



THE BEST OF THE BEST

From nearly 125 applicants, these operations stood out for having produced high-quality milk consistently. Applications were evaluated for measures of quality, systems of monitoring udder health, milking routine, protocols for detection and treatment of clinical and subclinical cases of mastitis, and strategies for overall herd health and welfare.

PLATINUM WINNERS

Recipient

Mike, Jean, Brent,
Brock, and Nelda Bailey, Tomah, Wis..... Bob Zielsdorf, Prairie Farms Dairy
Jim and Karen Davenport, Ancramdale, N.Y. Ruth McCuin, Agri-Mark Inc.
Josh and Ginny Folts, North Collins, N.Y.....Debbie Lampson, Upstate Niagra Co-op Inc.
Mike and Tom Gerrits, Greenleaf, Wis..... JR Neu, Sartori Company

Nominator

Recipient

Mike Siegersma and Adrian Kroes,
Nampa, Idaho.....Allan Britten, Udder Health Systems Inc.
Larry and Paulette Werth,
Jeremy Werth and Paul Werth, Alpena, Mich. Ashley Herriman, *MMPA

Nominator

GOLD WINNERS

Recipient

Don Beattie, Holton, Mich..... Lyndsay Earl, *MMPA
Greg Bingham, Weston, Idaho Larry Hansen, Organic Valley
Hans Breitenmoser, Merrill, Wis. Tyler Hartung, Grassland Dairy Products Inc.
Ron Brooks, Waupaca, Wis. Jonathon August, Grande Milk Marketing
Brad, Mark, and Larry Crandall, Battle Creek, Mich.....Elyse Martin, *MMPA
Gordon Dick, McBain, Mich.....Deb Gingrich, *MMPA
Brad and Debby Kartes, West Branch, Mich. Ashley Herriman, *MMPA
Jerry, Carolyn, Mike, Eric, Jenny,
Jon, and Brandy Leahy, Brandon, Wis..... Mary Schuster, Belgioioso Cheese Inc.

Nominator

Recipient

Conrad, Lisa, and Brian Liebergen, Greenleaf, Wis.....JR Neu, Sartori Company
Jeff Orr and Paige Mier, Prescott, Mich.Dave Clark, Dairy Farmers of America
David and Mark Miller, Millersburg, Ohio.....Will Moore, SmithFoods Orrville Inc.
Brian and Heather Richardson, Warren, Mass.....Craig Jones, Agri-Mark Inc.
Brent Simon, Westphalia, Mich.....Bridget Moore, *MMPA
University of Connecticut Dairy, Storrs, Conn..... Craig Jones, Agri-Mark Inc.
Ken, Duane, Anna, and Laurie VanPolen, Marion, Mich. Deb Gingrich, *MMPA
Douglas Warner, Charlevoix, Mich. Frank Brazeau, *MMPA

Nominator

SILVER WINNERS

Recipient

Karl Bontrager, Wolcottville, Ind.....Krista Schrock, *MMPA
Michael Bosscher, McBain, Mich.....Deb Gingrich, *MMPA
Norm and Mark Buning, Falmouth, Mich.Deb Gingrich, *MMPA
John Christian and Rhoda Chupp, Sugarcreek, Ohio.....Will Moore, Smithfoods Orrville Inc.
Terry and Paul Fritz, West Branch, Mich..... Roger Burtch, Foremost Farms USA
Dave, Don, and Joanne Hall, Tomah, Wis. Ronald Brown, Foremost Farms USA
Andy and Laura Hecht, Cumberland, Wis. Jim Kauffman, **AMPI
Robert L. Hecker, Sheldon, Wis.....Steve Lodahl, **AMPI
Charles Hoellerer, Cincinnatus, N.Y. .Amber Brown, Organic Valley/CROPP Cooperative
Devin Johnston, Tillamook, Ore.Larry Hansen, Organic Valley
Harley and Marietta Lambright, LeRoy, Mich. Deb Gingrich, *MMPA
Ann Nelson, Lupton, Mich..... Roger Burtch, Foremost Farms USA

Nominator

Recipient

William Pirman, Skandia, Mich..... Frank Brazeau, *MMPA
Melvin and Patricia Pittman, Plum City, Wis.....Burt Hamm, Hastings Co-op Creamery
Jerry and Sharron Powers, Pentwater, Mich..... Lyndsay Earl, *MMPA
Mark and Bob Rau, West Branch, Mich..... Ashley Herriman, *MMPA
Walter and William Selke, Dakota, Minn. Derek Suchla, Plainview Milk Prod. Co-op
Allen and Aaron Slater, Holton, Mich. Lyndsay Earl, *MMPA
Terry and Ryan Stinson, Dakota, Minn..... Richard Bradley, Foremost Farms USA
Ken and Carol Tebos, Falmouth, Mich.Deb Gingrich, *MMPA
Cortney VanOeffelen, Conklin, Mich..... Roger Burtch, Foremost Farms USA
Marco Verhaar, Bad Axe, Mich. Steve Steely, Dairy Farmers of America
Robert and Kathy Waite, Middleburg, Pa..... Douglas Braham, Land O'Lakes
James Winkler, Sterling, Ohio..... Josh Zehentbauer, Dairy Farmers of America

Nominator

*Michigan Milk Producers Association
**Associated Milk Producers Inc.

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It's people that create quality milk

While a great deal of diversity exists between milking centers and bedding choices, these dairy farmers prove that cow care, cleanliness, and constant communication drive milk quality on their farms.

THIS year's National Dairy Quality Award Platinum winners are almost as diverse as the nation's dairy farms. While they produce some of America's highest quality milk on a daily basis, these farms use a variety of bedding choices including sand, sawdust, and even composted bedding all while milking cows in parlors, tie stall barns, and even with robots. This diversity proves high quality milk standards can be achieved in a number of environments.

Nominators submitted applications from 122 farms this year. From that group, the judges made the first screening based on milk quality benchmarks. Of these, 62 herds merited further analysis by a team of judges through a comprehensive review of measures to ensure milk quality based on the latest peer-reviewed science. After judging, final applications were designated as Silver, Gold, or Platinum winners. The previous page lists all of this year's winners along with their nominators.

Hoard's Dairyman is honored to co-sponsor the National Dairy Quality Awards with the National Mastitis Council. The program is possible thanks to sponsorship from Boehringer Ingelheim, Ecolab, GEA, IBA, and QualiTru Sampling Systems.

Here's how the winners get the job done:

What is your milking procedure?

Bailey's Cherry Valley Dairy: Sand is brushed off, strip out foremilk, predip, dry teats with a towel, attach milking units, and postdip. At the conclusion of milking, we also observe the udder for edema or swelling.

Butterwerth Dairy: We dry wipe teats with a microfiber towel, predip with foamer, massage foam into teats, forestrip, dry teats with microfiber towel, and attach milking unit. When the cow is done we remove milking unit from cow and post dip.

Country Aire Farms: We strip out foremilk three times for each teat, predip, clean and dry teats with reusable 12-inch by 12-inch cloth towels, attach milking units, and postdip.

Folts Farms: We milk our cows with robots. Sanitizer is applied to the udder with a rotating brush and teats are dried with forced air. Milking units are then attached, strip out foremilk, and postdip.

SunRidge Dairy: We predip, forestrip, dry the teats with an individual cloth towel, attach the milking units, and postdip.

Tollgate Holsteins: We strip out foremilk using a strip cup, dip the cows, dry teats using single-service white paper towels, attach milking units, and postdip the cows. In regard to forestripping, if a teat is wet with milk and/or is dirty from mud or manure, we dry wipe first. If the teat isn't clean after drying teats with a single-service towel, we repeat the predip and drying sequence and use a new towel.

How do you maintain healthy teats?

Bailey's Cherry Valley Dairy: We predip with a 10 percent emollient package and do not remove milker units until vacuum is shut off. We correct liner slips quickly, use good udder prep to be sure that cows have good milk let-down, and the vacuum is set at 14.5 cubic inches of vacuum.

Butterwerth Dairy: Teats are foamed and the foam is massaged into the teats and teat ends as part of the udder prep process, ensuring adequate stimulation time. We post dip with Udder Gold 4XLA. We also groom and maintain sand bedded stalls on a regular basis.

Country Aire Farms: Teats are foamed with predip after forestripping and dried with a cloth towel. After milking, teat ends are dipped in iodine postdip except for the winter months when we use a 10 percent emollient, iodine-based teat dip.

Folts Farms: We use teat dip with emollients and do quarterly milk cup removal based on individual takeoff on the robot's setting.

SunRidge Dairy: We conduct monthly parlor preventative maintenance and pulsation diagnostic tests. We also pre- and postdip along with using optimized milking machine takeoff settings.

Tollgate Holsteins: We use 60/40 pulsation combined with IBA pro-square inflations. During milking, we ensure proper machine positioning for even milkout and prompt removal of the machine when the cow is finished to avoid overmilking.

How do you keep cows comfortable?

Bailey's Cherry Valley Dairy: Manure and wet sand are removed from the stalls twice a day. Sand

is added every week. Manure is scraped from the alleys twice a day. Curtains are adjusted as needed based on weather conditions. Fans are on when the temperature is over 70°F. We make sure cows have access to water right outside the barn when weather allows after milking. Fly control is used as needed.

Dry cows are bedded with cornstalks in a shed to make a bedded pack. Individual calving pens are also bedded with cornstalks. The cows also have access to an outside lot. Manure is cleaned each month from the bedding pack, while the concrete yard is scraped each week. Bedding is added two times a week to the dry cow area.

Butterwerth Dairy: We scrape our freestall barn and groom the stalls twice each day. The stalls are bedded with sand, and we add lime to the stalls during the summer. Our barn also has curtain side walls for air ventilation.

Country Aire Farms: Milk cows are kept in a tunnel-ventilated freestall barn with pusher and exhaust fans and Roll-O-Matic curtains. All stalls are fit with DCC Waterbeds ISO.

The water beds are bedded lightly two times a week with kiln-dried sawdust. Each bed is thoroughly cleaned during each milking, removing manure and visible moisture, then Western hydrated barn lime is laid down on top and sawdust is moved around to keep the stalls dry.

The manure is scraped every hour with Patz alley scrapers into the drop site in the middle of the barn. Then it gravity flows into the manure pit.

Folts Farms: We have deep-bedded sand stalls in which sand is added weekly. Stalls are groomed twice a day. Manure is removed with alley scrapers, cycling every two hours.

The only time the skid steer enters the barn is to add sand weekly, and this process aids cow comfort. Alleys have rubber matting. Stalls are 50 inches wide and 8 feet long and are suspended by a double-hung system to allow for more lunge space. Ventilation is controlled by a weather station utilizing automatic curtains, variable-speed circulation fans, and variable-speed chimney fans.

To avoid competition, there is zero overcrowding at the headlocks and there are four 12-foot stainless steel tip tanks for water. Our dry cows are treated



Even with switching out cows three times each milking, the Bailey family repeated as a Platinum milk quality herd. The tie stall barn's 2-inch milk pipeline and conventional milking units without automatic takeoffs would be reflective of many farms across the county. What is different, though, is the farm team's determination to follow the same precise milking routine every day. It's that consistent approach to milking, meticulous freestall and alley cleaning, and a rigorous milking system maintenance plan that also sets up the Tomah, Wis., herd for success. Shown above (L to R) are: Thomas Pierce, Alfonso Martinez, Brent Johnson, Brent Bailey, Josie Bailey, Nelda Bailey holding son Broden, Blair Bailey, Teagan Bailey, Brock Bailey holding daughter Malynn, and Jean and Mike Bailey.



Milking system setup, cows that need extra attention, milking routines, and employee schedules would be among the first items seen on the walls when walking into the office and milking center at Butterwerth Dairy, Alpena, Mich. It's this attention to detail and excellent communication that also helped the dairy get back on its feet when its herd was depopulated in 2015 after bovine tuberculosis crossed from northern Michigan's deer herd into its dairy herd. As a result, the farm renovated freestalls and switched from Jerseys to Holsteins to quickly return to milking cows. Shown above (L to R) are: Jenn Buchner, Jeremy Werth, Paul Werth, Larry and Paulette Werth, Evan Beyer (behind Larry and Paulette), Austin Malaney, Josh Jones, CJ Malaney, and Ethan Buchinger.



Josh Folts and his wife, Ginny, fulfilled Josh's lifelong dream of building a dairy farm 1-1/2 years ago. Prior to construction, the couple spent two years evaluating facilities across the Northeast, and Josh also built upon his experience in custom cropping, manure application, and as a herdsman. "We wanted our barn to be as perfect as possible for cow comfort," explained Josh. While the farm milks with robots, they explain that its "time in the barn" that leads to quality milk. "Rumination and activity monitoring are the best part about robots as we can avert health issues and give those cows extra attention," said Josh, who farms in North Collins, N.Y. Shown above (L to R) are: Isaac, Zane, Ginny, Josh, and Gunnar Folts. Isaac handles genetics; Gunnar, rumination; and Zane, milk quality.



The Gerrits Family, brothers Tom and Mike Gerrits, are owners of Country Aire Farms located in Greenleaf, Wis. The repeat, Platinum-award-winning herd uses a Western hydrated barn lime or lime application to water bed surfaces to keep cows clean, as well as bedding with kiln-dried sawdust. Additionally, tails are trimmed every six weeks. Not unique among all Platinum winners, including the Gerrits, is their commitment to quality. "The daily culture on the farm is designed to encourage all people involved to not accept 'good enough' but to ask 'What can I do to make improvements today?'" said nominator JR Neu with the Sartori Company. Shown above (L to R) are: Craig and Nick Gerrits with their father, Tom; and Mike Gerrits with his sons, Jonathan and Matt Gerrits.

the same as the milk cows except close-up cows get moved to a sawdust bedded pack to freshen.

SunRidge Dairy: We add compost bedding twice a week and groom stalls daily. All alleys are vacuumed twice daily and flushed once daily to remove manure. During warm weather, cows have access to exercise lots that are groomed daily. There are fans and sprinklers in the parlor to aide cow cooling. Our dry cows are housed on open lots that are groomed daily. Straw bedding is offered all year round and shade is provided. We vacuum manure from the feed alley every day.

Tollgate Holsteins: We use properly sized stalls and adjust the trainers to the cow's height. We scrape wet or dirty bedding back and then pull clean bedding to cover the foam mat bed. We apply this practice at each milking (two times a day) and every time feed is pushed up (at least four times a day). Each stall gets 70 cubic feet of kiln-dried pine sawdust and 5 ounces of hydrated lime.

We use "over cow" fans, which are able to swivel to enhance the natural air current. We also have thermostatically controlled fans with adjustable louvered intake vents set at 45°F for winter.

How do you detect mastitis?

Subclinical:

Bailey's Cherry Valley Dairy: We use monthly DHIA (Dairy Herd Information Association) reports and the CMT (California Mastitis Test).

Butterwerth Dairy: We use the CMT test, DHIA testing, and culture milk.

Country Aire Farms: We use SCC (somatic cell count) data from DHIA and then use a CMT on any cows over 200,000 to find infected quarters.

Folts Farms: We monitor color and conductivity on the robot, CMT test, and DHI testing. Our sons, Gunnar and Zane, routinely walk the cows.

SunRidge Dairy: We monitor SCC levels and CMT test as needed.

Tollgate Holsteins: We evaluate DHIA reports for high SCC cows. We also look for abnormal tactility (feel or texture) of a quarter but showing no signs in the strip cup, then run a CMT on those cows.

Clinical:

Bailey's Cherry Valley Dairy: To catch clinical mastitis, we forestrip, check for udder swelling, and evaluate cows for lower milk production.

Butterwerth Dairy: We prestrip to detect mastitis.

Country Aire Farms: Visible signs such as flakes, chunky milk, swollen quarters, or high

SCC all hit on our clinical milk radar.

Folts Farms: We monitor robot coding for discoloration or conductivity. We follow up by stripping the cow for observation.

SunRidge Dairy: Milkers will find mastitis cases during forestripping.

Tollgate Holsteins: We detect clinical mastitis through visual observation and use of the strip cup.

Describe your fresh cow monitoring.

Bailey's Cherry Valley Dairy: Fresh cows are watched closely to make sure they are eating, and temperatures are taken on any cows that are not performing as expected. Early in lactation we use the CMT, and suspect quarters are treated with antibiotics. High SCC cows are cultured to determine the pathogen. Treatment is based on culture results.

Butterwerth Dairy: All cows are CMT tested before milk goes in the bulk tank.

Country Aire Farms: All fresh cows are monitored in the postfresh pen daily by the herd manager where he looks for visible signs of distress or illness. He also takes temperatures. The postfresh pen is bedded with virgin (first-time use) sand. Fresh cows also are milked every 8 hours, and udder health and milk quality are observed carefully.

Folts Farms: We make sure the cows are milking a minimum of three times a day. We also utilize DHI testing and monitor color and conductivity through the robot. In addition, rumination and activity monitoring help us avert individual health events via early detection and quick intervention.

SunRidge Dairy: All fresh cows and heifers are CMT tested. Milk is sampled and cultured at a laboratory. Within the next year, we want to conduct in-house milk culturing.

Tollgate Holsteins: We watch for abnormal udder involution, such as excessive leaking. We forestrip looking for abnormal milk and check for abnormal edema. We use the CMT on all fresh cows, note the trends, and if a quarter doesn't correct itself, we will use a quarter milker. If there is no improvement, we will culture, treat appropriately, and watch and wait for normal milk.

What steps do you take at dry-off?

Bailey's Cherry Valley Dairy: All cows receive dry cow treatment. Following milking, teats are hand stripped. The teat end is cleaned with an alcohol pad and is intramammary infused with Tomorrow (cephaphim), using partial insertion into the teat canal. The product is massaged into the udder.

After that, each teat end is cleaned again with an alcohol pad, air is removed from Orbesal tubes, intramammary infused with Orbesal using partial insertion. All teats are postdipped with Barrier-One teat dip.

Butterwerth Dairy: All cows are dry treated with Tomorrow intramammary according to the labeled instructions. We also administer J5 and Endovac vaccine to all dry cows.

Country Aire Farms: We administer J-5 *E. coli* vaccine between 215 to 230 days carried calf (DCC) and give a booster between 255 to 261 DCC. When administering dry treatment, teat ends are dipped with iodine and wiped with a cloth towel following milking. An alcohol pad is used to clean teat ends, and Spectramast DC (ceftiofur hydrochloride) and Orbesal (bismuth subnitrate) are administered intramammary. Postdip is then applied, and cows are moved to the dry cow pen. At 30 to 36 days postfresh, we administer J-5 vaccine to all cows.

Folts Farms: Two weeks prior to dry-off, the grain delivered via the robots gets cut in half to reduce milk production, which also reduces the stress at dry-off. On the day of dry-off, we milk the cows and then clean the teat ends with alcohol swabs. Dry Clox (cloxacillin benzathine) is administered via intramammary partial insertion followed by Orbesal intramammary partial insertion. Then we use a 1 percent iodine postdip and Endovac intramuscular and Multimin subcutaneous. Two weeks after dry-off, we use Scourguard IM. Four weeks after dry-off, we give Endovac IM and Multimin SQ.

SunRidge Dairy: We use Orbesal and Orbenin DC intramammary after cleaning teat ends with alcohol swabs. Endovac is used for dry-off and close-up cows.

Tollgate Holsteins: Our dry-off process includes giving a subcutaneous injection of the Triangle 10 vaccine. We then remove the 80-pound balanced 75 percent forage TMR and feed them 58 to 60 NDF (neutral detergent fiber) grass hay ad libitum. Once the manure stiffens, they are milked daily until production drops below 20 pounds milk per day.

When the cluster is removed after the last milking, each teat end is swabbed with a single-service alcohol pad. The alcohol is allowed to dry and then each quarter is infused with Orbenin-DC (benzathine cloxacillin) using partial insertion and massaged well into the teat cistern.

Then we insert Orbesal teat sealant. First, we

Continued on following page ►►



"Because of their direct involvement and constant attention to details, owners Mike Siegersma and Adrian Kroes have created a farm that enables cows to produce high-quality milk year after year," wrote nominator Allan Britten. "By providing a clean environment, achieving excellent cow comfort, and developing a well-trained employee team, Mike and Adrian have created a safe, attractive, and caring place for people and cows to make a quality food product." The Nampa, Idaho, dairy houses cows in drylots and freestalls, the latter of which are bedded with composted bedding. All alleys are vacuumed twice each day. Shown above (L to R) are: Ramon Sanchez, Pedro Lopez, Ryan Kroes, Roberto Rojas, Alfredo Martinez, Carlos Lopez, Mike Siegersma, Manuel Rojas, and Adrian Kroes.



Tollgate Holsteins of Ancramdale, N.Y., just may be the nation's most decorated milk quality herd and once again repeated as a Platinum winner. "The hard work that Jim does day in and day out to ensure the best quality milk is so obvious. When walking his tie stall barn, you will always find clean, healthy, and comfortable cows," said nominator Ruth McCuin. No stranger to quality milk, the Davenports have earned top milk honors with Agri-Mark Cooperative since 1988. Jim Davenport and his herdsman, Art Downs, culture every case of mastitis. From those culture tests, the best therapy is pursued, and in some instances, no treatment is administered based on culture results. Shown above are Karen and Jim Davenport, herdsman Art Downs, and Ruth McCuin with Agri-Mark.

Continued from previous page

warm the tubes to about body temperature, tap on the plunger, and express the plunger to remove air from the tube. This prevents compressed air from blowing the sealant out of the streak canal and into the gland cistern and beyond. If during this purging process material gets on the canula, we use more alcohol pads to wipe the canula clean.

Describe your mastitis treatments.

For mild cases:

Bailey's Cherry Valley Dairy: We use Udder Comfort Essential Oil that is sprayed on the udder for four days, twice a day. No milk is withheld.

Butterwerth Dairy: We use Uddermint therapy.

Country Aire Farms: Intramammary infusion of Spectramast LC (ceftiofur hydrochloride) takes place for three to four days, once a day, and milk is withheld for 72 hours. We also do on-farm culturing to test for gram-positive bacteria.

Folts Farms: We administer Spectramast, intramammary, for eight days, once a day. Milk is withheld for 72 hours.

SunRidge Dairy: We use Pirsue (pirlimycin hydrochloride), intramammary, for two to five days, once a day. Milk is withheld for 36 hours.

Tollgate Holsteins: We culture all cases and also run a CMT. When we know the causative gram-positive pathogen, we treat with Pirsue. If we are unsure of the culture results, we treat with Spectromast LC. We CMT every milking and treat once a day for up to eight days (it is rare to treat this long).

For moderate cases:

Bailey's Cherry Valley Dairy: We use Spectramast LC, intramammary, for five days, once a day. Milk is withheld for 72 hours. We also administer Prevail (flunixin meglumine) IV (intravenous) for two days, once a day, and milk is withheld 36 hours.

Butterwerth Dairy: We administer Spectra-

mast, intramammary, for four days, once a day. Milk is withheld for 72 hours.

Country Aire Farms: Just like mild cases, we administer Spectramast LC, intramammary, three to four days, once a day, and milk is withheld for 72 hours.

Folts Farms: Pirsue is administered, intramammary, for eight days, once a day. Milk is withheld for 36 hours.

SunRidge Dairy: We use Pirsue, intramammary, two to five days, once a day. Milk is withheld for 36 hours.

Tollgate Holsteins: We follow the same steps as outlined in the mild cases but with one adjustment . . . if there is udder or quarter inflammation, we begin treatment before the culture results.

For severe cases:

Bailey's Cherry Valley Dairy: Same treatment as moderate cases, plus a sodium chloride (7.5 percent hypertonic saline) IV for two days, twice a day.

Butterwerth Dairy: Same treatment as moderate cases except we give it for seven days. We also IV Banamine (flunixin meglumine) and give Excenel (ceftiofur hydrochloride) intramuscular.

Country Aire Farms: Administer Spectramast LC intramammary, three to five days, once a day, milk withheld for over 120 hours.

Folts Farms: In severe cases, we culture the milk and discuss what to do based on the results.

SunRidge Dairy: We administer supportive treatment including IV fluids and oral drench for up to three days. We also have the option to add intramammary Pirsue and/or IV Banamine to the treatment regimen. Intramammary Pirsue is done once a day for two to five days and IV Banamine once a day for up to three days.

Tollgate Holsteins: It's rare that we have a severe case. If we have a severe case, we follow our aforementioned protocols and also work with our veterinarian. In these rare instances, we generally

treat cows with Excenel, intramuscular; administer Banamine, intravenous; give hypertonic saline solution, intravenous; and strip out the quarter three to four times a day.

How do you track treated cows?

Bailey's Cherry Valley Dairy: Cows are marked with four florescent green "T" marks (two on each side). Treated cows are moved to the last group of cows milked. Treatment records are kept in a three-ring binder noting diagnosis, treatment, follow-up treatments, and meat/milk withdrawals. All disease and treatments also are entered into AgSource DM, our computerized dairy management program.

Butterwerth Dairy: Treated cows are housed in a separate pen and banded with two red leg bands. All treated cows are recorded on the team protocol board and in the notebook, plus team members are notified via text messages. All treatment history is entered into our PC Dart computer program and a notebook.

Country Aire Farms: Treated cows are isolated in a hospital pen and milked in the hospital parlor. The herd manager records treatments in a notebook. Disease and treatment records are entered into Dairy Comp 305 daily. The daily treatment notebook is then filed away for a permanent physical record.

Folts Farms: Our computer system on the robots tracks treated cows, and it separates treated cows' milk from the rest of the milk. We also have hard copies of the records for back up.

SunRidge Dairy: All mastitis cows are marked with specific leg band colors (red or green) that identify the infected quarter. All disease and treatment records are entered into our Dairy Comp 305 computer program daily.

Tollgate Holsteins: We use leg bands, and the cow's condition is noted on paper and left prominently on the milking cart. We employ individual cow pages and a dry erase board. Permanent records are kept on individual cow health record pages. 🐄

	Bailey Dairy	Butterwerth Dairy	Country Aire Farms	Folts Farms	SunRidge Dairy	Tollgate Holsteins
Cows (milking/dry)	219/24	310/52	541/73	100/20	2,963/379	64/19
Breed	Holstein/Jersey	Holstein	Holstein/Jersey	Holstein	Holstein	Holstein/Ayrshire
Milk (lbs.)	26,433	27,883	32,390	31,000	28,596	26,834
Fat (%)	3.9	3.6	3.7	3.9	3.6	3.8
Protein (%)	3.1	3.1	3.0	3.1	3.1	3.2
SCC avg.	97,000	76,000	66,000	50,000	66,000	41,900
SPC avg.	1,500	1,000	1,000	4,000	3,000	1,000
Cows leaving the herd (all reasons) (%)	25.6	12.6	3.5	4.0	3.6	42.2
Udder health-related culls (% of culls)	8.9	2.5	21.1	25.0	17.0	0