55-37RIB BRAND BLEND	SSRIB	2	1	2
DKC57-97RIB BRAND BLEND	SSRIB	2	3	2
DKC58-06RIB BRAND BLEND	SSRIB	3	3	3
DKC59-07RIB BRAND BLEND	SSRIB	2	1	2
DKC62-08RIB BRAND BLEND	SSRIB	3	3	3
DKC64-34RIB BRAND BLEND	SSRIB	2	2	2
DKC67-42RIB BRAND BLEND	SSRIB	2	3	3
DKC68-26RIB BRAND BLEND	VT2PRIB	1	3	2
DKC69-16RIB BRAND BLEND	SSRIB	3	3	3
DKC70-64RIB BRAND BLEND	SSRIB	1	3	3

Rating scale: 1 = Excellent, 9 = Poor

Value Added Traits: VT2PRIB = VT Double PRO® RIB Complete® corn blend; SSRIB = SmartStax® RIB Complete® corn blend

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2	2	1300	1	2	2	M	3
1	2	1300	3	3	2	M-T	3
3	2	1305	3	3	2	T	2
3	3	1249	2	2	2	M	2
2	1	1320	2	2	2	M-T	2
3	3	1365	3	3	3	M	3
2	2	1377	5	3	1	M-T	1
3	2	1372	3	2	4	M-T	3
2	1	1329	2	2	3	M-T	1
2	3	1380	2	2	3	M-T	3
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PLAN ROBETARVEST:

Tips for a Successful Harvest

Hugo Ramírez Iowa State University



A successful harvest should start with a planning meeting with the teams involved in the process, including harvesting, hauling and ensiling. It's important to review the process, timing, who's leading in each area and contingency plans, says Hugo Ramírez, assistant professor at Iowa State University.

Monitoring Moisture

- Target 35% dry matter (DM) with a realistic range of 33% to 38%.
- Ensiling wet corn silage may result in poor fermentation and low energy.
- Cut some plants every two to three days for about a week to measure DM content. Drydown typically increases about 0.5 percentage units per day, but a heat wave could speed it up, so test fields regularly to hit optimal harvest.

Minimizing Shrink

- Use of an inoculant promotes effective fermentation, offering a 2% to 3% improvement in recovery of DM.
- The best opportunity for uniform inoculant application is at the chopper.
- Use non-chlorinated water or less than 1 ppm chlorine for the inoculant, and keep the water below 85°F; otherwise, the bacteria can weaken or die.

 Use oxygen barriers to maximize recovery of DM and reduce top-surface shrink by about 40% to 50%.

Chop Length

- Chopping to a very small particle size, like confetti, does not substitute for kernel processing.
- Chop length should be 19 mm (¾ inch).
- Set kernel processor at 2 mm to not only crack but fracture the kernel.
- Packing density should be at least 15 lbs. of DM per ft³.

Safety First

- Shallow piles are safe piles. The driveover pile should have a slope of 3:1.
- If packing in tall bunkers, use dual tractor tires to pack close to the wall edge but still maintain a safe driving distance.
- If collecting silage samples as forage is being delivered, stop all traffic until the person sampling gives the signal that he or she is clear of the area.

IS MY KERNEL PROCESSING SUFFICIENT?

Kernel processing is now standard practice when chopping corn because it damages the protective layer of corn kernels, providing better access to the starch for rumen bacteria. Properly processed corn silage should not have any visible whole corn kernels.



Separated kernels showing three levels of kernel processing. Only the material on the right could be considered adequately processed.

Photo courtesy of the University of Wisconsin Forage Team

PLANFOR FEEDOUT:

Why Is Structural Fiber Important for the Rumen?

Peter Robinson University of California-Davis



Structural fiber is made up of lignin, cellulose, hemicellulose and cutin, and it's referred to as "structural" because it's firm and visible, says Peter Robinson, Ph.D. and Extension specialist at the University of California-Davis. Structural fiber is involved in several important processes in the rumen.

Rumination or cud chewing — It is important in stabilizing the rumen environment and driven by dietary structural fiber. Cud chewing breaks open particles that have been eaten, but not significantly broken up, to facilitate bacterial attachment to particle surfaces. In addition, cud chewing stimulates salivation, which buffers the rumen to prevent its pH from dropping to cause rumen acidosis.

Nutrient provider — Fiber digestion leads to the creation of volatile fatty acids in the rumen which, once absorbed from the rumen, are a major energy source to support milk production.

Digestibility — Because of the physical nature of structural fiber, it takes up space in the rumen. One of two things can happen:

- **1.** It's digested in the rumen broken down into chemical compounds, such as volatile fatty acids, that are absorbed
- 2. It passes out of the rumen broken down into smaller particles that pass on to the abomasum (true stomach)

Fiber that digests very slowly remains in the rumen and occupies space, which is limited in a rumen, so it results in reduced feed intake. Thus, the rate at which fiber is digested in the rumen is very important. For example, if fiber is 100% digested, but it takes 50 hours in the rumen to get there, then intake will be restricted by rumen space. A more valuable structural fiber is one that is only 50% digested but only needs 14 hours in the rumen to get there because this fiber stimulates cud chewing and salivation and is partly digested, but then passes out of the rumen to allow new fiber to enter in as new DM intake.

When fiber digests faster, it still expresses its structural characteristics, but the particles get smaller and pass out of the rumen and the animal can eat feed. Thus, more nutrients are available to the animal from absorption from the rumen.

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WORLD DAIRY EXPO ★ RECOGNITION AWARD HONOREES ★

World Dairy Expo is pleased to once again honor four outstanding dairy leaders as the 2019 World Dairy Expo Recognition Award Winners. Dedicating their lives to their local dairy communities and the global dairy industry, the impact of each of these individuals has reached around the world and back.

The 2019 Dairy Woman of the Year is Janina Siemers, Siemers Holsteins, Newton, Wis.; Steve Maddox, Maddox Dairy, in Burrel, Calif. is the Dairyman of the Year. The Industry Person of the Year is University of Wisconsin-Madison Department of Dairy Science professor, Randy Shaver of Madison,

Wis. while the International Person of the Year is Julio A. Brache Arzeno, Rica Group, Santo Domingo, DN, Dominican Republic.

These dairy influencers will be recognized at the Dinner with the Stars banquet on the evening of Wednesday, Oct. 2, 2019 in the Exhibition Hall at the Alliant Energy Center. The celebration will begin with the WDE Welcome Reception featuring complimentary hors d'oeuvres and drinks at 5 p.m., followed by a ticketed banquet at 7:00 p.m. Everyone is invited to attend this event honoring the award recipients. Following is a brief biography of each of the honorees.



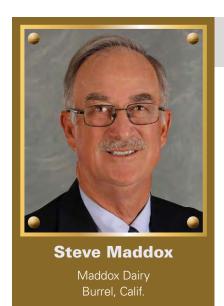
The 2019 Dairy Woman of the Year, Janina Siemers of Newton, Wis., farms with her husband, Dan, and sons, Jordan and Connor, at Siemers Holsteins a herd of more than 2,700 Registered Holsteins. The daughter of immigrants, Siemers moved from California to

DAIRY WOMAN OF THE YEAR

Wisconsin upon marrying Dan in 1994. Since then, she has been a pioneer and forward thinker at Siemers Holsteins, and an instrumental player in building the farm and seeing it come to fruition. In the early 1990s, Siemers was adamant the farm implement Dairy Comp 305 and after learning how to use the program, she began assisting local dairies transition to the technology. Today, Siemers is responsible for Holstein USA registrations, human resources, payroll, finances, purchases, developing standard operating procedure and so much more. While she does not have a registered Holstein background, she encouraged the family to invest in Cherry Crest Manoman Roz, a now global household name.

As a life-long learner, Siemers

is dedicated to gaining more knowledge and teaching others while she does. Since her children, nieces and nephews began their involvement in dairy quiz bowl competitions, so did she as a parent and coach. She continues to offer her knowledge and skills as the coach of the junior quiz bowl team in Manitowoc County as well as assisting individuals who come to her with questions. Her accomplishments as a leader also include service as a board member for organizations she believes in and as a committee member for national and local agricultural and Holstein fundraising projects, including the recently completed 2019 National Holstein Convention held in Wisconsin, and for the Howards Grove Elementary School Special Education Referendum Committee.



Steve Maddox of Burrel, Calif., a

managing partner in Maddox Dairy and a partner in RuAnn Genetics, is the 2019 Dairyman of the Year. Following graduation from California Polytechnic State University in 1980, Maddox returned to his family's

DAIRYMAN OF THE YEAR

farm and began working to build RuAnn Genetics. This 1,000-cow herd serves as the breeding herd for Maddox Dairy, a 4,000-cow herd. In a year, 3,000 to 4,000 embryos are collected at RuAnn and more than 100,000 embryos have been collected since its start. Maddox oversees feed management and ration formulation for the herds while coordinating the activities of more than 60 employees. Under Maddox's care, and working closely with his brother, Pat, and son, Stephen Jr., the cows in both herds maintain a rolling herd average above 26,000 lb. of milk with 200 cows classified Excellent and more than 1,000 Very Good. He has two other grown children, Melissa and Christina, with his wife, Brenda.

Off the farm, Maddox has a colorful resume of involvement in organizations. He has offered input and leadership to the National Dairy Promotion and Research Board as a member of the U.S. Dairy Export Council Board, Dairy Export Committee, serving as Vice Chairman and Chairman in 2012 and 2013. Maddox has also held board positions with the Innovation Center for U.S. Dairy, National Milk Producers Federation, California Dairies, Challenge Dairy Products Inc., Danish Creamery Association and Fresno Dairy Herd Improvement Association. Maddox also serves on Holstein Association USA's Legislative Affairs Committee and makes regular trips to Washington, D.C., to advocate for dairy producers.



Julio A. Brache Arzeno, the 2019 International Person of the Year. now serves as president of Rica Group in the Dominican Republic. For nearly two decades, Brache's career as a physician included

INTERNATIONAL PERSON OF THE YEAR

five hospitals and a private clinic while he was a professor at two universities. In the early 1960s, Brache and his wife, Elsa Maria Álvarez Bonilla, started raising livestock that resulted in a dairy products processing and sales initiative while raising their five children: Julio Virgilio, José Braulio, Carmen Maria. Pedro Guillermo and Elsa Julia.

After leaving his medical career, Brache developed one of the most significant agro-industries in the Rica Group. With the help of other farmers, he founded Pasteurizadora Rica in 1966, and in 1971 he began managing the company. The company grew to become a consortium that has

achieved success in the business world, fostering innovation, quality care and a portfolio with more than one hundred products for national consumption and some export. Brache has seen his original farm develop into San Antonio Dairy, which provides milk for Rica Group products while also breeding show winning registered Holsteins.

Brache is the founder and first president of the Holstein Association of the Dominican Republic, serving from 1990 to 2003. He created the first herd book in the country and the most up-to-date database of dairy cows in the Dominican Republic. His list of accolades includes local, national and worldwide awards.





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^{1.} Effects of Vaccination with Vista® 5 L5 SQ or Bovi-Shield GOLD® FP® L5 on Milk Production. 2010.
2. Technical Reference 96-4: Evaluation of Injection-Site Blemishes Using Ultrasonography Following Administration of Two Commercial Multivalent Clostridial Vaccines.
3. Merck Veterinary Update: Post-Vaccinal Milk Response in Dairy Cows to Three Vaccines for the Control of Neonatal Diarrhea. 2007.

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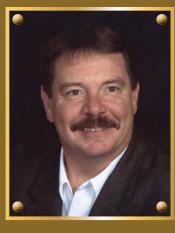
^{4.} Spire MF. Once PMH[®] IN Endotoxin Load. 2015.
5. Field Safety Study of a Low-Reactive Clostridium Chauvoei-Septicum-Haemolytica-Novyi-Sordellii-Tetani-Perfringes Types C&D Bacterin-Toxoid (Cavalry 9). APHIS Product Code No. 7340.00. 2005

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Randy Shaver

University of Wisconsin-Madison, Department of Dairy Science Madison, Wis.

University of Wisconsin-**Madison Department of** Dairy Science professor, Randy Shaver is the 2019 **Industry Person of the**

Year. For more than three decades, Randy Shaver has been conducting research and teaching at the University of Wisconsin-Madison where he has dedicated himself to translating complex nutrition research results into practical feeding recommendations for the dairy industry. While working to do this, in 1989, he hosted an applied nutrition conference that has now grown into the Four-State Applied Nutrition and Management Conference in Dubuque, Iowa that attracts more than 600 annual conference participants. Shaver's career efforts have contributed to the establishment of corn silage as a predominant forage in dairy cattle diets, corn silage hybrid evaluation, improved corn silage maturity and moisture content at harvest, corn silage kernel processing and improvements, and

INDUSTRY PERSON OF THE YEAR

optimized forage length of chop guidelines. He is also credited in reducing phosphorus feeding to lactating dairy cows, higher focus on starch in dairy cattle diets, use of fecal starch as a diagnostic tool and increased use of rumen-protected methionine in dairy cattle diets, to name a few. Shaver has advised or co-advised over 30 masters or doctoral students at the University of Wisconsin-Madison and authored or co-authored more than 100 peer-reviewed journal publications, 200 scientific abstracts, more than 100 popular-press articles in industry trade magazines, and several hundred newsletter articles. extension handouts or bulletins and internet publications.

Shaver has served in leadership roles for Professional Dairy Producers of Wisconsin, American Dairy Science Association, American College of Animal Sciences and American Registry of Professional Animal Scientists. Recognized for his impact in the dairy industry, Shaver is a past recipient of the ADSA AFIA Dairy Nutrition Award, ADSA Pioneer Hi-Bred Forage Award, ADSA DeLaval Dairy Extension Award, ADSA **Nutrition Professionals Applied** Dairy Nutrition Award and UW-Madison CALS Pound Extension Excellence Award.

CREDIT WHERE IT'S DUE

New award recognizes Expo's Supreme Champion Heifer

A bit of World Dairy Expo history was made during last year's Parade of Champions when Milksource Gentry Marriot-ET was named the first-ever Supreme Champion Heifer. The new award recognizes the top animal from among the Junior Champions of the seven breed shows held throughout the week.

Marriot, owned by MilkSource Genetics LLC of Kaukauna. Wis., and Finca Valparaiso of Guatemala, was Junior Champion of the International Jersey Show. MilkSource Genetics also owned the Reserve Junior Champion Heifer, Milksource Yaelyn-ET, who was Junior Champion of the International Holstein Show.

"A tremendous amount of work, effort and talent throughout the year goes into developing a heifer and getting her ready for the show," says Ann Marie Magnochi, WDE dairy cattle show manager. "The committee saw this award as an opportunity to recognize those exhibitors and breeders who bring elite heifers to Expo."

"In my opinion, this kind of award was long, long overdue," adds WDE Dairy Cattle Exhibitor Committee Chairman Tom Morris. "When you think about the number of heifers being exhibited at the show, the value of those animals and all the work involved, offering some additional recognition is only right. And, judging by what we heard at the show last year, the award is very, very popular."

As part of the award, the owners of the Supreme Champion Heifer receive the W. Terry Howard Memorial Trophy. Howard was a University of Wisconsin-Madison

dairy scientist whose volunteer involvement with the WDE Dairy Cattle Show spanned nearly four decades. After serving as the Holstein breed superintendent for 14 years, he was the overall dairy superintendent for 18 years. He was also a member of the WDE board of directors, the organization's executive committee and numerous other committees. Howard passed away in 2017.



Photo by Cybil Fisher



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ALL IN THE FAMILY, EXPOEDITION

World Dairy Expo is the perfect meeting spot for this Kansas-based dairy family



Cindy Achen prepacks food the family will eat in the barn during Expo. "Everyone loves mom's chilli," she says.

For some families, organizing a family reunion can be a stressful, maybe even painful, undertaking. Among the major challenges are picking a date or dates that fit into everybody's schedule and choosing a location everyone will like.

The Achen family — Craig and Cindy and their 11 children, ages 14 to 31 — has come up with a solution to those planning woes. They make World Dairy Expo a reunion destination of choice.

Home for the Achens is a 3,200-cow commercial dairy and 10,000-head heifer feedlot near the town of Lakin in southwestern Kansas. Three of the kids are still on the farm. Nineteen-year old John handles the feed program and other duties at the feedlot, while Jack, 16, and Joe, 14, are still in high





Several members of the Achen family attended World Dairy Expo in 2018. They are, (left to right): Christy, Cindy, Joseph, Nicholas, Emily and Roxann.

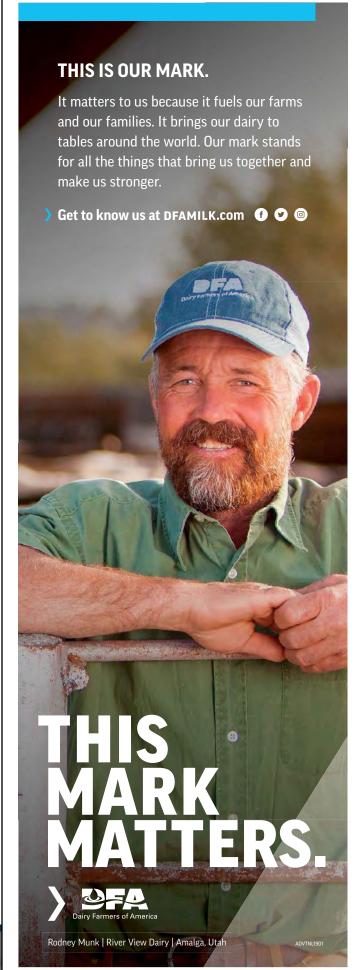
school. Four of the adult siblings - son, Jacob, and daughters Emily, Rachel and Annie (along with their spouses) — are involved with dairies the family owns in Minnesota, South Dakota and Indiana. Two of the kids are in college. Nicholas is at the University of Minnesota; Christy just finished her studies at Utah State University. Rounding out the crew are Roxann, who works as a surgical technician in Brookings, S.D. and Jessica, the oldest, who lives in Australia with her husband, Brad, and their two children.

Distances and a variety of professional and personal obligations make it impossible for all family members to complete the trip to Madison every year. Last year, for example, Craig and John opted to stay home to oversee a major expansion project, while Jessica decided it was too soon to travel with a newborn infant. The year before, with Jacob's wedding scheduled for the week after Expo, the entire family missed the Show.

"It's not set in stone that we'll come every year," Cindy says, "But when it works out, this is absolutely a great place for getting together. We all love cows and the dairy business, and we all have memories of trips here in the past that connect us as a family."

Much of the family's activity at Expo centers around competing in the International Milking Shorthorn Show. Their Cherrywood Milking Shorthorn prefix is well-known and respected in breed circles.

The three oldest kids — Jessica, Emily and Jacob — set the stage for the upcoming generation's participation in Expo breed shows while in college at



the University of Minnesota during the mid- to late-2000s. "They were all on the university's dairy cattle judging team," Cindy says, "So they'd be here for that. But they'd also get together with friends and load up a trailer with cattle and their tack and head to the show. We called them the 'boxcar children.'"

In the following years, many of the younger Achen siblings followed suit and showed Cherrywood animals. Last year, 14-year-old Joseph, the youngest, showed in several classes. "It's always great to see the older kids working with the youngest ones when they're getting ready for the show, showing them the ropes and giving them tips," Cindy says.

Other structured activities at Expo have given the kids opportunities to learn more about dairying and forge new



"We all have memories of trips here in the past that connect us as a family." — Cindy Achen

connections in the industry. Last year, Jack, who is thinking about a career in sales for a feed or genetics company after high school, competed in WDE's Youth Fitting Contest. He earned secondplace honors in the contest's Intermediate Male Division. To make up for missing a week of school, he received an assignment from one of his teachers to visit at least 15 exhibitor booths in the WDF Trade Show and turn in a report on what he learned. "There was a lot to see," he says. "I got a lot better idea of how big the dairy industry is."

Last year, 21-year-old Christy, who recently graduated with a degree in agricultural communications and journalism, worked throughout Expo week as an intern. She also attended the National Dairy Shrine banquet where she

received an educational scholarship. In previous years, Jessica, Emily and Jacob were also scholarship recipients.

As beneficial as such experiences are, the unstructured social activities during the week are the big draw of attending Expo. Cindy looks forward to seeing friends that she and Craig have made in their 30 years of dairying together. "We show Milking Shorthorns, but we have friends who have Holsteins, Guernseys, Brown Swiss and other breeds," she says. "It's great to just walk through the barns and touch base with them."



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Cindy Achen provides helpful guidance as two of the Achen family get a young heifer ready to show.

The older kids also look forward to seeing friends they've made showing at Expo over the years. "It's awesome to have the chance to come back and see the people you interacted with when you were younger and find out what's happening with them and their families," Christy says.

Above all, though, Expo is about getting together with family. Activities range from helping with the show string, grouping up to attend other breed shows in the Coliseum, playing cards in the barn and getting together for meals.

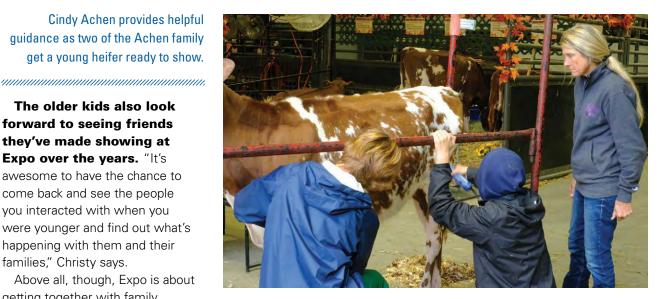
"We try to go out to a nice restaurant once during the week," Cindy says. "I also prepack what we eat in the barn while we're here. Everybody loves mom's chili."

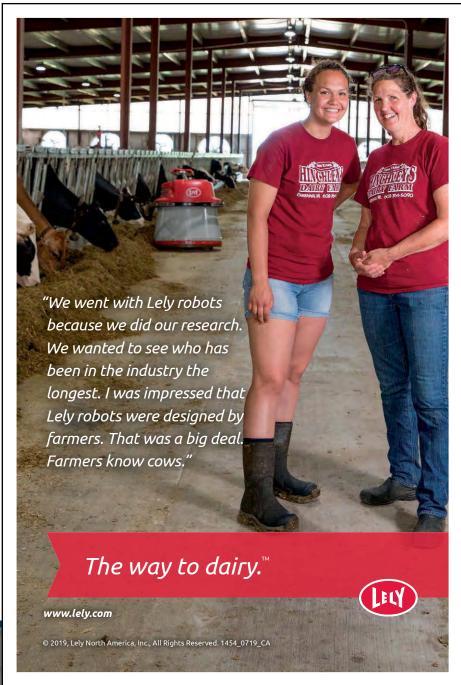
"We're spread out all over now," adds Roxann, who works as a surgical room technician in Brookings, S.D. "We all try to get home for the major holidays like Christmas and Thanksgiving. But there, we're helping out with chores and a lot of the conversations revolve around what's going on with the dairy."

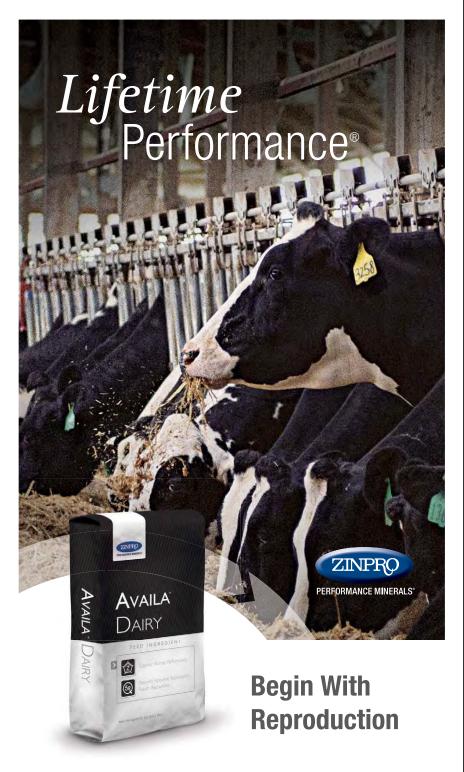
"At Expo, the atmosphere is different. We have more time to reminisce and catch up with each other about what's going on in our lives. And we all like it when mom and dad get together with their friends in the barn and tell all of the stories about what happened in their younger days."

For the full article, scan this QR code with your phone. DairyHerd.com/FamilyReunion









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Rabiee, A. R., I. J. Lean, M. A. Stevenson, and M. T. Socha. 2010. Effects of feeding organic trace minerals on milk production and reproductive performance in lactating dairy cows: A meta-analysis. J. Dairy Sci. 93:4239.

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Expogoers share their top finds from the planet's premier, dairy-specific **Trade Show**

"We're always looking for anything that will make our cows more comfortable. It's helpful to come here and get an idea of things we might want to take a closer look at over time. All the people working in the booths here know where their products are being used out in the countryside. They'll give you suggestions on where to go to talk to other producers who are already using their products. Then, you can go out and see for yourself how these products

are working in the real world. There's nothing like personal contact."

> -Bill Slade. Olin, N.C.



"I'm always on the lookout for things that will simplify our jobs and make us more efficient. You're not hearing just from one local rep about how to get the most out of a particular product. Instead, you can talk to several people from different places and learn what their customers



are doing. You end up with different perspectives." —Johanna Knorr, Morris,

Minn.

"This is the place to be if you're looking for the latest and best in the dairy business. If you're looking for a particular product, you'll often see several companies offering their version of it. You can gather all kinds of information and sit down

and do your comparisons right on the spot. You don't have to spend a lot of time doing searches on the internet or waiting for sales people to stop by the farm."

- Carrie Warmka, Fox Lake, Wis.



"I spent the better part of one day just going to the different booths, and I managed to fill up four bags with flyers, pamphlets and other materials. Things are changing so fast in the dairy business these days. It can be hard to keep up with it all.



When you come to a show like this, you get a pretty good idea of what's going on throughout the industry in a short period of time. It's a pretty amazing event." -Lynn DeForest, Leslie, Mich.

"As producers of a commodity, we're seeing margins getting slimmer and slimmer all the time. The ability to pay help what they're demanding is a struggle in any business, including dairying, and it will continue to be a struggle. So robots are definitely on our radar.

Right now, we're still gathering information that will help us make a good decision." -Tom Walker, Wisconsin Dells, Wis.

"We'll have six to eight weeks every summer where the temperatures are in excess of 35 to 45 degrees Celsius. And for every degree over 35, we're losing roughly one liter of milk per cow. Talking to the people from the different



companies gave us some ideas on how we might adapt some of these fans to fit our situation and what we're looking to build going forward." -Stuart Modra, Gunbower, Australia

For more comments, scan this QR code with your phone or visit **DairyHerd.com/HeardOnTheStreet**





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2019 KNOWLEDGE NOOK SESSIONS

Located in the atrium of the Exhibition Hall, the Knowledge Nook is designed for companies to showcase innovation introduced in the past year.

TUESDAY, OCT. 1

12:30 p.m.

Labor Issues and Animal Welfare: Are Robots Part of the Solution?

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Jouni Pitkaranta, MSC, Founder and Chairman of the Board and Virpi Kurkela, DVM and Veterinary Specialist, 4dBarn Presented by 4dBarn

1:30 p.m.

Essential Microbial Support: Improving Health and Performance with Probiotics

Mike Hutjens, Professor, Department of Animal Sciences, University of Illinois Presented by: Chr. Hansen

WEDNESDAY, OCT. 2

9:30 a.m.

Evolution of Hybrid Alfalfa and What's Next

Sara Hendrickson, Forage Leader, and Chad Staudinger, Regional Sales Manager, Dairyland Seed; Steve Wagner, Alfalfa Plant Breeder, Corteva Agriscience Presented by: Dairyland Seed

10:30 a.m.

Better Haymaking — Greater ROI and Feed Quality for Dairy Operations Through Denser Bales

Curt Hoffman, Crop Packaging Marketing Manager and Jordan Milewski, Crop Preparation Marketing Manager, New Holland Presented by: New Holland 11:30 a.m.

Herd Insights Brought to Life with Augmented Reality

Roxie Muller, Innovation Manager, Nedap Livestock Management Presented by: Nedap Livestock Management

12:30 p.m.

Colostrum for So Many Other Reasons

Rick Dumm, DVM

Presented by: Dairy Tech Inc.

1:30 p.m.

Managing Dairy Crossbreds Health and How to Market Them

Dr. Grant Crawford, Merck Animal Health Presented by: Merck Animal Health



THURSDAY, OCT. 3

9:30 a.m.

Colostrum for So Many Other Reasons

Rick Dumm, DVM Presented by: Dairy Tech Inc.

10:30 a.m.

Estrotect Breeding Indicators - A **New Reproduction Management Tool**

Ky Pohler, Ph.D., Associate Professor, Texas A&M University Presented by: Estrotect

11:30 a.m.

Phixup — An Innovative and Natural Way to Maintain Optimum **Ruminal Conditions**

Rodrigo Araujo de Souza, Ph.D., Business Unit Manager North America, Timab Magnesium USA Presented by: Timab Magnesium USA

12:30 p.m.

Starting Calves with Force — Lifetime Health and Production Begin on Day One

David P. Casper, Technical Services Leader/Dairy Nutritionist, Furst-McNess Company Presented by: Furst-McNess Company

1:30 p.m.

Acoustic Pulse Technology — Increasing Milk Yield and Treating **Mastitis Free of Antibiotics**

Professor Gabriel Leitner, Ph.D., Chief Science Officer, Armenta Presented by: Armenta

FRIDAY, OCT. 4

Colostrum for So Many Other Reasons

Rick Dumm, DVM Presented by: Dairy Tech Inc.

10:30 a.m.

Starting Calves with Force — Lifetime Health and Production Begin on Day One

David P. Casper, Technical Services Leader/Dairy Nutritionist, Furst-McNess Company Presented by: Furst-McNess Company

11:30 a.m.

Microbial Inoculation Improves Silage Aerobic Stability after Short-Term Fermentation: Fact or Fiction?

Luiz Ferraretto, Associate Professor of Livestock Nutrition, Department of Animal Sciences, University of Florida Presented by: Chr. Hanson

12:30 p.m.

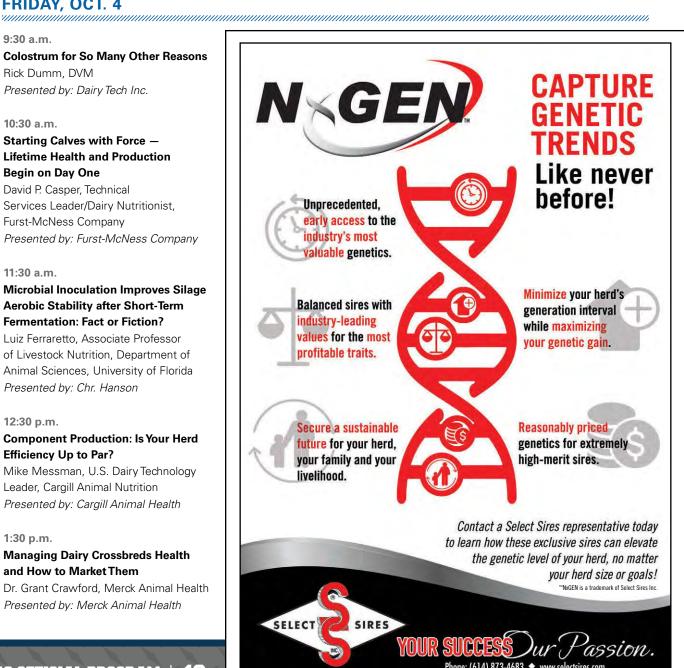
Component Production: Is Your Herd Efficiency Up to Par?

Mike Messman, U.S. Dairy Technology Leader, Cargill Animal Nutrition Presented by: Cargill Animal Health

1:30 p.m.

Managing Dairy Crossbreds Health and How to Market Them

Dr. Grant Crawford, Merck Animal Health Presented by: Merck Animal Health





Students and coaches from a small school in Ontario give a recap of their 2018, five-day road trip to Expo and the International Post-Secondary Dairy Cattle Judging Contest.

Competing in one of the youth dairy cattle judging events held at World Dairy Expo gives young people looking to develop careers in the dairy industry a chance to pit their skills and knowledge against top-flight peers from throughout the U.S., Canada and around the globe. Plus kids get the chance to sample all WDE has to offer.

The two teams (four members each) representing the University of Guelph — Ridgetown Campus in Ridgetown, Ontario in the International Post-Secondary Dairy Cattle Judging Contest made the most of their World Dairy Expo experience in 2018.

Accompanied by coach Gail Carpenter, an assistant professor of dairy nutrition management, and assistant coach Amber Sayers, manager of day-to-day activities at the campus dairy

barn, the teams left Ridgetown at 4:00 a.m. on Friday morning, the week before Expo. Total drive time to Madison is around eight hours, but stops at two high-profile dairies in northern Illinois — Golden Oaks Farms and Luck-F Holsteins — for practice judging sessions added several hours to the journey.

For team member Sam Johnston, the stops were a highlight. "I had heard about both of these places and dreamed about being able to visit them and seeing their hightype animals and show cows," says

Johnston, who is from a 57-cow dairy in southwestern Ontario.

"Eating at American restaurants we don't have back home was a really big deal."

The day's activities weren't finished when the team arrived in Madison late Friday afternoon. Following a practice session of oral reasons at the hotel, the teams went out to dinner at a local restaurant. "We ended up at Cracker Barrel on Friday night and Olive Garden on Saturday night," Carpenter says. "Eating at American restaurants we don't have back home was a really big deal."

On Saturday and Sunday, the teams joined teams from other schools for tours of four dairies in southeastern Wisconsin. At each stop, teams participated in practice judging sessions and learned about the management of each operation. Visits to the Hoard's Dairyman Farm, the National Dairy Shrine and Nasco in Fort Atkinson, Wis., rounded out the weekend activities.

Monday was competition day.









Judging team members got to take in all Expo has to offer, from visiting with cattle exhibitor friends to shopping at the Purple Cow Gift Shop.

Team members spent the morning in the Showring judging cow and heifer classes and submitting their placings. In the afternoon, they met individually with judges to give oral reasons, justifying their placements.

Johnston described the competition as intense but felt like he and his teammates had been well-prepared by their coaches. "One of the reasons to be on a judging team is that you get more confidence talking in front of people that you don't know," he says. "I've never had a problem with that, but I've gotten better at it by being on the judging team. It's something that will help me my entire life."

At the awards banquet on Monday night, the two Ridgetown teams learned they had placed eighth and ninth (out of sixteen teams) in the Post-Secondary contest. Team member Emily Unger was satisfied with the results. "You'd always like to do better, of course," Unger says. "But I really felt everybody did their best. There was a lot of pressure during the day, and I was nervous. But when it was over, I felt like I had learned a lot. And I had a lot of fun."

Unger's response brought a smile and an approving nod from her



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coach. "I'm very competitive, and I want us to win," says Carpenter, who competed in the National Intercollegiate Dairy Cattle Judging Contest at Expo as a member of the Michigan State University team in 2007. "But it's like we're always telling the kids: You're really competing against yourself. What counts is whether you feel like you've improved as a person and put your best effort forward. If you can tell people that you competed at World Dairy Expo and that you did your best, you're a winner."

With the pressure of the competition behind them, the Ridgetown team members were free to explore Expo on Tuesday. Shopping at the Purple Cow Gift Shop, having their pictures taken in front of Expo icons like Miss

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Madison and the giant globe and grabbing a grilled cheese sandwich and milkshake at the UW-Madison Cheese Stand were on the agenda for many team members. Most of the students also visited exhibits in the World Dairy Expo Trade Show.

By far, though, the real "must do" activities were touring the cattle

Miss Madison receives lots of love from members of the Ridgetown judging team.

strings in the New Holland Pavilions and attending breed shows in the Coliseum. "We got to see a lot of cows from breeds that we don't see much of in Canada," Unger says. "The quality of the cattle here was unbelievable."

The teams left Expo late Tuesday afternoon for the long drive home. Carpenter was able to catch snippets of her students' reactions to the Expo in the van.

"They were excited," she says.
"They talked about the competition and how well they worked as a team. They felt good about it. They also talked about the people they met, the stuff they got, the cows they saw and how much fun they had. Overall, I'd say it was a pretty successful outing."



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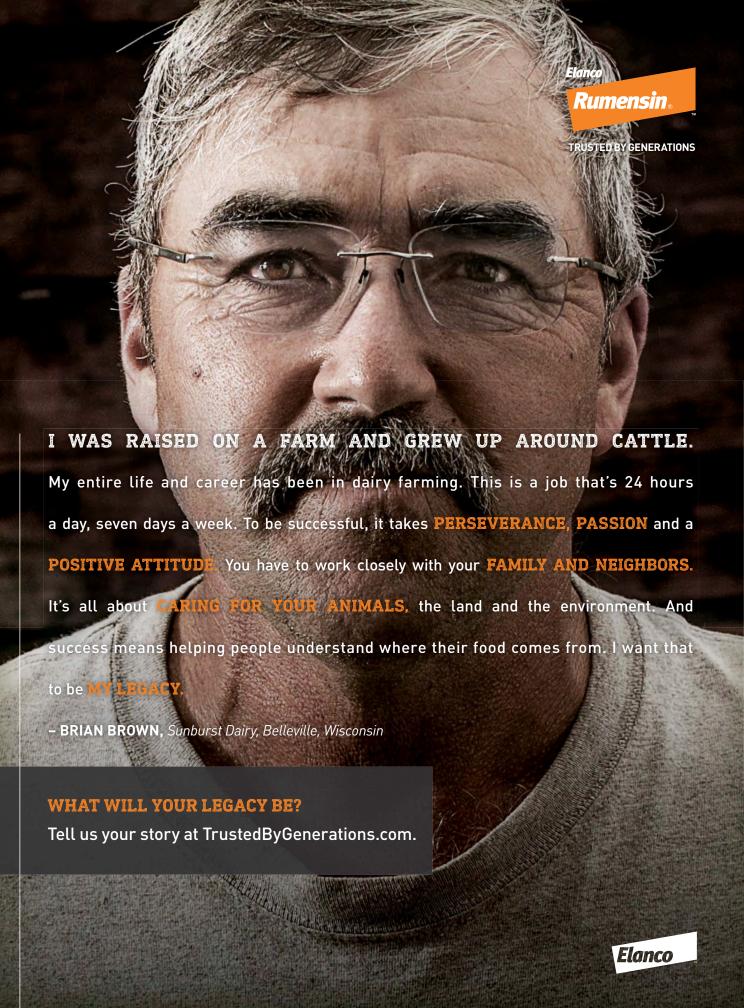
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- 1. Elanco Animal Health. Data on file.
- 2. Elanco Animal Health. Data on file.
- 3. Elanco Animal Health. Data on file.
- 4. McDougald LR, Hofacre C, Mathis G, et al. Chemotherapy of coccidiosis. In: Long PL, editor. The biology of the coccidia. Baltimore, MD: University Park Press;1980:373-427.
- 5. Long PL, Jeffers TK. Studies on the stage of action of ionophorous antibiotics against Eimeria. J Parasitol. 1982;68(3):363-71.



WHERE ARE THEY NOW?

Highly successful professionals in today's dairy industry reflect on how dairy cattle judging played a role in shaping their careers.



Tina Vilter-McDonald, Owner, TVM Marketing, Hartland, Wis.

Being on the dairy cattle judging team at South Dakota State University helped Tina sharpen the skills she uses to run a small communications firm serving mostly agricultural- and dairy-oriented clients. "I learned how to speak clearly and organize

my thoughts," says Tina, who was High Individual in the 1989 National Intercollegiate Dairy Cattle Judging Contest. "It also helped me become confident that I could operate in high-pressure situations."



Brian Behnke, Business Manager, St. Jacobs Animal Breeding Corp. (a division of ABS Global), DeForest, Wis.

Being High Individual in the 1988 National Intercollegiate Dairy Cattle Judging Contest gave Brian a leg up in landing a job. "Employers want to hire top individuals, people who can think on their

feet and work under pressure" says Brian, a member of the University of Wisconsin-Madison judging team. "A lot of them were on judging teams themselves and know how much work it takes."



Laura Finley, Owner, Piper View Designs, Farley, Iowa

On the judging team at the University of Wisconsin-Madison, Laura developed an appreciation for the importance of time management. "You have to commit a lot of time to team activities when you're involved in judging," says Finley, who was High

Individual in the 2014 National Intercollegiate Dairy Cattle Judging Contest. "You learn how to prioritize and get everything done. It's something that will help you throughout your life."



Gail Carpenter, Asst. Professor of Dairy Nutrition, University of Guelph-Ridgetown Campus, Ridgetown, Ontario

Judging activities were a confidence builder for Gail, competing at Expo as a member of the Michigan 4-H team and Michigan State University's Intercollegiate team. "When I started, I was shy,"

says Gail, who coaches the University of Guelph-Ridgetown Campus' post-secondary teams. "Speaking in front of strangers got me out of my shell. It was hard, but I stuck with it, and I got better at it."



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GOING HIGH-TECH





Collecting, tabulating and recording the information necessary for determining team and individual winners in the youth dairy cattle judging contests is a large task.

Last year, 235 young people representing 61 teams from the U.S., Canada, and Holland took part. Depending on the contest, each of the participants placed 10 to 12 cow and heifer classes.

In previous years, participants would turn in a hand-marked placing card for each class to Expo volunteers, who would enter the placings into a computer. "The old system wasn't broken, but it wasn't very efficient," savs Laurie Breuch. WDE dairy cattle show coordinator. "And there was always the potential for human error."

In 2018 organizers began a new system using scanners and computer tablets. Now each participant receives a lanyard with a plastic ear tag with a barcode containing the contestant's individual identification number. When they've finished judging each class, participants go to one of 40 tablets placed around the Showring and scan in their ID number, select the breed and class, key in their placings and hit submit.

"It's much more efficient," Breuch says. "Plus it frees up volunteers who were doing data entry to do other things."

The system was well-received by participants and coaches. "There was a bit of a learning curve," Breuch says, "After they went through one or two classes, kids got the hang of it and things went smoothly."

2019

WORLD DAIRY **EXPO JUDGES**

World Dairy Expo welcomes an elite slate of judges tasked to evaluate the finest dairy cattle in North America at the 53rd annual event in Madison, Wis., Oct. 1 through Oct. 5. These 16 individuals will stand in the center of the Showring placing nearly 2,500 cattle throughout the five-day show. Following is a brief biography of each judge.





INTERNATIONAL AYRSHIRE SHOW

OFFICIAL JUDGE:

Phillip Topp, Botkins, Ohio

Phillip Topp of Botkins, Ohio, owns 40 registered cows consisting of a variety of breeds along with a fabricating maintenance business. Topp has exhibited champions at the Ohio State Fair, North American International Livestock Exposition and World Dairy Expo, including the 1999 Grand Champion of the International Brown Swiss Show. In 2016, he was awarded the Ohio Young Breeder Award. He has judged county fairs, district shows and state fairs in nine states plus the Peru International Brown Swiss Show and the International Jersey Show at World Dairy Expo. Topp and his wife, Carrie, have three children, Aubree, 13, Aiden, 11, and Alaina, 9.

ASSOCIATE JUDGE:

Matt Hawbaker, Clear Spring, Md.

Matt Hawbaker lives in Clear Spring, Md., with his wife, Sarah, and their daughters, Kenley, 6, and Hadley, 2. After a 10-year career as a professional dairy cattle fitter working with top farms such as Windy Knoll View Holsteins, Savage-Leigh Holsteins, Waverly Farm Jerseys and MD-Hillbrook Sales and Services, Hawbaker opened Interstate Heifer Care in 2013. Entrusted with elite show heifers owned by dairy enthusiasts from around the globe, he has worked with and housed numerous All-Americans and show champions. Hawbaker has also judged the Delaware State Fair, Maryland State Jersey Show, Georgia All-Breeds Heifer Show and county fairs.









INTERNATIONAL BROWN SWISS SHOW

OFFICIAL JUDGE:

Joe Sparrow, Owenton, Ky.

Joe Sparrow is a dairy nutritionist for CPC Commodities and co-owner of Fairdale Farms LLC with his brothers, Ben and Kirby, and father, Richard. Fairdale Farms is home to 40 Brown Swiss cows and has produced a World Dairy Expo Intermediate Champion, North American International Livestock Exposition Supreme Champion and more than 30 All-American Nominees. Sparrow served as the associate judge of the 2013 International Brown Swiss Show and has officiated the Eastern and Northeastern National Brown Swiss Shows. the Dominican Republic National Show and multiple state fairs. Sparrow resides in Owenton, Ky., with his wife, Angela, and children, Archie, 4, and Wylie, 1.

ASSOCIATE JUDGE:

Jeff Core, Salvisa, Ky.

Jeff Core is the owner and operator of Keightley & Core Jerseys in Salvisa, Ky. Core has bred, owned and exhibited two national champions at the All-American Jersey Show, an Intermediate and Reserve Grand Champion Jersey at World Dairy Expo and an Intermediate Champion of the International Holstein Show. He has won Premier Breeder and Exhibitor banners at WDE and beyond. Keightley & Core Jerseys is home to 90 cows and production ranks in the top 10 nationally for their size. Core has judged the Western National Show and the All-American Jersey Show, the Summer Show in Ontario and the National Show in Mexico. Core and his wife. Alta Mae, have three children and two grandchildren.







INTERNATIONAL GUERNSEY SHOW

OFFICIAL JUDGE: **Seth Johnson, Tunbridge, Vt.**

Seth Johnson is an area sales manager with Phibro Animal Health. He previously served as the executive secretary of the American Guernsey Association, where he also helped manage sales during his 18-year tenure with the association. Johnson has evaluated cattle at the Canadian National Show, the Eastern States Exposition, the All-American Show, and the Ohio State Fair along with serving as an All-American judge for the Guernsey, Milking Shorthorn and Ayrshire breeds. Today, Johnson lives in Tunbridge, Vt., with his wife, Shannon, and their children, Zachary and Sylvia, where they raise a few Guernseys and Ayrshires for the kids to show.

ASSOCIATE JUDGE: **Jon Lantz, Ellsworth, Wis.**

An agronomist for Countryside Cooperative, Jon Lantz is serving as the 2019 associate judge of the International Guernsey Show. Lantz's herd of Guernseys consists of 50 cows with a rolling herd average of 22,000 lb. of milk with 1,000 lb. of fat and 800 lb. of protein. Along with a World Dairy Expo Intermediate Champion of the International Guernsey Show, his herd has consisted of many All-American winners and the world-record holder for milk, fat and protein production, Breezy Point P Racer. Lantz has previously judged the Guernsey show at the Ohio, Missouri, Illinois and Iowa state fairs, as well as the Big "E." He and his wife Jamie reside in Ellsworth, Wis., and have three grown children, Jens, Anders and Maren.











INTERNATIONAL HOLSTEIN SHOW

OFFICIAL JUDGE:

Chad Ryan, Fond du Lac, Wis.

Chad Ryan resides in Fond du Lac, Wis., with his wife, Amy, and sons, Dylan, 11, and Cameron, 10. There he assists his parents with Ryan-Vu Holsteins, a 100-cow Registered Holstein herd. Ryan and his family have bred or developed 30 All-American, Junior All-American and All-Canadian nominees, three of which became All-American. They were Premier Breeder twice at the Wisconsin Championship Show. Ryan is a former director of the Wisconsin Holstein Association Board, currently serves on the World Dairy Expo Dairy Cattle Exhibitor Committee and recently joined the WDE Board of Directors. He also works with elite show cattle and genetic offerings at sales and shows. Ryan has judged the International Red & White and Junior Holstein Shows, the Northeast Spring National Holstein Show, various Midwest National Shows and the All-American Jersev and Junior Red & White Shows.

ASSOCIATE JUDGE: Lynn Harbaugh, Marion, Wis.

Lynn Harbaugh of Marion, Wis., is no stranger to the colored shavings. This Area Sales Representative for CentralStar Cooperative, Inc. has placed cattle at World Dairy Expo six times previously, including Ayrshires, Guernseys, Junior Holsteins, Milking Shorthorns and Red & Whites. Harbaugh has also judged cattle at the Royal Agricultural Winter Fair in Canada and a National Holstein Show in Mexico in addition to state and national shows across the county. As an exhibitor and breeder, he has shown Expo champions and class winners and worked with nearly 30 All-American or Junior All-American nominees. In 2018, Harbaugh, along with his wife, Sara, and children, Jacob, 14, Logan, 12, and Madison, 8, exhibited three All-American and eight Junior All-American nominees across six breeds. The Harbaugh's winning show cattle are part of a small, elite herd of Registered Holsteins that are bred under the Bella-View prefix.



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INTERNATIONAL JUNIOR HOLSTEIN SHOW

OFFICIAL JUDGE:

Eddie Bue, Kaukauna, Wis.

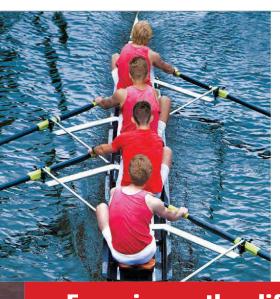
Eddie Bue works with an elite herd of show cattle as the general manger of MilkSource Genetics in Kaukauna, Wis. Under his care are Expo greats, Musqie Iatola Martha, Weeks Dundee Anika and Co-Vale Dempsey Dina-ET. Bue and his wife, Mandi, previously owned and operated Legendholm Holsteins in Hixton, Wis., and have worked with and cared for many Showring veterans. Starting out as a professional dairy cattle fitter in the U.S., Canada, Mexico and Colombia, Bue later worked as the herdsman at Stranshome Holsteins in Owatonna, Minn. and Ludwig Farms of Fithian, III., before starting Legendholm. In 2005, he was recognized at WDE as the Klussendorf-Mackenzie Award winner. Bue has stood in World Dairy Expo's Showring previously as the associate judge of the 2015 International Holstein Show and has also evaluated cattle in showrings across the U.S., Australia and Mexico.

ASSOCIATE JUDGE: **Brandon Ferry, Hilbert, Wis.**

Brandon Ferry resides in Hilbert, Wis., with his wife, Shianne, and their two children, Bryleigh and Ryker, where together they own and operate Fer-Crest Farms. Ferry's 40-acre farm is home to 70 milking Registered Holsteins and Jerseys. A 2008 graduate of the University of Wisconsin-Madison farm and industry short course with a degree in Dairy Herd Management, Ferry worked as a dairy cattle fitter across North America before starting the farm in 2010. The Ferrys, along with their partner the Bournes, bred and developed TJ Classic Minister Venus-ET before selling her prior to her title as the 2014 Supreme Champion of World Dairy Expo. Ferry has evaluated cattle at the National Jersey Jug, the Midwest Red & White Spring Show, the Wisconsin State Jersey Show and the Kentucky State Fair in the U.S. Internationally, Ferry has also judged cattle at the National Jersey Show in Bogota, Colombia.







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INTERNATIONAL JERSEY SHOW

OFFICIAL JUDGE:

Jack Lomeo Jr., Sylvan Beach, N.Y.

Jack Lomeo Jr. resides in Sylvan Beach, N.Y., where he works as a Territory Sales Manager for STgenetics. Lomeo is also the owner of Purple Fever Cattle Co. and owns 40 animals, representing all seven breeds, that are housed in three states and Canada, most of which are leased to young 4-H members. Lomeo has bought and sold numerous All-American and All-Canadian nominees along with locating show calves for many youth who have a commercial dairy background. He has played a role in many nominations in both the All-American and All-Canadian contests. Lomeo previously served as the 2017 official judge and 2014 associate judge of the International Milking Shorthorn Show. Beyond judging at WDE, Lomeo has evaluated dairy cattle at state shows across the Northeast. various regional shows in the U.S., the Royal Agricultural Winter Fair and is preparing for a Jersey show in Colombia this coming year.

ASSOCIATE JUDGE:

Brent Walker, Guelph, Ontario, Canada

Brent Walker, part-owner in Walkerbrae Farms and Brubacher Sales, lives in Guelph, Ontario, Canada, with his wife, Robin, and children, Alexandria and James, Walker has bred and owned numerous Holstein, Jersev and Brown Swiss All-American and All-Canadian award winners while his farm currently features 130 Holsteins and Jerseys. Along with the dairy cattle, Walker's farm is home to 100 beef cattle, 10,000 turkeys and Percheron draft horses. While a first-time judge on the colored shavings, Walker has placed cattle at International Dairy Week in 2019, 2010 and 1996, the Royal Agricultural Winter Fair in 2017, 2000 and 1998, the Sydney Royal in 2015 and 1996, and many state shows in the U.S.



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INTERNATIONAL **MILKING** SHORTHORN

OFFICIAL JUDGE:

Keith Topp, Botkins, Ohio

Keith Topp is a fabrication welder and a partner in Topp-View Farms. Owned with Topp's brother. Phillip, Topp-View is home to a 35-head herd composed of all seven major dairy breeds. Topp-View has exhibited several champions at World Dairy Expo. including the 1999 Grand Champion Brown Swiss, the 2005 Reserve Grand Champion Brown Swiss and the 2013 Brown Swiss and Milking Shorthorn Junior Champions. Topp stands center ring this year with an impressive judging career resume including the 2013 International Ayrshire Show, 2017 International Brown Swiss Show, 2017 Jersey Jug Futurity and 2019 Midwest Spring Holstein Show and numerous state and local shows. Topp lives in Botkins, Ohio with his wife, Kindra, and their children, Keaton and Kinley.

ASSOCIATE JUDGE:

Clark Morgan, Urbana, Ohio

The associate judge of the International Milking Shorthorn Show is Clark Morgan, owner of Morgan's Jerseys. The herd is composed of 15 milking Jerseys that have an average classification score of 92.6%. Morgan's Jerseys also houses 15 to 20 Jersey heifers. Morgan exhibits at various state and national Jersey shows and has bred and exhibited numerous All-Americans including an Ohio State Fair Grand Champion and the Reserve Senior Champion at the All-American Jersev Show held during the North American International Livestock Exposition in Louisville, Ky. He has traveled Ohio serving as the judge for local shows and resides in Urbana, Ohio, with his wife, Alisha, and son, Jake.

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INTERNATIONAL RED & WHITE SHOW

OFFICIAL JUDGE:

Jamie Black, Batavia, N.Y.

Jamie Black of Batavia, N.Y. has spent his life surrounded by cattle. Growing up at Montdale Holsteins in eastern Ontario, Canada, Black now works at Oakfield Corners Dairy where he cares for hightype cattle. He also owns Opportunity Holsteins and Jerseys, which is made up of about 70 animals. Black has played a part in developing numerous All-American and All-Canadian Nominees in both the Holstein and Jersey breeds throughout his career. He is no stranger to judging cattle and has evaluated Holsteins at the Royal Agricultural Winter Fair, the Northeastern Fall and Eastern National Shows and the Quebec and Ontario Spring Shows. Black has also traveled internationally to judge in Brazil, Argentina and South Korea.

ASSOCIATE JUDGE: Pat Lundy, Granville, N.Y.

Serving as the associate judge of the 2019 International Red & White Show is Patrick Lundy. Lundy resides in Granville, N.Y. where he is the part owner of Luncrest Farm LLC, a 200-cow Registered Holstein farm. After completing an agriculture business degree at SUNY-Cobleskill, he worked as a full-time dairy cattle fitter for eight years. While doing this, he had the opportunity to prepare cattle for shows and sales in 10 different countries. Lundy has been a part-owner of more than 10 All-American Nominees and last year, the farm bred two All-American and All-Canadian Nominees. Over the past four years, the team at Luncrest Farm has bred or owned more than 25 All-New-York Nominees. Lundy has placed cattle at various county, regional and state shows throughout the Northeast, including the Maryland Spring Show.

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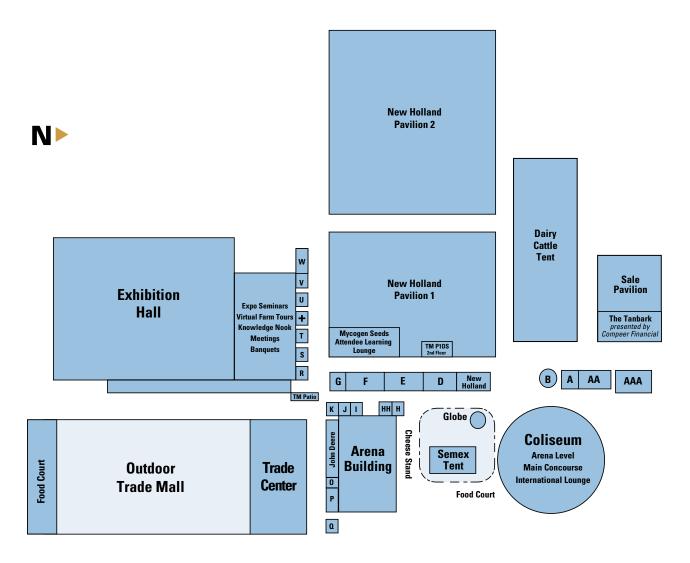
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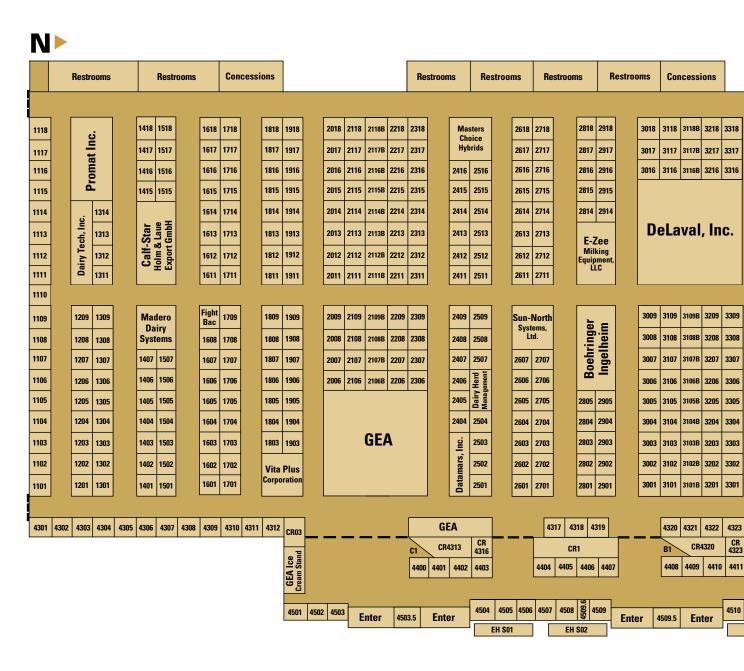


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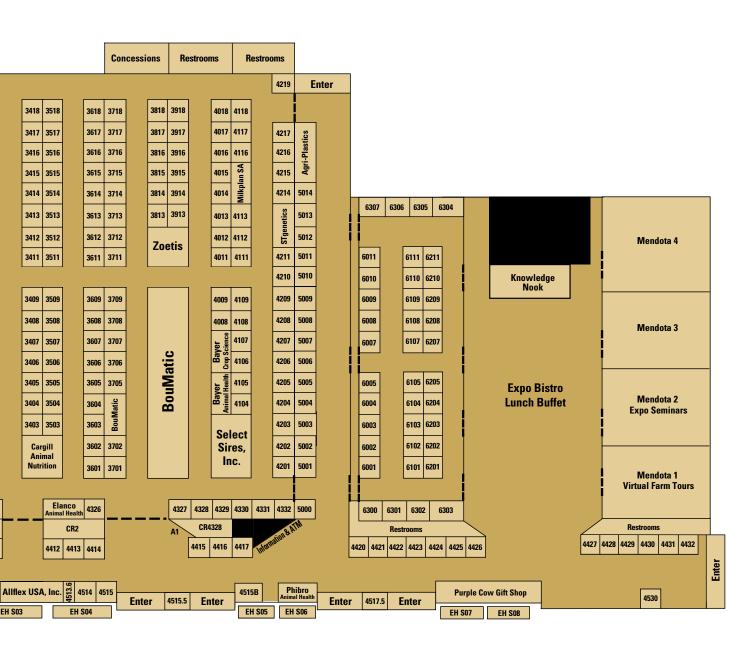
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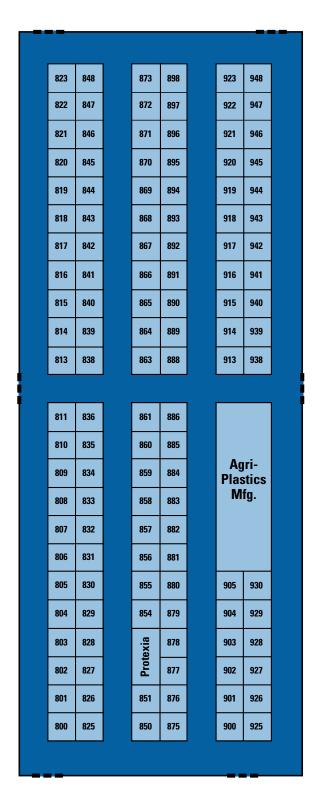
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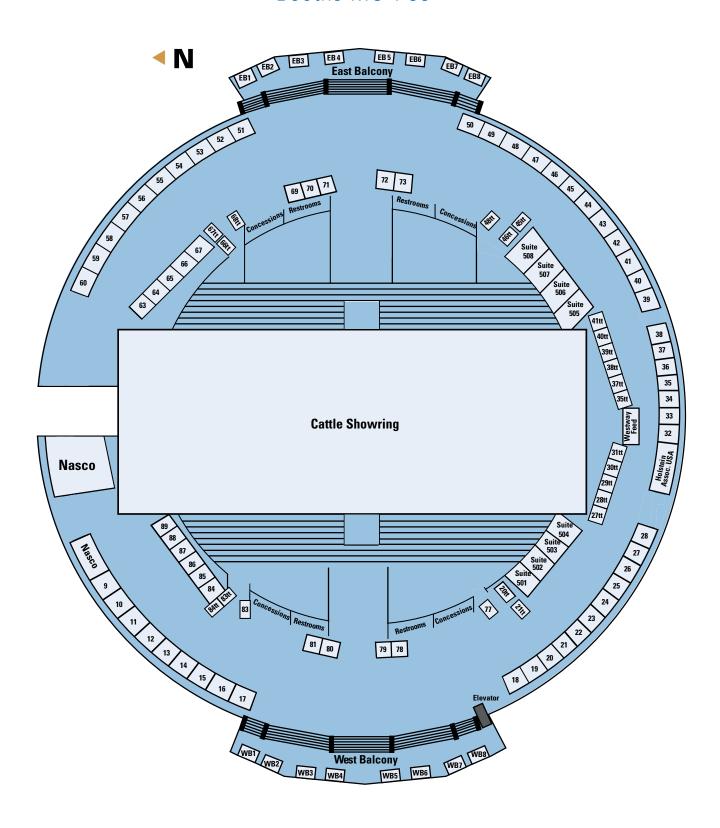
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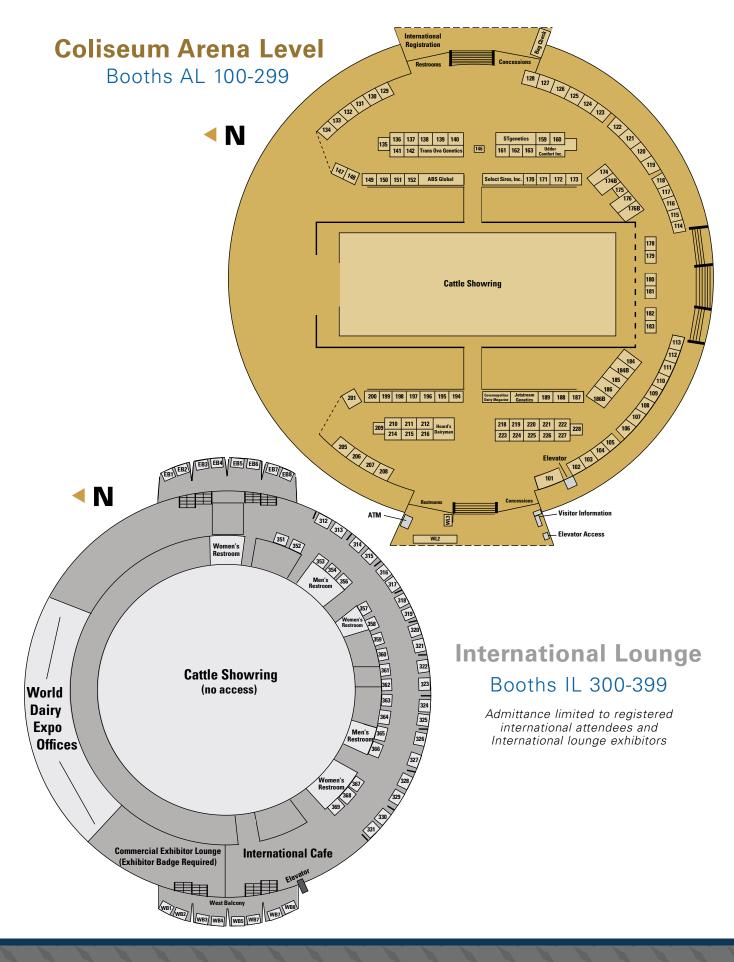
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RIGHT TOOLS, RIGHT MINDSET

Winners from the 2018 Youth Fitting Contest share their thoughts on what it takes to be the best

Investing in good equipment and maintaining it in tip-top condition are absolute musts for getting cows properly fitted for an appearance in the Showring, say senior division winners in the World Dairy Expo Youth Fitting Contest. But they're quick to add that having a passion for what you do, being willing to learn from others and practicing as often as possible are equally important.

"If you don't have proper equipment, it's hard to get everything looking just the way you want it," says 19-year-old Grant Fremstad of Westby, Wis. He captured first place honors in the contest's Senior Male Division in 2018 and also notched a win in the Intermediate Division in 2015. "It's absolutely critical," he says.

uses on the top line and belly hair, Grant's basic equipment list includes large clippers for working on the body, head and legs, smaller clippers for touching up legs and small udder clippers. "For the udder clippers, I use a 50-blade model to make sure that I don't leave any hair on the bag," he says. "You want to get it looking skin-

Along with the blower he

Purchasing good equipment is only one part of the battle, Grant emphasizes. Along with

tight with the veins popping."

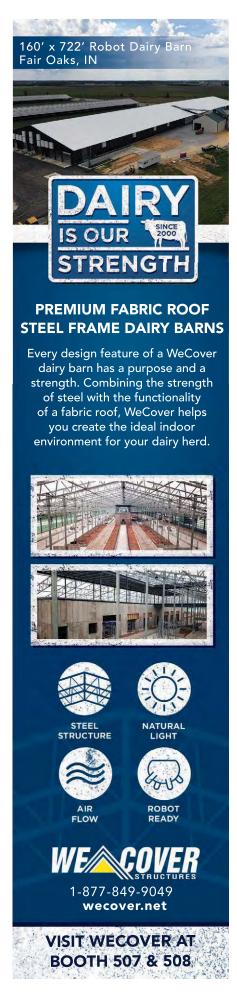


Grant Fremstad used the right tools to win first place in the Senior Male Division last year.

frequently sharpening blades on a grinding wheel, he sends his clippers to a professional service technician several times a year for a complete check. "Every time I begin working on an animal, I want to know that my equipment is working just right," he says. "You can't cut any corners and expect to do well when fitting an animal."

Beyond equipment and maintenance, putting yourself in a position to learn from experienced fitters is another key to polishing skills.

"I was lucky when I was younger," Grant says. "We'd hire Brandon Ferry to clip cows



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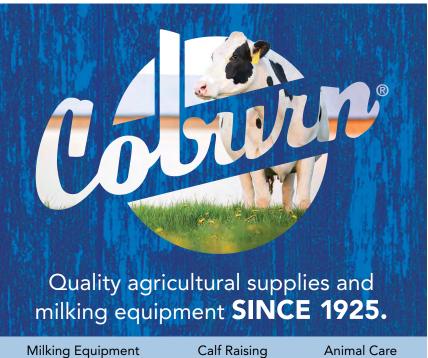
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Lisa Cramer, from Germany, took top honors in the Senior Female Division in 2018.

on our farm. He'd show me what to do and what not to do. I learned a lot from him. I also watch other fitters every chance I get. I hope to learn something new every day. My goal is to be one of the best."

Grant is always on the lookout for opportunities to practice and polish his craft. In the summer before his winning effort in the 2018 WDE contest, he spent just three days at home. The rest of his time was spent fitting at a variety of events, state and local fairs and breed association shows. in Wisconsin, Minnesota, Illinois and Iowa. "You have to stay at it," he says. "It will take a while. But eventually, if you keep focused, good things will come your way."

Like Grant, 20-year-old Lisa Cramer places a high priority on using good equipment and keeping it in top working order. In last year's WDE contest, Cramer, who hails from Uplengen, Germany, captured top honors in the Senior Female Division. "If your equipment is not working just right, you won't be able to do what you want to do," she says. "Also, the equipment is a big investment. You want it to last a long time. You have to take care of it the right way."

Lisa is a stickler for keeping equipment well-organized while working. Whenever she's done using a piece of equipment, she immediately puts it back right where she found it. "Sometimes at a show, you have to work

"If you have to stop and take time to look around for something you misplaced, it will slow you down. Then, you will be under more pressure, and you won't be able to do the best job."

really fast," she explains.

She advises young fitters just getting started to take advantage of learning opportunities whenever they present themselves. Attending fitting workshops organized by a local cattle

breeding company when she was in her early teens gave her a good idea of fitting basics. But informal learning opportunities were equally beneficial. "Whenever I'm working with other fitters, I watch to see how they do things," she says. "Then I'll try some of those things myself to see if they fit in my

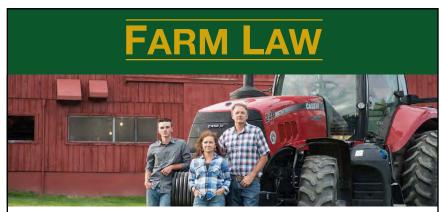
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DairyHerd.com/Fitting



system. Sometimes they work, sometimes they don't, but trying things is how you get better."

More than anything, Lisa says, becoming a top-flight dairy cattle fitter requires developing the right attitude. "You can't get too proud of yourself," she says. "Once you start thinking you are the best, you stop getting better. If you stay humble and keep things in perspective, you are more likely to look at others and see where you might improve."



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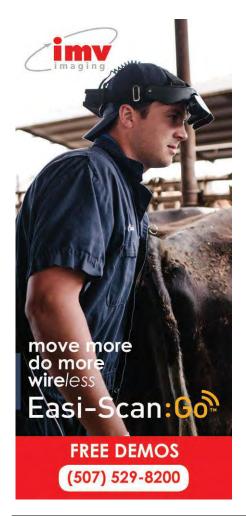
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