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 | Nominator
--- | ---
Mike 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. | Deb Gingrich, *MMPA
Brad and Debby Kartes, West Branch, Mich. | Ashley Herriman, *MMPA
Jenny, Carolyn, Mike, Eric, Jenny, Jon, and Bradly Leahy, Brandon, Wis. | Mary Schuster, BelGioioso Cheese Inc.

GOLD WINNERS

Recipient | Nominator
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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. | Deb Gingrich, *MMPA
Brad and Debby Kartes, West Branch, Mich. | Ashley Herriman, *MMPA
Jenny, Carolyn, Mike, Eric, Jenny, Jon, and Bradly Leahy, Brandon, Wis. | Mary Schuster, BelGioioso Cheese Inc.

SILVER WINNERS

Recipient | Nominator
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Karl Bontrager, Wolcottville, Ind. | Krista Schrock, *MMPA
Michael Bosscher, McBain, Mich. | Deb Gingrich, *MMPA
Norm and Mark Buning, Falmouth, Mich. | Jonathon August, Grande Milk Marketing
John Christian and Rhoda Chupp, Sugarcreek, Ohio | Will Moore, SmithFoods Orrville Inc.
Terry and Paul Fritz, West Branch, Mich. | Roger Burcht, Foremost Farms USA
Dave, Don, and Joanne Hall, Tomah, Wis. | Ronald Brown, Foremost Farms USA
Andy and Laura Hecht, Cumberland, Wis. | Jim Kaufman, *AMPI
Robert L. Hecker, Sheldon, Wis. | Steve Lodahl, **AMPI
Charles Hoellerer, Cincinnati, N.Y. | Amber Brown, Organic Valley/CRDPP Cooperative
Devin Johnston, Tillamook, Ore. | Larry Hansen, Organic Valley
Ann Nelson, Lupton, Mich. | Roger Burcht, Foremost Farms USA

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

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T HIS 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 the 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 Ecolab, Boehringer Ingelheim, Mastitis Council. The program is possible thanks to sponsorship from Ecolab, Boehringer Ingelheim, Ecolab, SEA, 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.

**Tolgate 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. While 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.

**Tolgate Holsteins:** We use 60/40 pulsation combined with IBA pro-square inflations. During milking, we ensure proper machine positioning for even milking 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 and automatic 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 IBO.

**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 Pata 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 udder and teat cleaning, and a rigorous milking system maintenance plan that also sets up the Tomah, Wis., herd for success.**

**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 IBO.**

**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.**

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How do you detect mastitis?

**Subclinical:**
- Bailey's Cherry Valley Dairy: We use monthly DHI (Dairy Herd Information Association) reports and the CMT (California Mastitis Test).
- Butterwerth Dairy: We use the CMT test, DHI testing, and monitoring teat health.
- Country Aire Farms: We use SCC (somatic cell count) data from DHIA and then use a CMT (California Mastitis Test) and the DHI (Dairy Herd Improvement) test.
- Folts Farms: We monitor the herd for signs of disease and use a CMT test.
- SunRidge Dairy: We use the CMT test, SCC data, and milk quality.
- Tollgate Holsteins: We use SCC data and the CMT test.

**Clinical:**
- Bailey's Cherry Valley Dairy: To catch clinical mastitis, we use a CMT test and milk quality.
- Butterwerth Dairy: We use a CMT test and milk quality.
- Country Aire Farms: We use milk quality and SCC data.
- Folts Farms: We use SCC data and a CMT test.
- SunRidge Dairy: We use SCC data and a CMT test.
- Tollgate Holsteins: We use SCC data and a CMT test.

SCC HIT all on our clinical milk radar.

**Folts Farms:** We monitor robot coding for discolored milk.

**SunRidge Dairy:** Milkers will find mastitis cases during forensic stripping.

**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 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.

**Folts Farms:** We make sure the cows are milked 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 to identify individual health issues.

**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 inversion, such as excessive leaking. We forecast udder condition and use the CMT test. If a quarter doesn't correct itself, we will use a quarter milk test. 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 Tomor- row ( cephalim), 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 Orbesol tube, an intramammary gram is introduced with Orbesol 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 instructions. We also administer E. coli and Endovac vaccine to all dry cows.

**Country Aire Farms:** We administer J-5 E. coli vaccine between 215 to 230 days carried call (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 Orbevel (bismuth substrate) 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 Orbesol 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 Orbesol and Orbevel 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 38 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 Orbesol teat sealant. First, we...
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
from the tube. This prevents compressed air from
abruptly pushing the sealant through the tube.
If during this process material gets on the canula,
we clean it off and then continue. We 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
from the tube. This prevents compressed air from
abruptly pushing the sealant through the tube.

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, intra-
ammary, 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.

For severe cases:

Bailey’s Cherry Valley Dairy: Same treatment as moderate cases, plus a sodium chloride (7.5 per-
cent 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 Spectra-
mast LC intrammary, 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 Pir-
sue 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 se-
vere 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; adminis-
ter 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 treat-
ment history is entered into our PC Dart comput-
er 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 dis-
ease 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 prominent-
ly on the milking cart. We employ individual cow
pages and a dry erase board. Permanent records are
kept on individual cow health record pages.

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Bailey Dairy Butterwerth Dairy Country Aire Farms Folts Farms SunRidge Dairy Tollgate Holsteins

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<th>Cows (milking/day)</th>
<th>219/24</th>
<th>310/52</th>
<th>541/13</th>
<th>100/20</th>
<th>2,963/379</th>
<th>64/19</th>
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<tbody>
<tr>
<td>Breed</td>
<td>Holstein/Jersey</td>
<td>Holstein</td>
<td>Holstein/Jersey</td>
<td>Holstein</td>
<td>Holstein</td>
<td>Holstein/Ayrshire</td>
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<tr>
<td>Milk (lbs.)</td>
<td>26,433</td>
<td>27,883</td>
<td>32,390</td>
<td>31,000</td>
<td>28,596</td>
<td>26,834</td>
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<td>Fat (%)</td>
<td>3.9</td>
<td>3.6</td>
<td>3.7</td>
<td>3.9</td>
<td>3.6</td>
<td>3.8</td>
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<tr>
<td>Protein (%)</td>
<td>3.1</td>
<td>3.1</td>
<td>3.0</td>
<td>3.1</td>
<td>3.1</td>
<td>3.2</td>
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<td>SCC avg.</td>
<td>97,000</td>
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<td>500,000</td>
<td>66,000</td>
<td>41,900</td>
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<td>1,000</td>
<td>4,000</td>
<td>3,000</td>
<td>1,000</td>
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<td>Cows leaving the herd (all reasons) (%)</td>
<td>25.6</td>
<td>12.6</td>
<td>3.5</td>
<td>4.0</td>
<td>3.6</td>
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<td>Udder health-related culs (% of culs)</td>
<td>8.9</td>
<td>2.5</td>
<td>21.1</td>
<td>25.0</td>
<td>17.0</td>
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