



They stick to the reproductive basics

Cow people committed to cow care have created the culture to achieve reproductive success on these farms. It also helped them win top honors in the Dairy Cattle Reproduction Council competition.

IT'S about doing the little things well. That is what you will learn after reading comments from the top dairy farm managers who won this year's Dairy Cattle Reproduction Council awards competition.

While attention to detail has remained steadfast, what has changed since the inception of this contest nearly a decade ago is the level of competition. In those early contests, pregnancy rates (PR) in the high 20s would have earned Platinum honors. This year, Platinum level herds ranged from 32 to 39 percent. All 24 award winning herds (listed on page 733) are above 26 percent PR. For additional coverage about each farm, go to www.hoards.com/E_reproduction.

What is your voluntary waiting period?

Ayers: Our voluntary waiting period (VWP) has been 63 days for the last eight years. In May, we upped it to 70 days. The better we do on first service, the higher the percent of cows with short lactations (285 to 290 days). In the future, we may increase our VWP another week if needed.

Our VWP is 360 days on heifers. At that point, we tail chalk and observe them on a daily basis. If a heifer doesn't show heat by 375 days in age, she is given Lutalyse (prostaglandin). If still no heat by 382 days, heifers are given GnRH and a CIDR. Heifers are then bred the following week so all heifers are serviced by 398 days of age.

Burns: We have a 69- to 75-day VWP. This date does not differ except if cows had metritis, a displaced abomasum or gave birth to twins. Heifers are serviced based upon weight and size, but nothing is bred before 13 months of age. On both heifers and cows, we cull less adequate animals prior to entering the breeding pool.

Collins: We begin breeding at 70 DIM, which is the same for all lactations. We breed heifers at 13 months, as long as height and body condition look good and there are no other problems.

Holmes: At 68 DIM, any cow that comes in a good heat can be bred. A standardized voluntary

waiting period makes it easier for the people who do the breeding. Heifers are bred at 13 months with smaller framed heifers started at 14 months.

Kloppe: Our voluntary waiting period is 55 days postpartum for all lactating cows. We believe that an early attempt needs to be made to breed the cows as the longer the cow is open, the more loss you incur. We breed heifers at 14 months of age, as long as they are healthy and of the appropriate size.

Schilling: We use a 68-day VWP for cherry picked heats, but most cows are bred with an ovsynch first service between 80 and 86 DIM. We have seen positive results in our conception rates and peak milk by raising our VWP for our ovsynch from 60 to 80 days. Virgin heifers are bred starting at 13 months of age.

Heifers are entered in the breeding pen at 13 months of age and are bred by visual inspection of Estroject patched by the Genex team. Most heifers are allowed to go through one estrous cycle before being bred starting at 13 months of age. Heifers are ultrasounded at 28 days postinsemination, and if found open with a corpus luteum, are given Lutalyse.

How are cows bred?

Ayers: We changed in April 2014 from pre-synch 14/14/ovsynch to PG-3-G (cows) and PG-4-G (first-lactation heifers). All cows that are not identified as do not breed (DNB) are run through the synch programs. We gained 5 to 8 percent in conception rate overall on first-service conception with the change. It works well for us as we can start it later since it is only a 20-day long protocol. We do not heat detect cows.

Burns: Visual observations are done by everyone on farm including those assigned to the task. We utilize a timed A.I. program. Overall, 73 percent are bred on programmed breeding (ovsynch/resynch) and the conception rate has been 49 percent over the past 12 months. The remaining 27 percent are bred on standing heats with a conception rate of 49 percent for the past 12 months.

Collins: All cows and heifers are chalked dai-

ly, and Select Sires walks through all breeding groups on a daily basis. If a cow comes into heat right around 70 DIM, they will breed it, and any cows on the timed list can get bred if they show heat before Thursday.

Conception rates are 50 percent on timed A.I. (77 percent of breedings) and 46 percent on chalk/standing (23 percent of breedings).

Holmes: All cows are painted as soon as they freshen using Genex Reveal Paint. They are "walked" once daily and are visually observed for heats (while the cows are restrained in headlocks) by Genex A.I. technician, Tim Heiring.

If cows are not bred after the second Lutalyse dose, we will start them on a presynch program so all cows have semen around 90 DIM.

The conception rates are as follows: standing heat, 48 percent; paint, 47 percent; double breeding, 62 percent; presynch, 55 percent; resynch-ovsynch, 51 percent; and breeding after the second Lutalyse, 47 percent.

Kloppe: We breed primarily on standing heats, using Estroject patches as a heat detection aid. Cows are observed twice each day for 15-minute intervals. Once daily, we compare the heat list to the stickers on herdmates to make sure they are still in place and to observe any changes.

The method has been successful for the past 13 years. In summer 2015, we added the DeLaval Alpro activity monitor system to our operation and are eager to learn how it may enhance our success.

Any cow that is not seen in heat before 60 days in milk is enrolled in a synch program that includes two doses of prostaglandin 14 days apart. Those cows are bred 6 to 10 hours after standing heat. If a cow does not come into heat, she is checked by the veterinarian to determine if a cyst, CL, or follicle can be found. If a cyst or follicles are found, GnRH is administered followed by prostaglandin seven days later. However, if CLs are found, only prostaglandin is administered. We recently started using ultrasound and have observed an improvement in pregnancy rates.



"Just because you do a protocol with 100 percent compliance doesn't mean you will have success if other areas of the farm are lacking," explained Jesse Ayers who heads up cow care at Ayers Farms in Perryville, Ohio. "It has a lot to do with performance of the entire farm. Cow comfort, transition cow care, nutrition (forages produced and rations fed) and milk quality all play critical roles." Ayers went on to say when sharing insight as to what leads to reproduction success on their dairy. Ayers Farms consists of 720 Holsteins that average 29,323 M, 1,032 F and 848 P and a DCRC contest high 39 percent pregnancy rate. Shown above are key members of the Ayers Farms' team (L to R): Jeff Byers, D.V.M., with Byland Animal Hospital; John Kline; Jesse Ayers; and Ben Mercer, a nutritionist with FARM Service.



"Compliance is a must," noted Jonathan Burns. "All people involved must have the ability to follow protocol," the Hornell, N.Y., dairyman went on to say when detailing his farm's reproductive success. "Cows crave consistency as creatures of habit — routine is important. Consistency must be followed by the individuals who work with the animals. Also, set the stage with good nutrition which maintains good gut health. This, in turn, impacts the entire condition of the cow." The 460-cow Holstein herd averages 29,000 M, 963 F and 782 P and a 32 percent pregnancy rate. Shown above are key members of the Burns Family Farm team (L to R): front row, Karis, Micah and Domenica Burns; back row, Alfredo Anzures; Randy Harris, nutritionist; David and Jonathan Burns; Jake Perno; Scott DeGroff, veterinarian.



“Cow comfort, feed quality, ration consistency and minimal cow group changes help improve production on our dairy,” said Lisa Collins of Greenleaf, Wis. “Our simplified groups include dry, pre- and postfresh, two-year olds and two-plus lactation animals,” added Kevin Collins. “We also use headlocks for efficient chalking, breeding and herd health. Calm, great employees are a must, too,” stated daughter Brittany Vander Kinter. The Collins herd of 918 Holsteins, with a few Jersey crosses, maintains a herd average of 28,564 M, 1,000 F and 886 P with a 120,000 SCC and a 37 percent pregnancy rate on the 100 percent A.I. bred herd. Shown above are (L to R): Kevin and Lisa Collins; Carl Klug, A.I. technician; Brittany Vander Kinter; Scott Hecker, Select Sires A.I. technician; Eileen Webster; Josh Kluncker, D.V.M.; and Austin Webster.



“We feel we have a great farm team along with consultants in the form of an A.I. breeder, veterinarian and nutritionist who work well together to communicate issues they see in the herd,” explained Tim Holmes when discussing back-to-back Platinum-category wins in the DCRC contest. “Implementing quarterly team meetings also has kept everyone on the same page,” added son Travis. The 998-cow Holstein herd hailing from Argyle, Wis., averages 27,961 M, 1,006 F, 810 P with a 110,000 SCC and a 34 percent pregnancy rate. Shown above are members of the farm team (L to R): Tim Holmes; B.J. Jones, veterinarian; Travis and Stephanie Holmes with their children Claire, Hunter and Riley standing in the utility vehicle; Tim Heiring, Genex A.I. technician; and John Wienkes, Spensley Feed Sales nutritionist.

Schilling: Cows are tail painted with Genex Reveal paint and “walked” every day by the Genex team. Nonlactating heifers have Estroprotect patches applied prebreeding and then are painted when confirmed pregnant. The heifers are also “walked” while restrained in headlocks once per day.

Cows are watched for heats in the postfresh pen at 25 DIM. However, cows are not bred based off heat detection until the end of the 68-day VWP. For first-service cows based on observed heat, cows settle at 49 percent conception rate. Cows bred on ovsynch for first service settle a little higher at 53 percent.

Approximately 58 percent of our breedings are synchronized with a 54 percent conception rate; 15 percent of cows are classified as standing heat with a 44 percent conception rate; while 27 percent are classified as chalk breedings with a 51 percent conception rate.

Describe your facilities for breeding.

Ayers: We have three groups of cows that we breed each week. All groups have headlocks and we breed before and after milking.

Burns: The cows are bred in the parlor or at a management rail with the remainder bred in the freestall. Heifers are bred in headlocks or in freestalls.

Collins: All breeding groups have headlocks, including heifers.

Holmes: Cows are bred in the freestall barn while they are restrained in headlocks. There are also two groups of breeding-age heifers that are visually observed for heats while restrained in headlocks once daily by evaluating Estroprotect patches.

Kloppe: We breed our cows in a palpation rail after being sorted at each milking. We breed our heifers in a chute.

Schilling: Cows are bred in headlocks on a daily basis. Ovsynch cows are bred around 2 p.m. at the headlocks. Heifers are bred in outdoor headlocks.

How do you deal with problem cows?

Ayers: After first service, we use an ovsynch protocol on all services. At vet check, cows without a good CL receive a second dose of GnRH and are bred the following week. We continue to watch production on vet checks and mark DNB on cows producing less than 85 pounds per day. We are able to get the majority of cows pregnant on first and second service. No bulls are used.

Burns: We give GnRH five days post-A.I. to the

second and greater services. We also palpate any open cow at the beginning of ovsynch. If there is a CL, we sometimes give two shots of GnRH seven days apart then check with ultrasound for a good CL before proceeding with breeding.

As we breed cows, each one is assessed based upon relative value (RELV), milk production, feet and legs, lactation number, and overall animal condition.

Collins: If a cow has been bred three to five times, we evaluate age, BCS, milk, history and then determine if she is worth breeding more or to discontinue breeding and place her on a future culling list. No bulls are present on farm.

Holmes: Most problem cows are put on the DNB list about 210 DIM. If they are milking really well, we may give them a little longer. No cleanup bulls are used on the milking cows. Two cleanup bulls are used on the heifers in case a heifer slips a pregnancy after they are confirmed pregnant at 60 days.

Kloppe: If cows are not serviced by 75 days in milk, our veterinarian rechecks them to determine if they need to be placed on a synchronized program, after which they typically come in heat. It is atypical that there are further problems. If a cow is open after four breedings, she is no longer bred and eventually culled from the herd. We have no cleanup bulls on the farm. However, we use Simmental-Angus cross semen on some fourth service cows.

Schilling: We try to identify problem cows early and stop breeding them. Cows are considered for a “do not breed” classification when they are open, over 185 DIM, and have lower production. When a DNB cow’s production falls under 70 pounds, she is considered for culling. Cows may be classified DNB earlier in lactation based on age, production, or feet and leg concerns. No bulls are used on heifers or cows.

Do you use sexed semen?

Ayers: We began using sexed semen this past year on first-service heifers that have the highest genetic ranking. The lowest ranking animals get bred to Angus or Simmental semen. The goal is not to produce more heifers, but get more heifer calves out of the best cows. Our conception rate is typically 10 to 15 percent lower with sexed semen.

Burns: Sexed semen is only used on heifers for the first two services, then high-conception conventional semen is used.

Collins: We only use sexed semen on the top 10 percent of genetic heifers during the first service. Conception is about the same.

Holmes: All virgin heifers are bred to sexed semen for the first two services. Third- and fourth-service heifers are bred to conventional calving ease semen. The later-service heifers are bred to beef bulls. Any heifer that is observed in heat past her fifth service is also considered to become a DNB. Our conception on sexed semen is 52 percent; conventional semen, 63 percent.

Kloppe: We do not use sexed semen.

Schilling: We use 90 percent sexed female semen on virgin heifers for the first two services. For services third and greater, we use conventional semen. Heifers will be marked do not breed if they do not settle by the fourth service. Sexed semen is not used in cows. Conception rate of sexed semen in the heifers is 49 percent and conventional semen is 59 percent.

We have continued to use sexed semen as we feel that our two-year-olds calve in with fewer difficulties due to the smaller calf size of the heifer calves. We also have marketed excess heifers as an additional source of income for the dairy.

What positive changes have you implemented to your breeding program?

Ayers: In 2003, we built a new close-up barn with cows housed in sand freestalls and we reduced overcrowding. Also, we move cows into the close-up pen only once a week now. In 2005, we built a 420-cow barn which allows us to be around 120 percent capacity without sacrificing cow comfort. We have always had fans over the headlocks and stalls. All barns have soakers; we switched from misters four or five years ago.

Burns: Harvesting of forages at a proper time, for the best quality, pays big dividends. We also work closely with the nutritionist once or twice a week and run dry matters once a week or more.

Dry cow comfort was enhanced when we added a bedded pack. Cow comfort also improved when we changed to sand bedding. We also try to keep cows standing in the holding area to a minimum, trim feet on each cow twice a year, and use water misters to keep cows cool in the holding areas.

Collins: In 2012, we built a new heifer barn that includes sand stalls and natural ventilation. Cows are housed in two tunnel-ventilated barns with misters, alley scrapers and waterbeds. Another barn has circulation fans, scrapers, misters and waterbeds. We have rubber in our drover lanes, holding pen and return aisles from the parlor.

Holmes: All cow breeding pens have grooved



floors, lots of fans and misters over the feed rail, and headlocks for easier handling. Shade cloth has been added over our prefresh bunks. We feel this has helped enhance our first-service conception rates in the summer.

Kloppe: We have sprinklers and fans in our freestall barns and sprinklers in our holding pen to help with heat stress in the summer months. This practice, which was implemented nearly 15 years ago, has relieved stress in hot weather. This, in turn leads to improved conception rates. We now feel that this is a critical component to our operation.

Schilling: We feel cow cooling is critical to maintain conception rates during the summer. Changes we have made the last several years to improve cow cooling include adding three rows of fans per pen over each row of freestalls, feed line water sprinklers, and additional water sprinklers in the holding area. In 2014, additional fans were added over cross alleys.

Dry cow cooling is also stressed with fans over the freestalls. Shade cloth has been added for the outside feeding of dry cows to help keep them cool. We feel that the improved cooling of our dry cows has helped produce healthier follicles which has led to higher first-service conception rates.

A third water well was added recently to help maintain water pressure demand for the sprinklers and waterers. We also feel the exceptional cow comfort from sand bedding with adequately sized freestalls has been critical to minimize lameness and allow maximal heat expression.

What key metrics do you monitor to evaluate reproductive performance?

Ayers: For cows, we monitor monthly conception rates, number pregnant each month, conception for breeding codes and pregnancy rate. In heifers, we follow monthly conception rates, sexed versus conventional pregnancy rates, number pregnant each month, difference between technicians and pregnancy rate.

Burns: We monitor our pregnancy rate monthly. Pregnancy and palpation rate are calculated every herd check (two weeks) with a goal of more than 75 percent. We monitor conception rate by code (ovsynch, resynch and standing heats). We also track percent pregnant by 200 days.

Collins: Dairy Comp helps us monitor weekly pregnancy rates and conception rates to identify

a trend. We also have developed spreadsheets to track conception rates, cystic ovaries and open rates after each synch program.

Holmes: We monitor weekly pregnancy rates, conception rates by breeding codes, conception rates by sexed semen versus conventional, and days in milk to first breeding. Most metrics are evaluated on a weekly basis by the herdsman and on a monthly basis by the herd vet.

Kloppe: We track conception rates for both cows and heifers. Additionally, we look at pregnancy rate

in cows and open cows found during herd check.

Schilling: On a daily basis, we monitor pregnancy rates. Each week, we look at conception rates by breeding code and technician, abortion/early embryonic death rate, and days in milk to first breeding. On a monthly basis, we evaluate fresh cow stats (how cows are transitioning). Every day we track dry matter intakes and refusal weigh backs. These metrics are the same for cows and heifers. We also monitor sexed semen versus conventional semen conception rates weekly in the heifers. 🐄

PLATINUM WINNERS

Recipient	Nominator
Jesse Ayers, Perrysville, Ohio	David Hill, Alta Genetics
Jonathan Burns, Hornell, N.Y.	L. Scott DeGroff, Perry Veterinary Clinic
Kevin and Lisa Collins, Greenleaf, Wis.	Scott Hecker, NorthStar Select Sires
Jill Gering, New Haven, Mo.	Scott Pooock, University of Missouri
Tim and Penny Holmes, Travis and Stephanie Holmes, Argyle, Wis.	Katie Martin, Zoetis
Schilling Family, Darlington, Wis.	Katie Martin, Zoetis

GOLD WINNERS

Recipient	Nominator
Brett Danyow, Loganton, Pa.	Bob Cloninger, Centre Herd Health Services
Denis Dunlop, Kuna, Idaho	Garth Millard, Vet Logic Inc.
Roger and Kerry Dunn, Coudersport, Pa.	Tyler Wagner, Alta Genetics
Dennis and Jean McKeen, Albion, Maine	Thomas Frangione, Merck
Mike Meier, Monett, Mo.	Scott Pooock, University of Missouri
Kevin Schrack, Loganton, Pa.	Bob Cloninger, Centre Herd Health Services

SILVER WINNERS

Recipient	Nominator
Joe Barman, Black Earth, Wis.	Humberto Rivera, Accelerated Genetics
Mark Cary, Jenni Cary, Jim Sheldon, and Dan Sheldon, Salem, N.Y.	Bob Ceglowski, Dairy Health and Management Services
James, Kurt and Justin Magnan, Fairfax, Vt.	Thomas Frangione, Merck
Jeff Rainy, Deming, Wash.	Brett Mackay, All West Select Sires
Mark and Mike Stanton, Coeymans Hollow, N.Y.	Steven Chuhta, Zoetis
Mark and Jason Torrey, Elba N.Y.	David Keller, Geneex

BRONZE WINNERS

Recipient	Nominator
Leonardo Barozzi, Canneto Sull'Oglio, Italy	Dario Filippini, BouMatic
Willard DeGolyer, Meghan Hauser, Castile, N.Y.	L. Scott DeGroff, Perry Veterinary Clinic
Earl and David Fournier, Swanton, Vt.	Thomas Frangione, Merck
Jefferey Paulen, Howard City, Mich.	Jeremy Howard, Simplot Animal Sciences
Tucker Purchase, Richard and Bonnie Hall, E. Montpelier, Vt.	Thomas Frangione, Merck
Wickstrom and Nyman Families, Chowchilla, Calif.	Steven Rosa, Arm & Hammer



"We have found that success lies in having a consistent staff," said herdsman Jill Gerling. "Putting together a reproductive team who works well together has added to the success at our operation," added assistant herdsman Megan Barrett. "These two working in tandem have improved our understanding of the processes and the herd, which, in turn, has improved our pregnancy rates. Additionally, sound record keeping through a good computer program is vital," commented Jill. Kloppe Dairy Farm in New Haven, Mo., consists of 330 Jersey cows that average 15,250 M, 675 F and 548 P with a 148,000 SCC on shipped milk and a 33 percent pregnancy rate. Shown above are key members of the team (L to R): Megan Barrett, Jill Gerling and Karl Kloppe. Gerling and Barrett handle all reproductive protocols and A.I. breedings.



"We feel cow comfort, foot health, cooling, nutrition and fresh cow care are essential for reproductive success. All factors depend on each other for a successful breeding program," explained Bill Schilling and his sons Andy and Brian, who have won the DCRC contest for a record fourth year in a row. The 655-cow Holstein herd hailing from Darlington, Wis., averages 30,624 M, 1,247 F and 960 P with a 59,000 SCC and a 35 percent pregnancy rate. Shown above are members of the farm team (L to R): Tim Heiring, Genex A.I. technician; B.J. Jones, D.V.M.; Sara and Andy Schilling; Bill and Barb Schilling; Brian and Bridget Schilling; Luke Risser; Mike Van Schyndle and John Wienkes, Spensley Feed Sales nutritionists; and Steve Fleming of Investors Community Bank.