



Dairy Greatness from Great Lakes Farmers

providing services and opportunities to all.

Founded in 1916, the Michigan Milk Producers
Association (MMPA) is a farmer-owned milk
marketing cooperative and dairy processor. MMPA's
member farms, located throughout the Great Lakes
Region, lead the way in quality milk production. Nationally
recognized for their commitment to quality,
MMPA serves its member-owners every day,
not only by marketing their milk, but by

mimilk.com



Who doesn't want more? I'm not talking about being ostentatious, but instead desiring greater outcomes from your current efforts and investments.

Recently, we've been part of producer surveys and focus groups, and the resounding themes include "efficiency" and "sustainability." Making strides in these areas has, and will come through new products and processes, but much can also be achieved with increased focus on optimizing current efforts ... getting more.

Throughout these pages, you will see references to "Get more from your ...," because we believe even when the individual components of your farm are operating at top performance, opportunities still exist to get more from your herd's genetics, reproduction, DHI data, milk sample, and overall herd health.

This year's ReproStar Award winners leveraged their CentralStar teams, and achieved high levels of reproductive efficiency, while creating more sustainable herds. The process of getting to that point may have started with genetic selection and intense management of reproduction protocols, but they expanded far beyond the early steps to "get more." Begin reading their stories on page 17.

When you peruse the year-end Top DHI reports, consider the advantages these producers have in turning data into action for more efficiency and sustainability. CentralStar's consultants have the knowledge, experience, and functional expertise to accomplish this, allowing you to *get more* from your herd.

CentralStar has been delivering on the *get more* mindset for decades. Because of the cooperative's decision to invest in our own research and development (R&D), producers and veterinarians across the U.S. and Canada *get more* from routine DHI samples by also testing them for pregnancy, Johne's, leukosis, and a host of other options. This technology continues to help dairies *get more* by reducing farm labor and increasing the value a vial of milk taken at DHI test provides.

Consider for a moment what you know about CentralStar. You might depend on us for genetic selection and A.I. service. Maybe it's DHI or diagnostic testing. Or, it could be animal-health products. Using any of these areas independent of another certainly brings value to your farm, but could you *get more* by intertwining these services together? We know the answer is yes and welcome the opportunity to work with you for the benefit of *getting more* efficiency and sustainability from your herd.

On behalf of the CentralStar team,

Kery

Kelly Bristle Director, Member Relations and Promotions

CentralStar Big Book

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On the Cover

Larson Acres, Inc., Evansville, Wis. L to R: CentralStar Area Sales Manager Ben Sarbacker, Larson Acres, Herdsman Paul Poppy, CentralStar CowManager Specialist, Matt Staner.





Fine Print

Reports and Key Performance Indicators are based on the period of 10/1/22 - 9/30/23. Owner-sampler and commercial herds are not eligible for report rankings. Energy Corrected Milk (ECM) calculation = (pounds of milk x .327) + (pounds of fat x 12.95) + (pounds of protein x 7.65). Herds with cows milked more than 2X per day are labeled as 3X herds.

Minimums to appear include:

- Number of processed tests = 9 or a DCR >90
- Herd size: 25 cows
- ECM: mixed-breed and Red & White herds: 20,000, Proteinbreed herds: 16,000





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ZERO MILK DISCARD

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MEAT
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AC2848 EpriGard[™] - 5 liter (\$271.62)

1 5liter of EpriGard treats 77 1430lb cows



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Central**Star**

PIONEER AWARD





Recognized as a top leadership expert in the world, it's no surprise John C. Maxwell's training and teachings were a constant for this year's Pioneer Award recipient, Gary A. Smith. A 38-year team member with the cooperative, Gary had an entrepreneurial spirit and passion for people. He was truly a pioneer implementing leadership and development strategies for the benefit of the cooperative's customers.

"What I enjoyed most about my career was seeing people grow both personally and professionally," shared Gary. "Prioritizing people development allowed us to keep moving a sound organization forward, while staying profitable, and providing services to customers to help them add more to their bottom line."

A career that spanned from April 1977 until retirement in March 2015, Gary's roles were diverse and his contributions many. "I was drawn to Michigan Animal Breeders Cooperative (MABC) because of the chance to work with farmers and animals," shared Gary. "But I soon realized it was the opportunities to help people develop their own skills for personal growth and to help our customers that I enjoyed the most."

In 1977, Gary began his career as an A.I. Technician-Distributor in western Michigan. Soon after, he became A.I. Training Specialist for west Michigan and Indiana teaching



producers the art of artificial insemination. In 1980, he was promoted to Regional Sales Manager for northern and central Michigan, during which he was instrumental in assisting with the development and implementation of a computerized-mobile-sales program, resulting in improved efficiency and accuracy for the cooperative. Also, he created the cooperative's first sales-training program, and developed a consultative-selling team, positioning the organization to better integrate sales and service to dairy producers.

From 1988 – 1997, Gary served as Director of Marketing and Sales, and Sales Manager. In 1997, he was named Director of Ag Sales and Technologies and was charged with developing a new revenue stream for the cooperative. Through his leadership, herdmanagement-product sales and technical-consultative services grew from \$197,000 to more than \$2 million annually.

Recognizing his expertise of training, people development, and sales, in 2003 the Board of Directors selected Gary to be General Manager and Executive Vice President. Through Gary's 12-year leadership, revenues grew from \$13.5 million to over \$25 million, enabling the return of more than \$5.1 million in patronage to member-stockowners.

Gary was dedicated to creating a strong team and did so by initiating a learning culture that was committed to customer excellence. He is credited for initiating an online learning center to enhance team-member knowledge and skills for the benefit of themselves and



customers. He also identified the need to create teams of service specialists to work with customers. "Implementing a team approach at that time was critical to advancing the cooperative," shared Gary. "Our offerings had expanded and included DHI services, research and development, and diagnostic testing, so it was time to bring everyone together for the benefit of customers."

In March 2015, Gary retired from the cooperative, and CentralStar Board President, Paul Trierweiler shared, "Gary has poured his heart and soul into our organization. His passion for the cooperative and employees is evident in the success we have experienced during his leadership."

Upon retirement, Gary continued his passion for developing people. In 2015, he started Gary A Smith Consulting Services, providing motivational and strategic team-growth approaches for individuals and businesses. In 2016, he joined the Michigan State University Demmer Center for Shooting Sports, Education, and Training as a Range Safety Officer and a USA Shooting Pistol Coach. Additionally, he continued to own and operate RodMaster Fishing Charters, LLC, on Lake Michigan. In 2021, Gary finally retired from it all and became a full time RV Wanderer, exploring America with his wife Denise.

The CentralStar Pioneer Award was established in 1977 to recognize individuals who, through unselfish and dedicated service as leaders, have provided the cooperative and its members greater prosperity, today, and a more secure tomorrow.

5

CentralStar Cooperative

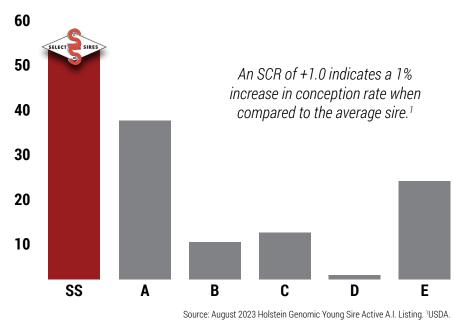
GET MORE FROM YOUR GENETICS REPRODUCTION

Leverage breed-leading genetics and proven reproductive programs to maximize your herd's potential and productivity. We can help you with day-to-day reproduction work and the strategic plans necessary to optimize heifer inventory, while providing programs to maximize your beef-on-dairy calves.



SIRE CONCEPTION RATE

HOLSTEIN ACTIVE YOUNG SIRES ≥ +1.0 SCR



GENETICIMPROVEMENT

0

00

Access to the world's best dairy, beef, and crossbreeding genetics to create the herd you want. Take your genetic selection to the next level when you enroll in Select Sires' NxGEN® program for early access to the most elite Holstein sires.





GET MORE FROM YOUR NOTE OF THE PROPERTY OF THE

With just a few ounces of milk collected through routine DHI testing you get essential information that impacts your herd's productivity, health, and profitability. At pennies a day, DHI is arguably one of the best investments you can make to improve herd performance.

DATA-DRIVEN MANAGEMENT DECISIONS

Accurate data collection

000

- Customized DHI programs for any size herd and set-up
- Seamless data transfer to breed associations
- Official test types meet CDCB requirements
- Records processed through DRMS, the largest dairy records processing center in the USA!



CONVENIENT & COST-EFFECTIVE DIAGNOSTIC TESTS

- Use milk samples to gain insights for health and physiology, saving you time and eliminating labor to find, sort, and lock-up cows
- Add analysis for A1/A2, BVD, BLV, Johne's, mastitis, neospora, pregnancy and more
- Perform multiple tests on one sample
- Send samples direct to lab or through routine DHI testing



TURN DATA **EACTION**

- Choose from hundreds of standard printed reports or custom build reports specific to your herd
- Maximize milk quality with FREE SCC reports
- ∠ Leverage DART (formerly PCDART) dairy management software and mobile-app for convenient access to insights for herd management. Interfaces with most major milking and electronic heat- and healthmonitoring systems. Affordable per cow pricing, local support, and FREE program updates.





SCC Hot Sheet - FREE

Provides SCC scores for all cows and ranks their contribution to the bulk tank. Emailed within 24 hours of sample processing.

| Index | Barn | Milk | Fat % | Pro % | SCS | Count | MUN | DIM | Lact | CAR | W/O | % |
|-------|------|------|-------|-------|-----|-------|-----|-----|------|-----|-----|------|
| 1409 | 1409 | 88.5 | 3.2 | 2.6 | 8.6 | 4851 | | 79 | 6 | | 140 | 12.7 |
| 1521 | 1521 | 80.3 | 3.4 | 3.0 | 8.5 | 4526 | | 185 | 4 | | 123 | 10.8 |
| 1884 | 1884 | 82.3 | 4.4 | 3.4 | 7.5 | 2263 | | 160 | 2 | | 115 | 5.5 |
| 1758 | 1758 | 70.0 | 5.1 | 3.4 | 7.1 | 1715 | | 179 | 3 | | 109 | 3.6 |

7 Test Days with Herdmate Deviation (220)

Tracks trends for milk and SCC. Lactation-to-date data includes deviation from herdmates, ranking cows within the herd.

| 8 | | S | CC and | Milk We | ights by | Test Da | ау | San | nple Day | / Data | | | | La | ctation To | Date | | | Projec | ted 305 2 | (ME | Times | Bred | Due |
|---------|----------------------------|-----------------------|-----------------------|-----------------------|--------------|-----------------------|--------------|-------------|------------|---------------------------|-----------|-------------|---------------|-----------------|---------------|-------------|-------------|------------------|----------------|-------------|------------|--------------|------------|------------------|
| Bre | Permanent ID | Test Date 03-30 | Test Date 04-27 | Test Date 05-27 | Test Date | Test Date 07-20 | Test Date | Milk | Fat% | Over | Barn Name | Lact No. | Fresh Date | Days in Milk | Milk | Fat | Pro | Income | Diff. fr | om Herdm | ates | Bred | Date | Date |
| Batch | Sire ID | Milk SCC | Milk SCC | Milk SCC | Milk SCC | Milk SCC | Milk SCC | scc | Pro% | Feed \$ Summit Milk | Index | Days | Age Yr/Mo | Days 3X | ERPA\$ | Fat% | Pro% | Feed \$ Perst. % | Milk | Fat | Pro | Service | Sire ID | Action Needed |
| | 840003008538901 MORTAIL | 98 3200 | 96 115 | 88 132 | 92 857 | 89 93 | 84 81 | 69.9 123 | 3.6 3.0 | 119 | 701 | 6 20 | 6-16 7-04 | 466 | 44600 +731 | 1804 4.0 | 1306 2.9 | B 100 | 31437 +341 | 1326 +85 | 933 -30 | 2 JUMPSHO | 10-23 T | 7*29 F |
| | 840003003831045 SCORPIO | TF 100 | 115 13 | 156 13 | 132 13 | 128 13 | 148 13 | 116.5 14 | 3.7 3.1 | 135 | 775 | 6 52 | 3-27 7-03 | 181 | 23485 +323 | 853 3.6 | 658 2.8 | 0 98 | 33215 +626 | 1220 +12 | 969 -28 | 3 JAGUAR | 8-28 | 6-04 P 10-12 |
| HO 1 | 840003011934894 SHOT | DRY | DRY | 138 41 | 160 33 | 144 18 | 136 20 | 136.0 29 | 2.3 2.6 | 152 | 794 | 6 43 | 5-12 7-03 | 135 | 18956 -316 | 538 2.8 | 504 2.7 | 2 107 | 34629 +1815 | 984 -194 | 977 -19 | 1 TOPSY | 8-07 | 5-14 P |

Udder Health Monitor (427)

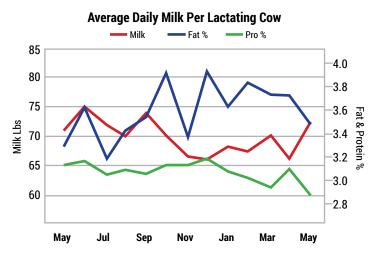
Monitors SCC by lactation group. Identifies cows to cull for poor udder health. Overview benchmarks herd with top 20% of cohort herds.

| | Cows to Treat or Watch - 1st Lactation Infected this test or last test (SCC >= 200K (SCS >= 4.0)) and DIM >= 5 | | | | | | | | | | | | | | | | | |
|-------|---|-------|-----|------|-----|--------------|---------------|----------------------|-------------------------------|-------------|----|-------------------------|--------------------|---------------------------|----------------------|------------------------------------|-----------------------|-------|
| Index | Grp | Lact. | DIM | Milk | scc | Prev. SCC | Inf. Level | Lact. Avg. SCC | Prev. Lact. Avg. SCC | Te: Infe | | Date 1st Infected | DIM 1st Inf. | 30 Day Milk Loss | 305 2X ME Milk | Prv. Lact. 305 2X ME Milk | Days Since Bred | Preg. |
| 8772 | 3 | 1 | 226 | 81.2 | 650 | 429 | CHR | 214 | ~~~~ | 4 | 57 | 2-12-13 | 135 | 83 | 28,487 | ~~~~ | 150 | Р |
| 8720 | 3 | 1 | 407 | 89.2 | 528 | 66 | NEW | 264 | ~~~~ | 7 | 54 | 7-09-12 | 98 | 77 | 33,155 | ~~~~ | 157 | Р |
| 8726 | 3 | 1 | 389 | 57.7 | 348 | 132 | NEW | 100 | ~~~~ | 2 | 17 | 3-12-13 | 326 | 63 | 33,722 | ~~~~ | 221 | Р |

Herd Evaluator (402)

Monitor trends to trouble-shoot and identify areas of opportunity in a herd. Easy-to-read herd overview summarizes key areas known to affect profitability on Midwest dairies including average daily milk, SCC, turnover and death loss, pregnancy and conception, and herd inventory.

Graphs provide quick visual with data tables providing more in-depth information.



Pregnancy & Conception Rates Pregnancy Rate Conception Rate 28.0 26.0 24.0 22.0 18.0 16.0 14.0 12.0 Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr May

9

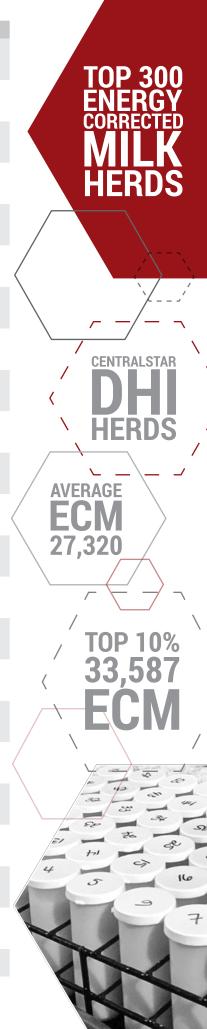


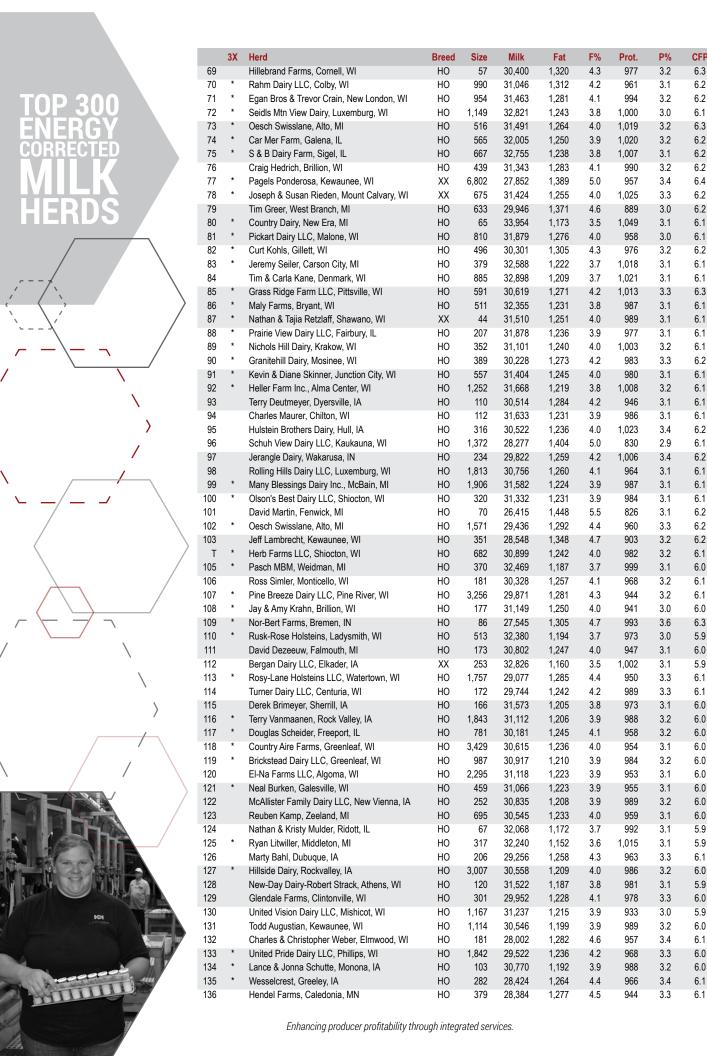
New Products from DRMS give you

- Cloud access
- Real-time data
- Regional Benchmarks



| | 3X | Herd | Breed | Size | Milk | Fat | F% | Prot. | P% | CFP | ECM |
|----------|----|---|----------|--------------|------------------|----------------|------------|----------------|------------|------------|------------------|
| 1 2 | * | Koester Dairy Inc., Dakota, IL | HO | 412 690 | 36,429 34,119 | 1,578 | 4.3 | 1,154 1,074 | 3.2 | 7.5 7.2 | 41,175 39,679 |
| 3 | * | Lew-Max LLC, Belding, MI Horsens Homestead Farms, Cecil, WI | HO HO | 1,451 | 34,785 | 1,568 1,483 | 4.6 4.3 | 1,148 | 3.1 3.3 | 7.2 7.2 | 39,362 |
| 4 | * | Kellercrest Reg Hol Inc., Mount Horeb, WI | НО | 334 | 33,750 | 1,506 | 4.5 | 1,115 | 3.3 | 7.2 | 39,069 |
| 5 | * | Sand Creek Dairy LLC, Hastings, MI | НО | 962 | 35,658 | 1,434 | 4.0 | 1,153 | 3.2 | 7.1 | 39,051 |
| 6 | * | Zoromski Family Farms LLC, Custer, WI | НО | 469 | 33,838 | 1,491 | 4.4 | 1,111 | 3.3 | 7.1 | 38,873 |
| 7 | * | Nor-Bert Farms, Bremen, IN | BS | 27 | 29,632 | 1,576 | 5.3 | 1,080 | 3.6 | 7.3 | 38,361 |
| 8 | * | Blaser Farms Inc., Gillett, WI | HO | 605 | 34,486 | 1,421 | 4.1 | 1,093 | 3.2 | 6.9 | 38,040 |
| 9 | * | Tom Engelken, Earlville, IA Shiloh Dairy, Greenleaf, WI | HO HO | 221 2,665 | 34,543 32,733 | 1,385 1,468 | 4.0 4.5 | 1,124 1,056 | 3.3 3.2 | 6.9 6.9 | 37,830 37,793 |
| 11 | * | Nobis Dairy Farms, St Johns, MI | HO | 1,004 | 35,275 | 1,382 | 3.9 | 1,064 | 3.0 | 6.7 | 37,793 |
| 12 | * | Tom Kunkel, Cuba City, WI | НО | 244 | 33,593 | 1,437 | 4.3 | 1,035 | 3.1 | 6.8 | 37,512 |
| 13 | * | Feltz Family Farm, Stevens Point, WI | НО | 791 | 34,445 | 1,376 | 4.0 | 1,101 | 3.2 | 6.8 | 37,505 |
| 14 | * | Nathan & Tajia Retzlaff, Shawano, WI | НО | 150 | 34,665 | 1,364 | 3.9 | 1,091 | 3.1 | 6.7 | 37,345 |
| 15 | * | Abel Dairy Farms, Fond Du Lac, WI | НО | 4,247 | 32,207 | 1,459 | 4.5 | 1,018 | 3.2 | 6.8 | 37,213 |
| 16 | * | First Farms, Ionia, MI | HO | 568 | 33,658 | 1,388 | 4.1 | 1,043 | 3.1 | 6.7 | 36,960 |
| 17 18 | * | Top-Deck Farms, Westgate, IA Whitetail Valley Dairy LLC, Waupaca, WI | HO HO | 719 327 | 32,224 34,312 | 1,431 1,332 | 4.4 3.9 | 1,010 1,072 | 3.1 3.1 | 6.7 6.6 | 36,795 36,670 |
| 19 | * | Gibbs Family Dairy, Waterville, IA | НО | 592 | 31,978 | 1,429 | 4.5 | 1,004 | 3.1 | 6.7 | 36,643 |
| 20 | * | Fischer & Clark Dairy, Hatley, WI | XX | 1,014 | 32,301 | 1,390 | 4.3 | 1,051 | 3.3 | 6.7 | 36,603 |
| 21 | * | Mark Vanderhyde - Spartan Farm, Sparta, MI | НО | 269 | 29,755 | 1,528 | 5.1 | 920 | 3.1 | 6.7 | 36,555 |
| 22 | | Dan & Tim Liner, Van Dyne, WI | НО | 261 | 33,542 | 1,317 | 3.9 | 1,102 | 3.3 | 6.6 | 36,454 |
| 23 | * | Fred & Pat Beer, Milford, IN | HO | 1,055 | 32,678 | 1,382 | 4.2 | 1,028 | 3.1 | 6.6 | 36,447 |
| 24 25 | * | Harry & Gary Sanborn, Hubbardston, MI Mitchell Ronnebaum, Earlville, IA | HO HO | 700 183 | 33,363 32,071 | 1,353 1,376 | 4.1 | 1,038 1,049 | 3.1 | 6.6 6.6 | 36,372 36,331 |
| 26 | * | Lucky 7 Dairy, McBain, MI | НО | 2,008 | 34,656 | 1,376 | 3.7 | 1,049 | 3.1 | 6.5 | 36,296 |
| 27 | * | Crandall Farms LLC, Battle Creek, MI | НО | 355 | 32,160 | 1,372 | 4.3 | 1,047 | 3.3 | 6.6 | 36,293 |
| 28 | * | Newell Farms, Trufant, MI | НО | 473 | 33,328 | 1,322 | 4.0 | 1,075 | 3.2 | 6.6 | 36,242 |
| 29 | * | Weishaar Family Farm, Westfield, WI | НО | 353 | 33,286 | 1,353 | 4.1 | 1,023 | 3.1 | 6.5 | 36,232 |
| 30 | * | Heimans Holsteins LLC, Marshfield, WI | НО | 535 | 32,008 | 1,372 | 4.3 | 1,038 | 3.2 | 6.6 | 36,175 |
| 31 | * | Wayside Dairy, Greenleaf, WI | HO | 2,571 | 31,389 | 1,398 | 4.5 | 995 | 3.2 | 6.6 | 35,980 |
| 32 33 | * | Srnka Farms LLC, Algoma, WI Five Star Dairy, Elk Mound, WI | HO HO | 501 1,080 | 33,612 31,027 | 1,323 1,399 | 3.9 4.5 | 1,016 987 | 3.0 3.2 | 6.4 6.5 | 35,896 35,813 |
| 34 | * | Ambrosius Dairy Farm, Seymour, WI | НО | 126 | 33,137 | 1,318 | 4.0 | 1,023 | 3.1 | 6.4 | 35,730 |
| 35 | * | Sugar Creek Dairy, Elkhorn, WI | НО | 637 | 32,673 | 1,305 | 4.0 | 1,057 | 3.2 | 6.5 | 35,670 |
| 36 | | Devon & Doreen Zimmerman, Claypool, IN | НО | 332 | 31,869 | 1,319 | 4.1 | 1,051 | 3.3 | 6.5 | 35,542 |
| 37 | * | Quantum Dairy LLC, Weyauwega, WI | НО | 3,547 | 30,639 | 1,393 | 4.5 | 974 | 3.2 | 6.5 | 35,509 |
| 38 | * | Tony Rosebrugh, West Branch, MI | XX | 788 | 32,871 | 1,310 | 4.0 | 1,014 | 3.1 | 6.4 | 35,470 |
| 39 40 | * | Scott & Dawn Seward, Pine River, WI Banner Ridge Farms LLC, Platteville, WI | HO HO | 455 551 | 32,711 32,407 | 1,313 1,307 | 4.0 | 1,010 1,030 | 3.1 3.2 | 6.4 6.4 | 35,426 35,402 |
| 41 | * | George Kasbergen, Mansfield, IL | НО | 3,707 | 33,703 | 1,281 | 3.8 | 1,017 | 3.0 | 6.3 | 35,390 |
| 42 | | Kevin Solum, Deer Park, WI | НО | 1,347 | 30,463 | 1,355 | 4.4 | 1,029 | 3.4 | 6.5 | 35,381 |
| 43 | | Mark Lensing, Calmar, IA | НО | 939 | 31,420 | 1,336 | 4.3 | 1,001 | 3.2 | 6.4 | 35,233 |
| 44 | | Gav-N-View Farm, Lansing, IA | НО | 477 | 30,071 | 1,392 | 4.6 | 963 | 3.2 | 6.5 | 35,227 |
| 45 | * | W-R-L Daniels Farm, Whittemore, MI | HO | 671 | 29,734 | 1,403 | 4.7 | 956 | 3.2 | 6.5 | 35,205 |
| 46 47 | * | Mike Zagata, Sebewaing, MI Wilnore Holsteins, Milton, WI | HO HO | 709 90 | 31,395 33,415 | 1,352 1,251 | 4.3 3.7 | 969 1,053 | 3.1 3.2 | 6.4 6.3 | 35,187 35,183 |
| 48 | * | Neil Christianson, Shiocton, WI | НО | 189 | 31,383 | 1,324 | 4.2 | 994 | 3.2 | 6.4 | 35,103 |
| 49 | * | J-Max, LLC, Fremont, MI | НО | 1,634 | 32,469 | 1,296 | 4.0 | 990 | 3.0 | 6.3 | 34,974 |
| 50 | * | Dairy Dreams, Casco, WI | XX | 4,529 | 29,131 | 1,381 | 4.7 | 982 | 3.4 | 6.5 | 34,922 |
| 51 | * | Spring Breeze Dairy, Bryant, WI | НО | 4,446 | 32,722 | 1,262 | 3.9 | 1,028 | 3.1 | 6.3 | 34,907 |
| 52 | * | Katie & Jeff Falk, Monroe, WI | HO | 603 | 31,927 | 1,321 | 4.1 | 962 | 3.0 | 6.3 | 34,906 |
| T 54 | | Greg & Jenny Conway, Lansing, IA Stuart Farms, Lowell, MI | HO HO | 170 433 | 30,719 30,693 | 1,345 1,325 | 4.4 4.3 | 973 1,007 | 3.2 3.3 | 6.4 6.4 | 34,906 34,899 |
| 55 | * | Ed Walter Farm Inc., Oshkosh, WI | НО | 318 | 31,344 | 1,310 | 4.2 | 998 | 3.2 | 6.3 | 34,849 |
| 56 | * | Ronald & Nancy Felten, St. Cloud, WI | НО | 470 | 31,050 | 1,306 | 4.2 | 1,014 | 3.3 | 6.4 | 34,823 |
| 57 | | Jim & Matt Wautier, Brussels, WI | НО | 56 | 31,341 | 1,312 | 4.2 | 990 | 3.2 | 6.3 | 34,812 |
| 58 | * | Buning Dairy LLC, Falmouth, MI | НО | 710 | 32,791 | 1,253 | 3.8 | 1,025 | 3.1 | 6.2 | 34,790 |
| 59 | | Derek Hammerand, Dubuque, IA | HO | 221 | 31,054 | 1,317 | 4.2 | 986 | 3.2 | 6.3 | 34,753 |
| 60 61 | * | Doug Fairbanks, Anamosa, IA Darren Rusch, Pound, WI | HO | 285 | 31,286 | 1,307 | 4.2 | 991 | 3.2 | 6.3 6.3 | 34,737 |
| 62 | * | Todd & Bryce Mark, Elmwood, WI | HO HO | 407 165 | 30,749 32,312 | 1,328 1,238 | 4.3 3.8 | 975 1,060 | 3.2 3.3 | 6.3 | 34,711 34,707 |
| 63 | * | Jordan Prairie Holsteins, Brodhead, WI | НО | 220 | 32,180 | 1,251 | 3.9 | 1,029 | 3.2 | 6.2 | 34,595 |
| 64 | * | Enyart Farms LLC, Postville, IA | НО | 314 | 32,116 | 1,281 | 4.0 | 980 | 3.1 | 6.2 | 34,588 |
| 65 | * | Yonkman Dairy, McBain, MI | НО | 1,885 | 31,481 | 1,312 | 4.2 | 952 | 3.0 | 6.2 | 34,567 |
| 66 | | River Crest Dairy LLC, Greenwood, WI | HO | 256 | 30,190 | 1,310 | 4.3 | 1,010 | 3.3 | 6.4 | 34,563 |
| 67 | * | Foresight Farms, LLC, Decorah, IA | HO HO | 1,128 | 31,794 | 1,256 | 4.0 | 1,030 | 3.2 | 6.3 | 34,541 |
| 68 | | Dale Brinks, McBain, MI | НО | 205 | 31,147 | 1,284 | 4.1 | 1,010 | 3.2 | 6.3 | 34,539 |
| | | | | | | | | | | | |





ECM

34,509

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33 192

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33,081

33,080

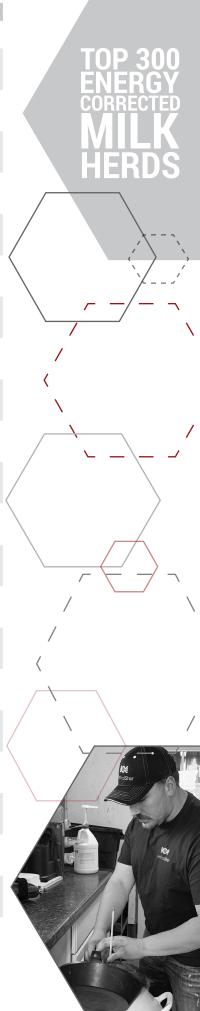
33,065

33,056

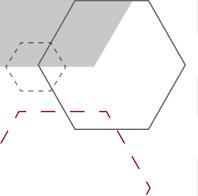
33,053

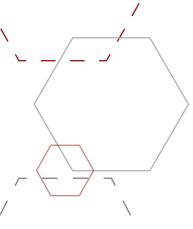
33,040

| | 3X | Herd | Breed | Size | Milk | Fat | F% | Prot. | Р% | CFP | ECM |
|------------|----|--|----------|--------------|------------------|----------------|------------|------------|------------|------------|------------------|
| 137 | | Lyle & Carla Weaver, Goshen, IN | НО | 142 | 29,539 | 1,243 | 4.2 | 950 | 3.2 | 6.0 | 33,024 |
| 138 | * | Pebble Knolls Dairy, Brandon, WI | HO | 787 | 29,879 | 1,215 | 4.1 | 981 | 3.3 | 6.0 | 33,009 |
| 139 | * | Tracy Lacrosse & Dale Uecker, Forestville, WI | HO | 86 | 29,706 | 1,238 | 4.2 | 949 | 3.2 | 6.0 | 33,006 |
| 140 141 | | Brightside Dairy LLC, Greenleaf, WI | HO HO | 830 775 | 32,276 29,750 | 1,143 1,247 | 3.5 4.2 | 999 927 | 3.1 3.1 | 5.9 6.0 | 32,998 32,968 |
| 141 | | Bauduin's Grandview Dairy LLC, Casco, WI Silvershea Holsteins LLC, Omro, WI | НО | 188 | 30,997 | 1,247 | 3.9 | 953 | 3.1 | 5.9 | 32,966 |
| 143 | | Furseth Farms Inc., Stoughton, WI | НО | 192 | 30,004 | 1,200 | 3.9 4.1 | 951 | 3.1 | 6.0 | 32,924 |
| 144 | | Golden Corners Dairy, Oconto Falls, WI | НО | 284 | 29,757 | 1,229 | 4.1 | 951 | 3.2 | 6.0 | 32,921 |
| 145 | * | Larry & Jennifer Meyer, Chilton, WI | НО | 125 | 30,841 | 1,182 | 3.8 | 982 | 3.2 | 5.9 | 32,904 |
| 146 | * | Wirth Farms, Evart, MI | НО | 1,491 | 32,588 | 1,143 | 3.5 | 973 | 3.0 | 5.8 | 32,902 |
| 147 | | Royal Vista Holsteins LLC, Pickett, WI | НО | 371 | 29,987 | 1,218 | 4.1 | 957 | 3.2 | 6.0 | 32,900 |
| 148 | | Burke Larsen, Scottville, MI | НО | 688 | 30,418 | 1,218 | 4.0 | 931 | 3.1 | 5.9 | 32,842 |
| 149 | * | Blanchard Family Dairy, Charlotte, IA | XX | 1,614 | 28,209 | 1,297 | 4.6 | 890 | 3.2 | 6.0 | 32,829 |
| 150 | | Dominic & Jamie Mastey, Bonduel, WI | НО | 160 | 31,219 | 1,195 | 3.8 | 932 | 3.0 | 5.8 | 32,814 |
| 151 | | Jonas Zimmerman, Wakarusa, IN | НО | 127 | 26,958 | 1,335 | 5.0 | 875 | 3.2 | 6.1 | 32,797 |
| 152 | * | Stutzman Family Farms LLC, Conrath, WI | НО | 365 | 30,380 | 1,226 | 4.0 | 913 | 3.0 | 5.9 | 32,795 |
| 153 | | Riemer-Sawall, Clintonville, WI | НО | 186 | 29,072 | 1,224 | 4.2 | 972 | 3.3 | 6.0 | 32,793 |
| 154 | | Jason & Sara Menne, Postville, IA | НО | 170 | 29,081 | 1,232 | 4.2 | 955 | 3.3 | 6.0 | 32,770 |
| 155 | * | Norm & Derrick Hammond, Dowling, MI | НО | 521 | 30,933 | 1,182 | 3.8 | 957 | 3.1 | 5.9 | 32,743 |
| 156 | * | Cross Farms, Oshkosh, WI | НО | 1,963 | 30,316 | 1,183 | 3.9 | 981 | 3.2 | 5.9 | 32,738 |
| 157 | | Petro Farms, Gobles, MI | НО | 977 | 30,762 | 1,169 | 3.8 | 982 | 3.2 | 5.9 | 32,710 |
| 158 | | Reuben Nolt, Alta Vista, IA | НО | 65 | 28,614 | 1,256 | 4.4 | 923 | 3.2 | 6.0 | 32,683 |
| 159 | | Earl & Jeff Horning, Manchester, MI | НО | 437 | 29,675 | 1,227 | 4.1 | 924 | 3.1 | 5.9 | 32,662 |
| 160 | * | Jeff & Melinda Walz, West Union, IA | HO | 124 | 30,472 | 1,212 | 4.0 | 915 | 3.0 | 5.8 | 32,659 |
| 161 | * | Schmidtknecht Farms LLP, Mondovi, WI | HO | 999 | 29,214 | 1,232 | 4.2 | 928 | 3.2 | 5.9 | 32,607 |
| 162 | | Mitchell Dairy & Grain LLC, Winnebago, IL | HO | 476 | 30,657 | 1,196 | 3.9 | 923 | 3.0 | 5.8 | 32,574 |
| 163 164 | * | Blair Farms, Winslow, IL Kinnard Farms Inc., Casco, WI | HO HO | 213 8,203 | 30,487 31,431 | 1,182 1,142 | 3.9 3.6 | 952 979 | 3.1 3.1 | 5.8 5.8 | 32,559 32,556 |
| 165 | * | Oesch Swisslane, Alto, MI | НО | 1,792 | 28,150 | 1,142 | 4.5 | 922 | 3.3 | 6.0 | 32,549 |
| 166 | * | Brand Dairy Farm, Waterloo, IN | НО | 402 | 30,189 | 1,189 | 3.9 | 949 | 3.1 | 5.9 | 32,529 |
| 167 | * | Brad & Laura Friesen, Barron, WI | НО | 219 | 29,824 | 1,103 | 4.0 | 961 | 3.2 | 5.9 | 32,528 |
| 168 | | Production Unlimited LLC, Twin Lakes, WI | НО | 130 | 28,731 | 1,225 | 4.3 | 950 | 3.3 | 6.0 | 32,526 |
| 169 | | Amy Karpinski, Waupaca, WI | XX | 208 | 30,878 | 1,169 | 3.8 | 951 | 3.1 | 5.8 | 32,511 |
| 170 | * | Montecassino Dairy, Milladore, WI | НО | 336 | 29,663 | 1,181 | 4.0 | 981 | 3.3 | 5.9 | 32,498 |
| 171 | | Duane, Jeanne & Dave Meier, Monticello, WI | НО | 74 | 29,321 | 1,203 | 4.1 | 958 | 3.3 | 5.9 | 32,496 |
| 172 | * | Stencil Farms, Denmark, WI | НО | 1,601 | 28,947 | 1,238 | 4.3 | 913 | 3.2 | 5.9 | 32,482 |
| 173 | | Tom Engelken, Earlville, IA | XX | 27 | 28,483 | 1,217 | 4.3 | 962 | 3.4 | 6.0 | 32,433 |
| 174 | | Brumm Dairy LLC, Stacyville, IA | НО | 264 | 29,364 | 1,201 | 4.1 | 950 | 3.2 | 5.9 | 32,422 |
| 175 | * | River Ridge Dairy, Coopersville, MI | НО | 1,858 | 28,266 | 1,261 | 4.5 | 892 | 3.2 | 5.9 | 32,397 |
| 176 | * | Hopeless Dairy Inc., Sheldon, WI | НО | 409 | 27,914 | 1,266 | 4.5 | 895 | 3.2 | 5.9 | 32,369 |
| 177 | * | Gene & Connie Duschner, Farley, IA | НО | 620 | 28,486 | 1,217 | 4.3 | 953 | 3.3 | 5.9 | 32,366 |
| 178 | * | James & Marlene Decker, Bernard, IA | НО | 530 | 29,728 | 1,200 | 4.0 | 926 | 3.1 | 5.8 | 32,345 |
| 179 | * | Second Look Holsteins LLC, Eden, WI | НО | 1,197 | 29,544 | 1,187 | 4.0 | 953 | 3.2 | 5.9 | 32,323 |
| 180 | * | Kohn Dairy LLC, Cecil, WI | НО | 289 | 29,937 | 1,187 | 4.0 | 932 | 3.1 | 5.8 | 32,291 |
| 181 | * | Galen Schalk, Hillman, MI | НО | 221 | 29,346 | 1,187 | 4.0 | 957 | 3.3 | 5.9 | 32,289 |
| 182 | * | Stempfle Holsteins, Maynard, IA | HO | 774 | 29,551 | 1,194 | 4.0 | 933 | 3.2 | 5.8 | 32,263 |
| 183 | * | Lake Breeze Dairy, Malone, WI | HO | 3,360 | 31,117 | 1,138 | 3.7 | 960 | 3.1 | 5.7 | 32,256 |
| 184 | • | Ro-Linda Acres, Waterville, IA | HO | 1,050 | 29,832 | 1,165 | 3.9 | 968 | 3.2 | 5.8 | 32,247 |
| 185 | | Terry & Milton Hallada, Lena, WI Troy & Don Meyer, Maynard, IA | HO | 249 | 30,154 28,733 | 1,164 | 3.9 | 949 | 3.1 | 5.8 | 32,194 |
| 186 187 | * | Craig & Katharine Edler, Browntown, IL | HO HO | 97 826 | 29,327 | 1,208 1,208 | 4.2 4.1 | 931 901 | 3.2 3.1 | 5.9 5.8 | 32,161 32,126 |
| 188 | | Brent & Carrie Pollard, Rockford, IL | НО | 63 | 28,354 | 1,200 | 4.1 | 920 | 3.2 | 5.9 | 32,120 |
| 189 | | Greg Illig & Sons, West Branch, MI | НО | 462 | 27,252 | 1,300 | 4.8 | 832 | 3.1 | 5.8 | 32,111 |
| 190 | * | Rem-Jem Dairy, LLC, Unity, WI | НО | 561 | 30,540 | 1,163 | 3.8 | 922 | 3.0 | 5.7 | 32,111 |
| 191 | | Lehman Dairy, Sherrill, IA | НО | 139 | 29,849 | 1,169 | 3.9 | 941 | 3.2 | 5.8 | 32,098 |
| 192 | | Coonridge Holsteins, Anamosa, IA | НО | 172 | 30,608 | 1,158 | 3.8 | 927 | 3.0 | 5.7 | 32,096 |
| Т | | Charles & Kappy Koch, Tremont, IL | НО | 148 | 26,775 | 1,250 | 4.7 | 935 | 3.5 | 6.0 | 32,096 |
| 194 | | Martin Kevin, Warren, IL | НО | 113 | 29,847 | 1,161 | 3.9 | 952 | 3.2 | 5.8 | 32,078 |
| 195 | | Jack & Tom Jeppesen, Stanton, MI | НО | 273 | 29,341 | 1,183 | 4.0 | 935 | 3.2 | 5.8 | 32,067 |
| 196 | * | Meier Meadows, Ridott, IL | НО | 893 | 29,317 | 1,184 | 4.0 | 934 | 3.2 | 5.8 | 32,065 |
| 197 | * | Berning Acres, East Dubuque, IL | НО | 472 | 28,516 | 1,211 | 4.2 | 921 | 3.2 | 5.8 | 32,053 |
| 198 | * | Maple Leaf Acres, Elk Mound, WI | НО | 354 | 28,018 | 1,227 | 4.4 | 910 | 3.2 | 5.9 | 32,013 |
| 199 | * | Sugar Creek LLC, New London, WI | НО | 1,663 | 28,922 | 1,215 | 4.2 | 890 | 3.1 | 5.8 | 32,000 |
| 200 | | Auburnvale Swiss, Fremont, WI | XX | 202 | 28,445 | 1,205 | 4.2 | 927 | 3.3 | 5.8 | 31,998 |
| 201 | | Kevin & Lisa Collins, Greenleaf, WI | НО | 1,518 | 29,379 | 1,171 | 4.0 | 942 | 3.2 | 5.8 | 31,978 |
| 202 | * | Allen Martin, Goshen, IN | НО | 482 | 30,110 | 1,149 | 3.8 | 946 | 3.1 | 5.7 | 31,962 |
| 203 | * | James & Brad Ritter, Byron, MI | НО | 269 | 29,101 | 1,199 | 4.1 | 903 | 3.1 | 5.8 | 31,951 |
| 204 | * | Jeff Brenner, Hopkins, MI | НО | 670 | 28,261 | 1,227 | 4.3 | 891 | 3.2 | 5.8 | 31,947 |
| | | | | | | | | | | | |



TOP 300 ENERGY CORRECTED MILK HERDS





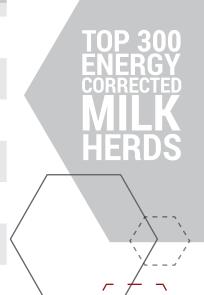


SCAN HERE FOR THE MONTHLY TOP 100 ECM



| | 3X | Herd | Breed | Size | Milk | Fat | F% | Prot. | P% | CFP | ECM |
|------------|----|--|----------|--------------|------------------|----------------|------------|------------|------------|------------|------------------|
| 205 | * | Carson Acres LLC, Hesperia, MI | НО | 139 | 29,875 | 1,150 | 3.8 | 952 | 3.2 | 5.8 | 31,944 |
| 206 | | Tom & Sara Kruse, Dyersville, IA | НО | 78 | 27,922 | 1,205 | 4.3 | 939 | 3.4 | 5.9 | 31,919 |
| 207 | * | Robert Getzloff, Wilson, MI | НО | 465 | 28,466 | 1,224 | 4.3 | 883 | 3.1 | 5.8 | 31,914 |
| 208 | | Matthew & Susan Smith, Hudson, MI | НО | 72 | 29,163 | 1,181 | 4.0 | 925 | 3.2 | 5.8 | 31,907 |
| 209 | | Rolling Valley Jerseys, Waterville, IA | XX | 34 | 27,232 | 1,219 | 4.5 | 942 | 3.5 | 5.9 | 31,897 |
| 210 211 | | Duane, Mel & Chad See, Chilton, WI Loehr Dairy LLC, Mount Calvary, WI | HO HO | 816 608 | 28,134 29,437 | 1,242 1,176 | 4.4 4.0 | 864 918 | 3.1 3.1 | 5.8 5.7 | 31,893 31,878 |
| 212 | | Andrew Houlberg, Monticello, WI | НО | 117 | 28,965 | 1,173 | 4.0 | 939 | 3.1 | 5.8 | 31,845 |
| 213 | | Bill & Bob Gruppen, Zeeland, MI | НО | 86 | 30,893 | 1,115 | 3.6 | 951 | 3.1 | 5.7 | 31,816 |
| 214 | | C-Dar Dairy LLC, Elkhart, IN | НО | 253 | 29,481 | 1,172 | 4.0 | 913 | 3.1 | 5.7 | 31,802 |
| 215 | | Kandy-Bahr Holsteins, Waukon, IA | НО | 69 | 29,836 | 1,132 | 3.8 | 964 | 3.2 | 5.7 | 31,790 |
| 216 | * | Keith Wood, Kingston, MI | НО | 137 | 28,410 | 1,178 | 4.1 | 945 | 3.3 | 5.8 | 31,774 |
| 217 | * | Kris Wardin, St Johns, MI | НО | 633 | 29,702 | 1,142 | 3.8 | 945 | 3.2 | 5.7 | 31,731 |
| 218 | * | Neighborhood Dairy, Kaukauna, WI | HO | 1,174 | 28,264 | 1,210 | 4.3 | 890 | 3.1 | 5.8 | 31,720 |
| 219 220 | * | Daane Dairy LLC, Brandon, WI | XX | 808 247 | 27,214 | 1,210 | 4.4 | 933 814 | 3.4 2.9 | 5.9 5.7 | 31,706 |
| 221 | * | Gilde Farms LLC, Lake City, MI 23 Dairy LLC, Middleton, MI | HO HO | 483 | 27,720 30,221 | 1,267 1,129 | 4.6 3.7 | 938 | 3.1 | 5.7 5.7 | 31,699 31,679 |
| 222 | | Dair-E-Land Holsteins, Shobonier, IL | НО | 140 | 29,263 | 1,149 | 3.9 | 945 | 3.2 | 5.7 | 31,678 |
| 223 | | Jeff Taylor, Rock Valley, IA | НО | 160 | 28,790 | 1,153 | 4.0 | 956 | 3.3 | 5.8 | 31,659 |
| 224 | | Charles & Kappy Coch, Tremont, IL | XX | 147 | 25,289 | 1,265 | 5.0 | 909 | 3.6 | 6.0 | 31,605 |
| 225 | * | Voight Acres, Shiocton, WI | НО | 290 | 29,780 | 1,138 | 3.8 | 925 | 3.1 | 5.7 | 31,551 |
| 226 | * | Lagesse Dairy Farms, Bloomer, WI | НО | 496 | 28,233 | 1,186 | 4.2 | 909 | 3.2 | 5.7 | 31,545 |
| 227 | | John & Ryan Sparrgrove, Castalia, IA | НО | 238 | 28,486 | 1,175 | 4.1 | 916 | 3.2 | 5.7 | 31,539 |
| 228 229 | | Virgil Martin, Boscobel, WI | HO | 125 172 | 29,492 | 1,145 1,152 | 3.9 | 923 920 | 3.1 3.1 | 5.7 5.7 | 31,533 |
| 230 | * | Jim Goldsmith, Earlville, IA Sand Creek Dairy LLC, Hastings, MI | HO JE | 417 | 29,255 24,725 | 1,152 | 3.9 5.1 | 928 | 3.8 | 6.0 | 31,523 31,514 |
| 231 | | Eric Frahm, Frankenmuth, MI | HO | 133 | 29,452 | 1,135 | 3.9 | 938 | 3.2 | 5.7 | 31,505 |
| 232 | * | Green Meadow Farms Inc., Elsie, MI | НО | 4,026 | 27,730 | 1,207 | 4.4 | 889 | 3.2 | 5.7 | 31,499 |
| 233 | * | Rickland Dairy LLC, Eldorado, WI | НО | 1,083 | 29,937 | 1,115 | 3.7 | 949 | 3.2 | 5.7 | 31,489 |
| 234 | | Kevin & Julie Fossum, Waterville, IA | НО | 246 | 28,779 | 1,147 | 4.0 | 943 | 3.3 | 5.7 | 31,478 |
| 235 | | Ron Brinks, McBain, MI | НО | 133 | 28,972 | 1,142 | 3.9 | 943 | 3.3 | 5.7 | 31,477 |
| 236 | | Heather Krueger, Clintonville, WI | НО | 72 | 28,825 | 1,159 | 4.0 | 919 | 3.2 | 5.7 | 31,465 |
| 237 238 | * | NE IA Dairy Foundation, Calmar, IA | HO | 215 670 | 27,744 | 1,201 | 4.3 | 894 883 | 3.2 3.2 | 5.7 | 31,464 |
| 239 | | Kenealy Dairy Farms, Cadott, WI Duane & Joan Lisowe, Chilton, WI | HO HO | 102 | 27,919 28,379 | 1,201 1,169 | 4.3 4.1 | 917 | 3.2 | 5.7 5.7 | 31,437 31,434 |
| 240 | | Mike Theunis, Wrightstown, WI | НО | 3,160 | 28,866 | 1,164 | 4.0 | 902 | 3.1 | 5.7 | 31,413 |
| 241 | | Marvin Martin, Carson City, MI | НО | 76 | 29,340 | 1,136 | 3.9 | 929 | 3.2 | 5.7 | 31,412 |
| 242 | | Troy & Sara Blazek, Oconto Falls, WI | НО | 199 | 28,944 | 1,136 | 3.9 | 943 | 3.3 | 5.7 | 31,390 |
| 243 | | Todd Martin, Claypool, IN | НО | 448 | 30,128 | 1,109 | 3.7 | 938 | 3.1 | 5.6 | 31,389 |
| 244 | | Dale & Sharon Fertig, Wall Lake, IA | НО | 222 | 28,396 | 1,175 | 4.1 | 900 | 3.2 | 5.7 | 31,387 |
| 245 | * | KDS Dairy Ryan Moellers, Cresco, IA | HO | 968 | 29,249 | 1,154 | 3.9 | 898 | 3.1 | 5.6 | 31,378 |
| 246 247 | | Vande Hei Dairy Farms, De Pere, WI Ron Folkema, Fremont, MI | HO XX | 433 1,063 | 29,871 28,869 | 1,129 1,173 | 3.8 4.1 | 912 880 | 3.1 | 5.6 5.6 | 31,365 31,363 |
| 248 | * | Preston Farms, Quincy, MI | HO | 940 | 27,745 | 1,173 | 4.3 | 912 | 3.3 | 5.7 | 31,330 |
| 249 | | Wilra Farms Inc., Nashville, IL | НО | 571 | 30,776 | 1,066 | 3.5 | 975 | 3.2 | 5.6 | 31,327 |
| 250 | | Steven Weaver, Goshen, IN | НО | 665 | 27,541 | 1,191 | 4.3 | 900 | 3.3 | 5.7 | 31,314 |
| 251 | * | David & Susan Granskog, Stephenson, MI | НО | 261 | 30,026 | 1,106 | 3.7 | 937 | 3.1 | 5.6 | 31,309 |
| T | | Dave Beuschel, Conklin, MI | НО | 114 | 28,075 | 1,196 | 4.3 | 868 | 3.1 | 5.7 | 31,309 |
| 253 | | Brian & Monica Enyart, Postville, IA | HO | 140 | 29,445 | 1,146 | 3.9 | 894 | 3.0 | 5.6 | 31,308 |
| 254 255 | | Stephen Burkholder, Orleans, MI Duane N Joan Lisowe, Chilton, WI | HO HO | 120 123 | 28,175 28,764 | 1,185 1,148 | 4.2 4.0 | 882 917 | 3.1 3.2 | 5.7 5.7 | 31,306 31,287 |
| 256 | | Norris Dairy Farm Inc., Hesperia, MI | НО | 723 | 28,372 | 1,140 | 4.0 | 892 | 3.1 | 5.7 | 31,266 |
| 257 | | Bob Van Daalwyk, Hilbert, WI | НО | 184 | 29,321 | 1,138 | 3.9 | 904 | 3.1 | 5.6 | 31,241 |
| 258 | | Dutch Meadows LLC, Zeeland, MI | НО | 190 | 27,925 | 1,167 | 4.2 | 909 | 3.3 | 5.7 | 31,198 |
| 259 | * | Plymouth Dairy Farm, Lemars, IA | НО | 8,285 | 28,608 | 1,125 | 3.9 | 949 | 3.3 | 5.7 | 31,183 |
| 260 | * | Lavern Martin, Conrath, WI | НО | 205 | 27,370 | 1,185 | 4.3 | 900 | 3.3 | 5.7 | 31,181 |
| 261 | | Bruce Martin, Whittemore, MI | XX | 105 | 28,060 | 1,166 | 4.2 | 901 | 3.2 | 5.7 | 31,168 |
| 262 | * | Tennesons 3-T Dairy, Ettrick, WI | HO | 362 691 | 29,079 | 1,110 | 3.8 | 951 | 3.3 | 5.6 | 31,158 |
| 263 T | | Noll Farms, Coleman, WI Jeff & Kate Hendrickson, Belleville, WI | HO HO | 681 123 | 30,743 28,749 | 1,089 1,137 | 3.5 4.0 | 913 917 | 3.0 3.2 | 5.5 5.6 | 31,140 31,140 |
| 265 | | William & Kathy Langreck, West Union, IA | НО | 133 | 29,284 | 1,118 | 3.8 | 926 | 3.2 | 5.6 | 31,140 |
| 266 | | Robert Lee, Marion, MI | НО | 125 | 27,378 | 1,173 | 4.3 | 913 | 3.3 | 5.7 | 31,127 |
| 267 | | Dave & Rick Tacoma, Falmouth, MI | НО | 405 | 29,122 | 1,107 | 3.8 | 943 | 3.2 | 5.6 | 31,072 |
| 268 | | Bill & Lisa Holland, Apple River, IL | НО | 370 | 29,089 | 1,118 | 3.8 | 924 | 3.2 | 5.6 | 31,059 |
| 269 | | Carrie Heim, Algoma, WI | НО | 826 | 28,467 | 1,135 | 4.0 | 916 | 3.2 | 5.6 | 31,014 |
| 270 | | Claytop Holsteins, Howard City, MI | НО | 292 | 27,391 | 1,179 | 4.3 | 887 | 3.2 | 5.7 | 31,010 |
| 271 | | Dave Wenger & Son's Dairy, Marlette, MI | HO HO | 222 105 | 27,459 | 1,171 | 4.3 | 892 884 | 3.2 | 5.7 5.5 | 30,967 |
| 272 | | Brantmeier Hilrose Dairy, Hilbert, WI | НО | 105 | 29,167 | 1,132 | 3.9 | 884 | 3.0 | 5.5 | 30,960 |

| | 3X | Herd | Breed | Size | Milk | Fat | F% | Prot. | Р% | CFP | ECM |
|-----|----|---|-------|-------|--------|-------|-----|-------|-----|-----|--------|
| 273 | | Twinkle-Hill Brown Swiss, Watertown, WI | XX | 27 | 28,904 | 1,098 | 3.8 | 949 | 3.3 | 5.6 | 30,931 |
| 274 | | Jerry & Stephanie Kauffmann, Farley, IA | НО | 266 | 28,556 | 1,125 | 3.9 | 915 | 3.2 | 5.6 | 30,906 |
| 275 | | Andy Kortman, McBain, MI | НО | 254 | 28,893 | 1,121 | 3.9 | 905 | 3.1 | 5.6 | 30,888 |
| 276 | * | Jo-Eng Dairy Farms, German Valley, IL | НО | 809 | 29,331 | 1,129 | 3.8 | 870 | 3.0 | 5.5 | 30,867 |
| 277 | * | Rick & Connie Schuessler, Antigo, WI | НО | 439 | 27,784 | 1,145 | 4.1 | 908 | 3.3 | 5.6 | 30,859 |
| 278 | * | Cole Riverview Farms, Bancroft, MI | НО | 316 | 27,981 | 1,162 | 4.2 | 868 | 3.1 | 5.6 | 30,838 |
| 279 | * | Liquid Coin Dairy LLC, Milladore, WI | НО | 784 | 28,020 | 1,173 | 4.2 | 846 | 3.0 | 5.5 | 30,825 |
| 280 | * | MSU Dairy Dept, Lansing, MI | НО | 247 | 29,103 | 1,096 | 3.8 | 929 | 3.2 | 5.5 | 30,817 |
| 281 | * | Quality Dairy, Luxemburg, WI | НО | 2,238 | 29,797 | 1,098 | 3.7 | 894 | 3.0 | 5.5 | 30,802 |
| 282 | | Raterink Dairy Farm, Zeeland, MI | НО | 121 | 28,525 | 1,151 | 4.0 | 858 | 3.0 | 5.5 | 30,797 |
| 283 | | Steve & Doug Kamphuis, Brandon, WI | НО | 317 | 28,336 | 1,127 | 4.0 | 906 | 3.2 | 5.6 | 30,791 |
| 284 | | Golden Sun Dairy LLC, Shiocton, WI | НО | 217 | 27,442 | 1,148 | 4.2 | 908 | 3.3 | 5.6 | 30,786 |
| 285 | | Doug Roth, Mt. Pleasant, IA | НО | 188 | 28,059 | 1,138 | 4.1 | 898 | 3.2 | 5.6 | 30,782 |
| 286 | | John W Nolt, Orchard, IA | НО | 58 | 28,339 | 1,149 | 4.1 | 866 | 3.1 | 5.5 | 30,771 |
| 287 | | Hanson Farms, Pine River, WI | НО | 387 | 28,225 | 1,133 | 4.0 | 897 | 3.2 | 5.6 | 30,764 |
| 288 | * | Alan & Ruth Hageman, Decorah, IA | НО | 120 | 28,875 | 1,111 | 3.8 | 902 | 3.1 | 5.5 | 30,730 |
| 289 | | Daryl & Pam Nunes, Deerfield, WI | НО | 39 | 27,621 | 1,168 | 4.2 | 859 | 3.1 | 5.6 | 30,729 |
| 290 | * | Landstad Dairy LLC, Bonduel, WI | НО | 316 | 29,643 | 1,099 | 3.7 | 889 | 3.0 | 5.4 | 30,726 |
| 291 | | Eric Zutz, Valders, WI | НО | 68 | 30,351 | 1,098 | 3.6 | 860 | 2.8 | 5.4 | 30,723 |
| 292 | * | Foxland Farms LLC, Greenleaf, WI | НО | 122 | 30,386 | 1,081 | 3.6 | 886 | 2.9 | 5.4 | 30,713 |
| 293 | | Dale Bogart, Kewaunee, WI | НО | 1,999 | 28,102 | 1,136 | 4.0 | 890 | 3.2 | 5.6 | 30,709 |
| 294 | | Krzewina Farms, Crivitz, WI | НО | 740 | 29,325 | 1,123 | 3.8 | 859 | 2.9 | 5.4 | 30,703 |
| 295 | | John Westra Sr, Primghar, IA | НО | 948 | 28,933 | 1,097 | 3.8 | 917 | 3.2 | 5.5 | 30,682 |
| 296 | * | Dean Meyer, New Albin, IA | НО | 2,471 | 26,181 | 1,210 | 4.6 | 843 | 3.2 | 5.6 | 30,680 |
| 297 | | Ken Zuiderveen, Falmouth, MI | НО | 399 | 28,289 | 1,123 | 4.0 | 899 | 3.2 | 5.5 | 30,671 |
| 298 | * | Greenleaf Ledge Dairy, Greenleaf, WI | НО | 605 | 29,293 | 1,095 | 3.7 | 902 | 3.1 | 5.5 | 30,659 |
| 299 | * | Rich Byma, Grant, MI | НО | 1,205 | 28,294 | 1,133 | 4.0 | 877 | 3.1 | 5.5 | 30,634 |
| 300 | | Walnutdale Farms, Wayland, MI | НО | 1,934 | 27,787 | 1,132 | 4.1 | 898 | 3.2 | 5.6 | 30,615 |
| | | | | | | | | | | | |





MSU DAIRY EDUCATION PROGRAMS



MSU Dairy Challenge and Academy students at the 2023 national competition in Sarasota Springs, N.Y.

- Two and four year dairy programs available
- Hands-on, practical dairy production and management courses followed by advanced integrative, analytical training complemented by in-depth science and business courses
- Develop lasting relationships in the industry through participation in MSU Dairy Club, Dairy Judging and Dairy Challenge
- Apply course concepts and expand dairy industry network through experiential learning opportunities including internships, study abroad and research

Contact:

Joe Domecq, Coordinator Dairy Education Programs domecqjo@msu.edu



Central Star

AWARD REPROSTAR WINNERS

Annually, CentralStar recognizes dairy farms that excel in reproductive performance. Over time, the programs farms use to achieve high-pregnancy rates are similar, with double-Ovsynch, CIDR-synch, and monitoring systems all being part of "Cadillac" reproduction programs.

The dairy industry and the Holstein breed, specifically, have made huge strides in the last decade at improving health and fertility through genetic gains. Herds like our winners have put a large focus on health and fertility traits in their sire selections for several years and are now reaping the rewards. They are enjoying the production benefits of milking more mature cows, and these mature cows are healthier and breeding back better than ever before.

Congratulations to this year's winners!

Trust in the team and systems

It has been a journey, but one that has led Schmitz East Branch Dairy to a 40% pregnancy rate. A fifth-generation dairy farm, brothers Tony and Aaron Schmitz manage the 230-cow herd in Fond du Lac, Wis. They returned home to farm with their mom, Mary, in 2019 after their father, Dave, passed away.

"We've gotten a lot of support from our team," said Tony. "John (Buske, CentralStar A.I. Specialist) and Dr. Mark Sosalla with Waupun Vet Service have helped us a lot in changing breeding protocols, which has been a big part of our journey.

In the beginning, we changed our firstservice protocol to double-Ovsynch and began administering GnRH a week prior to pregnancy check in an effort to be more aggressive with re-inseminating open cows."

With those changes, the dairy began to see improvements. While continuing to make calculated adjustments, they turned their attention to the heifers and installed the CowManager® electronic herd-monitoring system in 2022. "Our vet recommended

trying CowManager for heat detection on the heifers," recalls Tony. "It's easy to use, and we see the positive impact CowManager has on overall reproduction and health. Like many farms, our heifer facilities are a challenge, so getting them on the CowManager system has made a huge improvement in conception and pregnancy. We don't use any other heat detection; we rely 100% on CowManager. We have a reliable technician, we've done well with, and we appreciate him."

Installing CowManager in the cow herd was never part of the original plan, however, "It just made sense to implement it in the cows. We use the health feature of CowManager, which gives us the ability to better monitor close-up cows and the fresh pen. We've seen good success with CowManager identifying standing heats and are now switching our breeding protocol to utilize fewer shots, while still achieving our reproductive goals," said Tony.

The dairy has also become more aggressive in getting open cows re-inseminated. Cows are administered GnRH prior to the first pregnancy check at 28-30 days. "We give GnRH before pregnancy check, that way if an animal is open, it takes fewer days to get

Continued on next page...



SCHMITZ EAST BRANCH DAIRY

40% PREGNANCY RATE

50% CONCEPTION RATE 3+ LACTATION

39%
PREGNANCY
RATE
3+ LACTATION

Pictured (left): Tony and Aaron Schmitz, Dr. Mark Sosalla, CentralStar A.I. Specialist John Buske, CentralStar Reproductive Specialist Scott Hecker



BURR OAK HEIFERS

38% PREGNANCY RATE

68% SUBMISSION RATE

56% FIRST-SERVICE CONCEPTION RATE

Pictured (left): Jim Kruger, Marcia Starr, Melissa Brown, Ryan Brown, Mark Wallace, Alonso Luis, Anastacio Luis

them re-enrolled in Ovsynch. That change has helped us a lot to reduce the number of days open." Additionally, open, non-cycling cows are administered GnRH and a CIDR. "All of these protocols give us a chance to reinseminate animals more quickly. Non-cycling cows are bred in 11 days and cycling cows in four," said Tony.

Genetic choices for the herd include priority to fertility traits, along with using sires from the NxGEN® program. "Using NxGEN keeps us on the front line of what Select Sires has to offer, which translates to more genetic success," shared Tony. "Dave (Sattler, CentralStar Team Leader and Genetic Consultant) has managed our matings for a couple of years and has done a good job keeping it simple, while using genetically-superior bulls that excel for health and fertility traits."

Along with monitoring conception and pregnancy rates, Tony says, "Change in protocols, putting up higher-quality feed, having a good team, being patient, and monitoring changes in protocols have all played a role in the improvements this dairy has achieved."

"The biggest aspect of our progress is trust and having a good team of people around. It's the people who care about us that make the biggest difference," shared Tony. "John is very reliable; he gets results, and we really appreciate him. Turning around reproduction takes time. You have to trust and rely on your team, trust the system, and monitor progress."

Raising royalty

"At the end of the day, the best success for a heifer starts the day she's born," shared Herd Manager Melissa Brown at Burr Oak Heifers LLC, Coloma, Wis. "I work with the source farms to help them deliver the best calf possible to us, so that we can return a springing heifer that helps meet their goals."

Owned by Zahns Farms, LLC, Gillett, Wis., So-Fine Bovines, Westfield, Wis., and North Central Equipment, Auburndale, Wis., Melissa and her team are responsible for 2,800 heifers, ranging in age from six months old up to calving. When asked about the keys to achieving a 38% conception rate, Melissa shared, "It's all about communication, organization, compliance, and receiving the healthiest calf possible."

Research supports the healthier calves are at day one, week one, and month one, the greater the chance they will reach their potential. Believing in that whole-heartedly, Melissa has implemented tactics to ensure she is meeting the needs of each source farm.

"A healthier heifer is known to have a healthier, longer, more productive life," said Melissa. "And the faster and better a heifer grows, the lower the cost to my source farms." As such, a lot goes into making sure heifers are growing as they should. Average daily gain is monitored monthly from the moment a calf steps on the farm until 15-months of age. If an animal doesn't meet the source farm's breeding-weight requirements, a health analysis, which includes review of health history, and a physical assessment is performed. Using DairyComp 305 and HeiferPRO, Melissa individualizes the data in deciding between marking an animal as do-not-breed (DNB) or approving her for breeding. "It takes a lot of organization, and we don't cut corners," said Melissa. "There's a schedule, and we stick to it. It doesn't matter if it's a holiday, sub-zero, or 95 degrees."

At any given time, there are 500-600 heifers in the breeding pen. Different breeding protocols are used based on the source farm's desires, and CentralStar A.I. Specialist Mark Wallace tail chalks and breeds daily. "Consistency is very important and Mark being here at the same time every time is part of that." Early pregnancy confirmation is performed by the veterinarian at 31 days. Open heifers are checked for a functioning CL and given Lutalyse® or are enrolled in a CIDR-synch program. A second ultrasound-pregnancy confirmation is performed in-house at about 70 days. "Our goal is to have semen in every single heifer by 15 months of age," shared Melissa. "Today, we're at 98% of our goal."

Genetic selections for breeding are made by the source farms. "We receive all the health history on calves, and the data shows calf health continues to get better," shared Melissa. "Along with our intense management focus, the source farms have also made management changes, and they use Select Sires NxGEN sires."

"Communication is key to success with reproduction, or any business," said Melissa. "Communication with Mark is top-notch. If I don't see him, we have a central location to share information daily." In addition, Burr Oak employees carry a notebook so they can easily document and communicate anything out of the ordinary, allowing the animal to be checked and action taken the same day.

"What the farms want and what they are getting are results," said Melissa. "The heifers are princesses and are treated that way!"

The snowball effect

"Having success with reproduction breeds success," shared Kyle Levetzow, Model Dairy Farms, Dodgeville, Wis. "When we cull problem breeders, we don't get offspring from them. That snowballs and the entire herd improves."

This influence can be seen in the reproduction program. Forty-one percent of the herd consists of cows that are in their third or greater lactation and boast a 50% conception rate and 38% pregnancy rate, with the entire herd averaging a 37% pregnancy rate.

The reproduction program at Model Dairy includes a combination of synchronization programs. All cows are enrolled in double-Ovsynch for first-service breedings. An activity-monitoring system is used to identify cows in heat for subsequent breedings. Vet check is performed every Tuesday, and open cows are re-enrolled in a synchronization program. Cows are bred once a day by CentralStar A.I. Specialist Chakayla Stanek.

Ultrasound is used for early-pregnancy confirmation between 26-32 days and, again, at 60 days with fetus sexing. A final confirmation occurs at 180 days using a milkpregnancy test. "We used to rely on palpation for the final pregnancy check, but when the milk-pregnancy test came out, we switched because it's less invasive," said Kyle.

Cows open at 200 days-in-milk (DIM) are evaluated to determine next steps. "We try to look at each animal on an individual-production basis," said Kyle. "If they are still milking heavy, they may get another opportunity to be bred. If they've had health problems or have been cystic, we'll stop breeding."

Genetic strategy, combined with excellent calf and heifer rearing are at the foundation of this successful reproduction program. An early adopter, Kyle began genomic testing in 2014. Using that data, CentralStar Genetic Consultant David Sarbacker provides mating recommendations for the herd. "David and I meet a few times per year to discuss strategy for maximizing the number of heifers out of high-genomic animals," said Kyle. "We focus on Net Merit Dollars (NM\$) and Dairy Wellness Profit Dollars® (DWP\$®), using sexed semen on heifers and first-lactation cows."

Unique to what is currently a norm in the industry, Model Dairy does not use any beef semen in their breeding program. "We raise as many healthy heifers as we can and sell everything we don't need for the dairy as fresh or springing heifers," shared Kyle. "Our death loss on calves is less than 1%. Our herdsman is the calf feeder, and he does an excellent job."

With a high pregnancy rate and rolling herd average (RHA) of 32,382 pounds of milk, Kyle shared consistency is one of the most important things they do. "We might have a little hiccup once in a while with a herd check, but it's important to stay the course. Stick with the protocols, don't reinvent the wheel. We've been using double-Ovsynch for seven years and have been consistently over 30% for pregnancy rate the last several years -and it keeps pushing up."

Maximizing genetic potential

When you have a system and team that works, you stick with it. A repeat ReproStar award winner, Blue Star Dairy Farms Herdsman Dean Meinholz shared "We've stayed consistent with our breeding protocols and have had the same farm team for several years. We have

a heavy focus on selecting genetics high in wellness traits, including Daughter Pregnancy Rate (DPR) which should be contributing to our improved pregnancy rate."

Since being recognized in 2021, the dairy has improved pregnancy rate from 34% to 38%. "Blue Star Dairy Farms has a great team that is very organized, pays attention to detail, and their protocol compliance is spot on," shared CentralStar Regional Consulting Manager. Susie Martin. "They are also very aggressive with their genetic improvement and are making great strides."

The farm's genetic strategy begins with genomic testing all animals, something they've been doing for the past six years, to identify the best animals from which to make the next generation. A combination of sexed and beef semen is used in the herd, with NxGEN sires mated to elite heifers and a few select cows. Even still, the dairy wanted to speed up their progress.

"We decided we wanted to increase the genetic potential of the herd quicker, so we adjusted our plan," shared Dean. "About two years ago, we began identifying a few genomically-elite heifers for IVF (in vitro fertilization) and breed them with a NxGEN sire. This strategy allows us to multiply the genetics of our very best females."

"We only need a defined number of heifers for replacements, so we want to make sure we are producing the best ones we can to bring into the milking herd," shared Dean. "It's interesting to see the progress in the herd's genetics," said Dean. "I remember when we started genomic testing, we had a few animals that were \$100 or less DWP\$. Now, the lowest

Continued on next page...



MODEL DAIRY FARMS

Pictured (left): Herdsman Heber Herrera, Owner Kyle Levetzow, A.I. Specialist Chakayla Stanek, Veterinarian Dr. Kevin Johnson, CentralStar Area Sales Manager Jason Goke



BLUE STAR DAIRY FARMS

38% PREGNANCY

Pictured (left): Back row - Craig Meinholz, Brian Meinholz, Dean Meinholz. Front row - Javier L. Hidrogo, Susie Martin, Jeremy Konen and Jose Hidrogo.

animals in the herd are around \$500-\$600 DWPS. We've moved the bar guite a bit."

This focus and improvement in health traits

reduce the number of heifers we needed to produce."

A multiple-site dairy, the reproduction

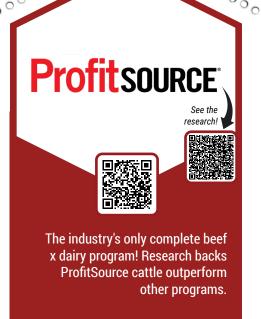
marked DNB at 250 days, or earlier, depending on production and other factors.

Blue Star Dairy Farms was solely a family partnership between two third-generation brothers, Craig and Brian Meinholz. Jim Hahn began working for the farm 22 years ago when he was 14 years old and recently became a partner in the operation. The fourth generation is showing interest in the farm, as well. One has completed college and returned to the farm; others are planning to do the same.

PROGRAMS THE WINNERS REFERENCED.

GET DETAILS FROM YOUR CENTRALSTAR TEAM°°







| | 3X | Herd | Size | Milk | Fat | % | Prot. | % | CFP | ECM |
|--------------|----------|---|------------|------------------|----------------|------------|------------|------------|------------|------------------|
| | n Swi | | ^- | | 4 ==0 | - 0 | 4 000 | | | 00.004 |
| 1 | * | Nor-Bert Farms, Bremen, IN | 27 | 29,632 | 1,576 | 5.3 | 1,080 | 3.6 | 7.3 | 38,361 |
| 2 | | Twinkle-Hill Brown Swiss, Watertown, WI | 67 | 25,884 | 1,120 | 4.3 | 926 | 3.6 | 5.6 | 30,052 |
| 3 | • | Doug Fairbanks, Anamosa, IA | 51 | 25,508 | 1,144 | 4.5 | 859 | 3.4 | 5.5 | 29,727 |
| 4 | | Hendel Farms, Caledonia, MN | 28 | 23,159 | 1,067 | 4.6 | 814 | 3.5 | 5.2 | 27,618 |
| 5 6 | | John & Wendy Korth, Freeport, IL Eric Frahm, Frankenmuth, MI | 76 25 | 23,630 24,209 | 1,016 975 | 4.3 | 837 818 | 3.5 3.4 | 5.1 4.9 | 27,287 26,800 |
| 7 | | Loehr Dairy LLC, Mount Calvary, WI | 34 | 24,209 | 973 | 4.0 | 803 | 3.4 | 4.9 | 26,593 |
| 8 | | Duane, Jeanne & Dave Meier, Monticello, WI | 63 | 22,372 | 1,000 | 4.5 | 806 | 3.6 | 4.9 | 26,432 |
| 9 | * | Lewis Century Stock Farms Inc., Lagrange, IN | 145 | 24,034 | 958 | 4.0 | 789 | 3.3 | 4.8 | 26,301 |
| 10 | | Troy Pauli, New Glarus, WI | 69 | 23,384 | 943 | 4.0 | 792 | 3.4 | 4.8 | 25,917 |
| 11 | | Jacob Worden, Sumner, IA | 61 | 22,802 | 932 | 4.1 | 776 | 3.4 | 4.7 | 25,462 |
| 12 | | Jake & Colleen Thostenson, Brodhead, WI | 55 | 21,416 | 914 | 4.3 | 755 | 3.5 | 4.6 | 24,615 |
| 13 | * | Larry & Jennifer Meyer, Chilton, WI | 27 | 21,200 | 899 | 4.2 | 728 | 3.4 | 4.5 | 24,144 |
| 14 | | Mark & Rhonda Hefel, Epworth, IA | 25 | 20,878 | 894 | 4.3 | 734 | 3.5 | 4.5 | 24,020 |
| 15 | | Lee-Ann's Swiss LLC, De Witt, IA | 89 | 20,513 | 886 | 4.3 | 736 | 3.6 | 4.4 | 23,812 |
| 16 | | Duron & Darin Bratland, Spring Grove, MN | 126 | 21,696 | 823 | 3.8 | 732 | 3.4 | 4.3 | 23,352 |
| 17 | | Brad Dietsche & Family, Colfax, WI | 39 | 18,929 | 851 | 4.5 | 679 | 3.6 | 4.2 | 22,405 |
| 18 | | Robert Brandt, Postville, IA | 55 | 19,023 | 823 | 4.3 | 663 | 3.5 | 4.1 | 21,950 |
| 19 | * | Daniel Siegert, Peosta, IA | 263 | 19,779 | 770 | 3.9 | 665 | 3.4 | 3.9 | 21,526 |
| 20 | | Robrt & Susan Kinney, Durand, IL | 90 | 18,888 | 796 | 4.2 | 636 | 3.4 | 3.9 | 21,350 |
| 21 | | James Hauschildt, Ellsworth, WI | 46 | 18,894 | 797 | 4.2 | 624 | 3.3 | 3.9 | 21,273 |
| 22 | | Rick Kruse, Earlville, IA | 36 | 18,988 | 782 | 4.1 | 626 | 3.3 | 3.9 | 21,125 |
| 23 | | Troy & Lindsey Nevil, Juda, WI | 67 | 17,594 | 717 | 4.1 | 569 | 3.2 | 3.5 | 19,391 |
| 24 | | Steve Klug, Spring Grove, MN | 108 | 17,444 | 700 | 4.0 | 573 | 3.3 | 3.5 | 19,153 |
| 25 | | Craig Miller & Family, Orangeville, IL | 36 | 17,345 | 667 | 3.8 | 560 | 3.2 | 3.4 | 18,593 |
| 26 | | Medlang Swiss - Linda Medlang, Kensett, IA | 86 | 16,749 | 672 | 4.0 | 575 | 3.4 | 3.4 | 18,578 |
| <u>Jerse</u> | <u>*</u> | Cond Creek Deim II C. Heetings MI | 447 | 04.705 | 1.001 | E 4 | 000 | 2.0 | 6.0 | 24 544 |
| 1 2 | * | Sand Creek Dairy LLC, Hastings, MI Grass Ridge Farm LLC, Pittsville, WI | 417 111 | 24,725 21,778 | 1,261 1,128 | 5.1 5.2 | 928 822 | 3.8 3.8 | 6.0 5.3 | 31,514 28,017 |
| 3 | * | Doug Fairbanks, Anamosa, IA | 82 | 21,776 | 1,126 | 5.3 | 790 | 3.6 | 5.3 | 27,982 |
| 4 | | Walnutdale Farms, Wayland, MI | 1,199 | 21,703 | 1,140 | 5.4 | 803 | 3.8 | 5.3 | 27,932 |
| 5 | | Petro Farms, Gobles, MI | 49 | 22,244 | 1,069 | 4.8 | 838 | 3.8 | 5.2 | 27,528 |
| 6 | | McAllister Family Dairy LLC, New Vienna, IA | 48 | 20,626 | 1,102 | 5.3 | 783 | 3.8 | 5.2 | 27,006 |
| 7 | * | United Pride Dairy LLC, Phillips, WI | 422 | 20,719 | 1,098 | 5.3 | 782 | 3.8 | 5.2 | 26,977 |
| 8 | | Darren Rusch, Pound, WI | 88 | 20,452 | 1,097 | 5.4 | 746 | 3.6 | 5.0 | 26,601 |
| 9 | | Gary Sulzer, Marathon, WI | 87 | 19,895 | 1,056 | 5.3 | 757 | 3.8 | 5.0 | 25,972 |
| 10 | | Golden Sun Dairy LLC, Shiocton, WI | 45 | 19,890 | 1,006 | 5.1 | 748 | 3.8 | 4.8 | 25,254 |
| 11 | * | Ron & Nicole Wussow, Cecil, WI | 81 | 19,786 | 1,007 | 5.1 | 746 | 3.8 | 4.8 | 25,218 |
| 12 | * | Peter Kimball, Baldwin, WI | 110 | 19,343 | 1,015 | 5.2 | 744 | 3.8 | 4.8 | 25,161 |
| 13 | | NE IA Dairy Foundation, Calmar, IA | 85 | 19,714 | 1,007 | 5.1 | 732 | 3.7 | 4.8 | 25,087 |
| 14 | * | Gord Dick, McBain, MI | 72 | 18,134 | 1,050 | 5.8 | 725 | 4.0 | 4.9 | 25,074 |
| 15 | | Jason & Mary Hettinga, Orange City, IA | 139 | 20,132 | 954 | 4.7 | 760 | 3.8 | 4.7 | 24,751 |
| 16 | | Donna Kunde, Manchester, IA | 228 | 19,636 | 990 | 5.0 | 714 | 3.6 | 4.7 | 24,704 |
| 17 | | I-O State Dairy, Ames, IA | 26 | 18,973 | 981 | 5.2 | 736 | 3.9 | 4.7 | 24,539 |
| 18 | | Spring Creek Farms Inc., Hixton, WI | 73 | 19,896 | 973 | 4.9 | 706 | 3.5 | 4.6 | 24,507 |
| 19 | | Jake & Colleen Thostenson, Brodhead, WI | 164 | 19,110 | 973 | 5.1 | 720 | 3.8 | 4.6 | 24,357 |
| 20 | | Dan Johnson, Evansville, WI | 46 | 19,546 | 941 | 4.8 | 699 | 3.6 | 4.5 | 23,925 |
| 21 | | Clover Farms, Dundas, IL | 1,537 | 19,120 | 935 | 4.9 | 727 | 3.8 | 4.6 | 23,922 |
| 22 | | Grand Central Jerseys LLC, Bristow, IA | 137 | 19,596 | 925 | 4.7 | 714 | 3.6 | 4.5 | 23,849 |
| 23 | | Jenks Jersey, LLC, Marathon, WI | 839 | 17,933 | 942 | 5.3 | 684 | 3.8 | 4.5 | 23,798 |
| 24 | • | Jeff Elmhorst, Granton, WI | 327 | 17,965 | 974 976 | 5.4 | 686 604 | 3.8 | 4.5 | 23,736 |
| 25 26 | * | Andy Dums, Rib Lake, WI Michael Heckaman, Argos, IN | 47 221 | 18,870 17,440 | 876 929 | 4.6 5.3 | 694 643 | 3.7 3.7 | 4.3 4.3 | 22,824 |
| 26 | | Lyle Borkholder, Nappanee, IN | 83 | 17,440 17,567 | 929 | 5.3 5.2 | 643 615 | 3.7 3.5 | 4.3 | 22,652 22,363 |
| 28 | | Leipprandt Dairy LLC, Pigeon, MI | 03 188 | 17,307 | 920 | 5.2 5.3 | 624 | 3.5 3.6 | 4.2 | 22,363 |
| 29 | | Bill Seyller, Fond Du Lac, WI | 45 | 17,522 | 891 | 5.0 | 652 | 3.7 | 4.2 | 22,332 |
| 30 | | Dave & Laurie Kyle, Elkhorn, WI | 142 | 18,089 | 884 | 4.9 | 644 | 3.6 | 4.2 | 22,313 |
| 31 | | Steinhauers Jerseys, Mattoon, WI | 117 | 17,481 | 887 | 5.1 | 661 | 3.8 | 4.2 | 22,260 |
| 32 | | Ronald Richards, Fairbank, IA | 77 | 17,536 | 886 | 5.1 | 652 | 3.7 | 4.2 | 22,196 |
| 33 | * | Murphy Family Farm, New London, WI | 83 | 16,719 | 906 | 5.4 | 633 | 3.8 | 4.2 | 22,042 |
| 34 | * | Andrew Rupprecht, Vassar, MI | 49 | 16,945 | 865 | 5.1 | 645 | 3.8 | 4.1 | 21,677 |
| 35 | | Andy Hauser, Clarksville, IA | 35 | 17,130 | 849 | 5.0 | 643 | 3.8 | 4.1 | 21,515 |
| 36 | | Flotos Jerseys, Oregon, IL | 110 | 16,737 | 832 | 5.0 | 604 | 3.6 | 3.9 | 20,868 |
| 37 | | Paul Kilgus, Fairbury, IL | 210 | 17,229 | 786 | 4.6 | 630 | 3.7 | 3.9 | 20,632 |
| 38 | | Mark & Rhonda Hefel, Epworth, IA | 49 | 16,319 | 804 | 4.9 | 628 | 3.8 | 3.9 | 20,552 |
| 39 | | Shawn & Dwight Gibbs, Farley, IA | 79 | 17,019 | 796 | 4.7 | 598 | 3.5 | 3.8 | 20,448 |
| 40 | | Graybill Farms, Freeport, IL | 166 | 15,677 | 817 | 5.2 | 594 | 3.8 | 3.9 | 20,251 |
| | | | | | | | | | | |

PROTEIN BREED HERDS

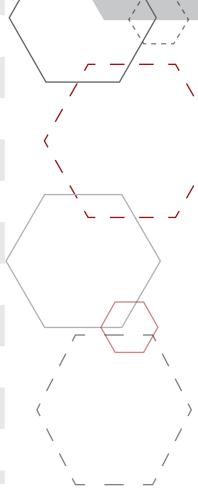


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| | 3X | Herd | Size | Milk | Fat | % | Prot. | % | CFP | ECM |
|----------|--------|---|------------|------------------|----------------|------------|--------------|------------|------------|------------------|
| 41 | | Hickory Grove Dairy, Dakota, IL | 64 | 15,738 | 810 | 5.1 | 582 | 3.7 | 3.8 | 20,088 |
| 42 | | Richlo Dairy Farms, Engadine, MI | 96 | 15,473 | 807 | 5.2 | 586 | 3.8 | 3.8 | 19,993 |
| 43 | | Marshland Dairy LLC, Spencer, WI | 102 | 16,217 | 782 | 4.8 | 575 | 3.5 | 3.7 | 19,829 |
| 44 | | Wendy Bok, Defiance, Ohio | 393 | 15,834 | 786 | 5.0 | 584 | 3.7 | 3.8 | 19,824 |
| 45 | * | Whitford Dairy, LLC, Volga, IA | 54 | 15,135 | 813 | 5.4 | 565 | 3.7 | 3.8 | 19,800 |
| 46 | | Hickory Grove Dairy, Dakota, IL | 28 | 16,367 | 782 767 | 4.8 | 562 | 3.4 | 3.7 | 19,778 |
| 47 | | John L Schwartz, Bremen, IN | 139 282 | 15,656 | 767 741 | 4.9 | 575 505 | 3.7 | 3.7 3.6 | 19,451 |
| 48 49 | | Leo & Keith Schulte, Dorchester, IA Bruce Eldred, Blanchard, MI | 72 | 16,131 15,732 | 741 756 | 4.6 4.8 | 585 571 | 3.6 3.6 | 3.6 | 19,346 19,303 |
| 50 | | Parsons Dairy Farm LLC, Antigo, WI | 33 | 15,799 | 747 | 4.7 | 559 | 3.5 | 3.6 | 19,116 |
| 51 | | Valley Gem Farms Inc., Cumberland, WI | 52 | 14,516 | 772 | 5.3 | 547 | 3.8 | 3.6 | 18,929 |
| 52 | | Tim Covington, Leon, IA | 59 | 15,399 | 732 | 4.8 | 561 | 3.6 | 3.5 | 18,807 |
| 53 | | Mark Blaha, New Auburn, WI | 260 | 13,529 | 704 | 5.2 | 500 | 3.7 | 3.3 | 17,366 |
| 54 | | Mashaw Danyel, Rock City, IL | 32 | 14,131 | 631 | 4.5 | 508 | 3.6 | 3.1 | 16,678 |
| 55 | | Alan & Stephanie Hughes, Pittsville, WI | 32 | 13,230 | 650 | 4.9 | 496 | 3.7 | 3.1 | 16,538 |
| 56 | | Delbert Yoder, Lagrange, IN | 44 | 12,846 | 661 | 5.1 | 483 | 3.8 | 3.1 | 16,456 |
| 57 | | Michelle Popp, Unity, WI | 33 | 13,583 | 613 | 4.5 | 481 | 3.5 | 3.0 | 16,060 |
| | d Bree | | | | | | | | | |
| 1 | * | Fischer & Clark Dairy, Hatley, WI | 1,014 | 32,301 | 1,390 | 4.3 | 1,051 | 3.3 | 6.7 | 36,603 |
| 2 | * | Tony Rosebrugh, West Branch, MI | 788 | 32,871 | 1,310 | 4.0 | 1,014 | 3.1 | 6.4 | 35,470 |
| 3 | * | Dairy Dreams, Casco, WI | 4,529 | 29,131 | 1,381 | 4.7 | 982 | 3.4 | 6.5 | 34,922 |
| 4 | * | Pagels Ponderosa, Kewaunee, WI | 6,802 | 27,852 | 1,389 | 5.0 | 957 | 3.4 | 6.4 | 34,416 |
| 5 6 | * | Joseph & Susan Rieden, Mount Calvary, WI | 675 44 | 31,424 | 1,255 1,251 | 4.0 4.0 | 1,025 989 | 3.3 | 6.2 6.1 | 34,369 |
| 7 | | Nathan & Tajia Retzlaff, Shawano, WI Bergan Dairy LLC, Elkader, IA | 253 | 31,510 32,826 | 1,160 | 3.5 | 1,002 | 3.1 3.1 | 5.9 | 34,070 33,421 |
| 8 | * | Blanchard Family Dairy, Charlotte, IA | 1,614 | 28,209 | 1,100 | 4.6 | 890 | 3.2 | 6.0 | 32,829 |
| 9 | | Amy Karpinski, Waupaca, WI | 208 | 30,878 | 1,169 | 3.8 | 951 | 3.1 | 5.8 | 32,511 |
| 10 | | Tom Engelken, Earlville, IA | 27 | 28,483 | 1,217 | 4.3 | 962 | 3.4 | 6.0 | 32,433 |
| 11 | | Auburnvale Swiss, Fremont, WI | 202 | 28,445 | 1,205 | 4.2 | 927 | 3.3 | 5.8 | 31,998 |
| 12 | | Rolling Valley Jerseys, Waterville, IA | 34 | 27,232 | 1,219 | 4.5 | 942 | 3.5 | 5.9 | 31,897 |
| 13 | * | Daane Dairy LLC, Brandon, WI | 808 | 27,214 | 1,210 | 4.4 | 933 | 3.4 | 5.9 | 31,706 |
| 14 | | Charles & Kappy Coch, Tremont, IL | 147 | 25,289 | 1,265 | 5.0 | 909 | 3.6 | 6.0 | 31,605 |
| 15 | | Ron Folkema, Fremont, MI | 1,063 | 28,869 | 1,173 | 4.1 | 880 | 3.0 | 5.6 | 31,363 |
| 16 | | Bruce Martin, Whittemore, MI | 105 | 28,060 | 1,166 | 4.2 | 901 | 3.2 | 5.7 | 31,168 |
| 17 | | Twinkle-Hill Brown Swiss, Watertown, WI | 27 | 28,904 | 1,098 | 3.8 | 949 | 3.3 | 5.6 | 30,931 |
| 18 | * | United Pride Dairy LLC, Phillips, WI | 276 | 24,916 | 1,207 | 4.8 | 893 | 3.6 | 5.8 | 30,610 |
| 19 | * | John Scidmore, Chadwick, IL | 377 | 27,244 | 1,095 | 4.0 | 891 | 3.3 | 5.4 | 29,905 |
| 20 | * | Stanley Ferris, Cement City, MI | 164 | 28,995 | 1,039 | 3.6 | 886 | 3.1 | 5.3 | 29,714 |
| 21 22 | * | Erdman Dairy, Chenoa, IL Glen May, Stacyville, IA | 70 194 | 24,660 25,437 | 1,189 1,155 | 4.8 4.5 | 817 819 | 3.3 3.2 | 5.5 5.4 | 29,711 29,541 |
| 23 | | Black Soil Dairy, Granville, IA | 2,927 | 26,635 | 1,064 | 4.0 | 877 | 3.3 | 5.3 | 29,198 |
| 24 | * | Liquid Coin Dairy LLC, Milladore, WI | 75 | 24,459 | 1,157 | 4.7 | 786 | 3.2 | 5.3 | 28,994 |
| 25 | * | Omro Dairy, Kaukauna, WI | 3,165 | 23,162 | 1,120 | 4.8 | 859 | 3.7 | 5.4 | 28,649 |
| 26 | | John S Calder, Carleton, MI | 138 | 25,851 | 1,042 | 4.0 | 850 | 3.3 | 5.2 | 28,450 |
| 27 | | Bob & John Bennett, Prescott, MI | 213 | 25,122 | 1,046 | 4.2 | 805 | 3.2 | 5.1 | 27,919 |
| 28 | * | Landstad Dairy LLC, Bonduel, WI | 90 | 25,078 | 1,041 | 4.2 | 814 | 3.2 | 5.1 | 27,909 |
| 29 | | Ted & Jonathan Keenan, Osseo, MI | 53 | 26,894 | 984 | 3.7 | 831 | 3.1 | 5.0 | 27,894 |
| 30 | | Dan Mauer, Scottville, MI | 44 | 24,927 | 1,025 | 4.1 | 842 | 3.4 | 5.1 | 27,866 |
| 31 | | Fisk Farms, Sand Lake, MI | 277 | 26,273 | 1,009 | 3.8 | 806 | 3.1 | 5.0 | 27,824 |
| 32 | | Tim & Kari Gaul, Guttenberg, IA | 80 57 | 25,890 | 1,013 | 3.9 | 814 | 3.1 | 5.0 | 27,811 |
| 33 | | Martha Imhoff, Goshen, IN | 57 | 23,199 | 1,124 | 4.8 | 736 | 3.2 | 5.1 | 27,772 |
| T 35 | | Eric Gaul, Farley, IA Tom & Jeni Melcher, Castalia, IA | 146 94 | 24,513 24,900 | 1,063 1,024 | 4.3 4.1 | 783 815 | 3.2 3.3 | 5.1 5.0 | 27,772 27,638 |
| 36 | | Auburnvale Swiss, Fremont, WI | 67 | 24,900 | 1,024 | 4.1 | 831 | 3.4 | 5.0 | 27,038 |
| 37 | | Darga Farms, Pound, WI | 336 | 24,613 | 1,038 | 4.2 | 784 | 3.2 | 5.0 | 27,488 |
| 38 | | Randy & Michelle Buehne, Highland, IL | 161 | 24,694 | 1,017 | 4.1 | 802 | 3.2 | 5.0 | 27,380 |
| 39 | | Wes Weaver, Sheldon, WI | 206 | 25,366 | 984 | 3.9 | 820 | 3.2 | 4.9 | 27,310 |
| 40 | | Deutsch Farms, Sycamore, IL | 184 | 24,110 | 1,010 | 4.2 | 814 | 3.4 | 5.0 | 27,191 |
| 41 | | Charlie & Katie Bue, Alma Center, WI | 40 | 24,694 | 1,008 | 4.1 | 791 | 3.2 | 4.9 | 27,180 |
| 42 | | Cal & Barb Marshall, Lupton, MI | 609 | 24,145 | 1,072 | 4.4 | 706 | 2.9 | 4.9 | 27,179 |
| 43 | * | Thuemmel Dairy, Port Austin, MI | 33 | 25,693 | 947 | 3.7 | 845 | 3.3 | 4.9 | 27,130 |
| 44 | | Jacob Worden, Sumner, IA | 27 | 22,954 | 1,039 | 4.5 | 795 | 3.5 | 5.0 | 27,043 |
| 45 | | Petro Farms, Gobles, MI | 42 | 24,901 | 967 | 3.9 | 822 | 3.3 | 4.9 | 26,954 |
| 46 | | Jim & Kim Wolf, Epworth, IA | 262 | 24,403 | 1,004 | 4.1 | 753 | 3.1 | 4.8 | 26,742 |
| 47 | * | Robert Roden, West Bend, WI | 962 | 24,008 | 1,006 | 4.2 | 751 | 3.1 | 4.8 | 26,623 |
| 48 | | David Michels, Osage, IA | 136 | 23,863 | 1,001 | 4.2 | 762 | 3.2 | 4.8 | 26,595 |
| 49 50 | | Carrie Peissig, Loyal, WI Steve & Ruth Butzler, Cumberland, WI | 52 129 | 23,912 | 978 972 | 4.1 4.2 | 755 787 | 3.2 | 4.7 4.8 | 26,260 26,190 |
| 50 | | OLOVO & MULLI DULZIOI, CUITIDOTATIU, WI | 129 | 23,187 | 312 | 4.4 | 101 | 3.4 | 4.0 | ۷۵, ۱۵۵ |

| | 3X | Herd | Size | Milk | Fat | % | Prot. | % | CFP | ECM |
|----------|----|--|-----------|--------|------------|------------|------------|------------|------------|--------|
| 51 | * | Tom Zenz, Grass Lake, MI | 232 | 24,040 | 935 | 3.9 | 768 | 3.2 | 4.7 | 25,845 |
| 52 | | Kevin Litwiller, Perrinton, MI | 144 | 21,904 | 956 | 4.4 | 758 | 3.5 | 4.7 | 25,342 |
| 53 | | Richlo Dairy Farms, Engadine, MI | 275 | 22,707 | 928 | 4.1 | 767 | 3.4 | 4.6 | 25,310 |
| 54 | * | Doug Fairbanks, Anamosa, IA | 26 | 21,159 | 989 | 4.7 | 721 | 3.4 | 4.7 | 25,242 |
| 55 | | Dan & Melissa Fagle, Fayette, IA | 45 | 23,980 | 900 | 3.8 | 747 | 3.1 | 4.5 | 25,211 |
| 56 | | Saxon Homestead Farms, Cleveland, WI | 577 | 21,494 | 966 | 4.5 | 736 | 3.4 | 4.7 | 25,169 |
| 57 | | Randy D Knapp, Epworth, IA | 113 | 21,044 | 969 | 4.6 | 744 | 3.5 | 4.7 | 25,103 |
| 58 | | Gary Nielsen, Coral, MI | 66 | 22,631 | 938 | 4.1 | 721 | 3.2 | 4.5 | 25,063 |
| 59 | | Ryan Kluesner, Worthington, IA | 39 | 22,753 | 910 | 4.0 | 763 | 3.4 | 4.6 | 25,062 |
| 60 | | Jeff & Nancy Taylor, Colfax, WI | 143 | 21,828 | 926 | 4.2 | 759 | 3.5 | 4.6 | 24,936 |
| 61 | | Brain Saunders, Independee, IA | 98 | 22,281 | 917 | 4.1 | 750 | 3.4 | 4.6 | 24,899 |
| 62 | | Twin River Dairy Inc., Freeport, MI | 476 | 20,651 | 977 | 4.7 | 717 | 3.5 | 4.6 | 24,890 |
| 63 | | Randy James, Livingston, WI | 442 | 22,019 | 928 | 4.2 | 737 | 3.3 | 4.6 | 24,856 |
| 64 | | Redetzkes' No Joke Dairy, Stratford, WI | 220 | 19,610 | 1,004 | 5.1 | 704 | 3.6 | 4.7 | 24,800 |
| 65 | | Tom & Karen Hamlett, Arlington, IA | 64 | 23,414 | 892 | 3.8 | 729 | 3.1 | 4.4 | 24,785 |
| 66 | | • | 59 | | 923 | 4.1 | | 3.2 | 4.4 | |
| 67 | * | Hiview Farm, Orangeville, IL | | 22,301 | | | 714 670 | | 4.5 | 24,707 |
| | | Gary & Darlene Kregel, Guttenberg, IA | 479 | 21,053 | 938 | 4.5 | 679 | 3.2 | | 24,226 |
| 68 69 | | Sam Schneider, Cuba City, WI | 107 55 | 19,023 | 992 881 | 5.2 4.1 | 664 | 3.5 3.4 | 4.5 4.4 | 24,147 |
| | | Pete & Ann Steffel, Oconto Falls, WI | | 21,719 | | | 733 | | | 24,119 |
| 70 71 | | Mike Carroll, Ryan, IA | 38 170 | 21,791 | 854 873 | 3.9 4.1 | 716 681 | 3.3 | 4.3 4.3 | 23,662 |
| | | Ramer View Holsteins, Goshen, IN | | 21,555 | | | | 3.2 | | 23,563 |
| 72 | | Hagen Brothers Dairy, Waterville, IA | 75 420 | 20,786 | 877 | 4.2 | 692 | 3.3 | 4.3 | 23,448 |
| 73 | | Gucwa Farms, Bad Axe, MI | 138 | 20,901 | 866 | 4.1 | 703 | 3.4 | 4.3 | 23,427 |
| 74 | | Bo-Te Farms Inc., West Branch, MI | 297 | 22,066 | 838 | 3.8 | 678 | 3.1 | 4.2 | 23,254 |
| 75 70 | | Tumbleweed Dairy, Lowell, MI | 34 | 20,799 | 871 | 4.2 | 671 | 3.2 | 4.2 | 23,214 |
| 76 | | John N Kuperus, Dorr, MI | 220 | 20,407 | 857 | 4.2 | 672 | 3.3 | 4.2 | 22,912 |
| 77 | | Twin Oak Farms, Dorchester, WI | 26 | 20,267 | 846 | 4.2 | 677 | 3.3 | 4.2 | 22,762 |
| 78 | | Jordan Martin, Greenwood, WI | 79 | 18,652 | 895 | 4.8 | 661 | 3.5 | 4.3 | 22,746 |
| 79 | | Kemridge Farm 2 Inc., Westfield, WI | 38 | 18,836 | 882 | 4.7 | 654 | 3.5 | 4.2 | 22,584 |
| 80 | | Aaron Dietsche, Bloomer, WI | 134 | 19,224 | 840 | 4.4 | 697 | 3.6 | 4.2 | 22,496 |
| 81 | | K & S Farms, Hudson, IN | 153 | 20,664 | 805 | 3.9 | 672 | 3.3 | 4.0 | 22,323 |
| 82 | | Loras Kruse Family, Holy Cross, IA | 70 | 18,454 | 862 | 4.7 | 623 | 3.4 | 4.1 | 21,963 |
| 83 | | Todd & Janet Habermann, Manitowoc, WI | 53 | 19,962 | 809 | 4.1 | 640 | 3.2 | 4.0 | 21,900 |
| 84 | | Wayne & Michael Mormann, Colesburg, IA | 26 | 18,293 | 832 | 4.5 | 620 | 3.4 | 4.0 | 21,499 |
| 85 | | Albern Olson, Stanton, MI | 115 | 18,428 | 818 | 4.4 | 623 | 3.4 | 3.9 | 21,385 |
| 86 | | Fordyce Family Farm, Aurelia, IA | 158 | 19,249 | 783 | 4.1 | 637 | 3.3 | 3.9 | 21,307 |
| 87 | | Rob Marten, Onondaga, MI | 66 | 18,741 | 773 | 4.1 | 654 | 3.5 | 3.9 | 21,142 |
| 88 | | Matt Brahmer, Spring Valley, WI | 35 | 17,171 | 847 | 4.9 | 595 | 3.5 | 4.0 | 21,135 |
| 89 | | Tim Busch, Cecil, WI | 43 | 19,360 | 773 | 4.0 | 618 | 3.2 | 3.8 | 21,069 |
| 90 | | Roger Mason, Stanley, WI | 48 | 19,524 | 767 | 3.9 | 609 | 3.1 | 3.8 | 20,976 |
| 91 | | Carissa Schneider, Browntown, WI | 61 | 19,882 | 752 | 3.8 | 608 | 3.1 | 3.7 | 20,891 |
| 92 | | Folkersma Farms LLC, Rudyard, MI | 122 | 18,250 | 788 | 4.3 | 607 | 3.3 | 3.8 | 20,816 |
| 93 | | Andy Lemler, Bourbon, IN | 85 | 20,255 | 705 | 3.5 | 661 | 3.3 | 3.7 | 20,810 |
| 94 | | Gucwa Farms, Bad Axe, MI | 38 | 18,435 | 757 | 4.1 | 624 | 3.4 | 3.8 | 20,605 |
| 95 | | Andy Hauser, Clarksville, IA | 29 | 19,603 | 706 | 3.6 | 643 | 3.3 | 3.7 | 20,472 |
| 96 | | Kadence, New Glarus, WI | 75 | 17,254 | 790 | 4.6 | 601 | 3.5 | 3.8 | 20,470 |
| 97 | | Clint & Abby Mueller, Black Creek, WI | 55 | 18,371 | 769 | 4.2 | 581 | 3.2 | 3.7 | 20,411 |
| 98 | | Jason Weihrouch, Melrose, WI | 46 | 18,459 | 753 | 4.1 | 598 | 3.2 | 3.7 | 20,362 |
| 99 | | Idlegold Guernsey, Comstock, WI | 145 | 17,257 | 778 | 4.5 | 594 | 3.4 | 3.8 | 20,262 |
| 100 | | Abrahamson & Abrahamson LLC, Waupaca, WI | 43 | 18,879 | 732 | 3.9 | 588 | 3.1 | 3.6 | 20,151 |
| 101 | | Frieson Dairy, Newark, IL | 238 | 17,436 | 760 | 4.4 | 601 | 3.4 | 3.7 | 20,141 |

PROTEIN BREED HERDS





REDUCE EMISSIONS ONE GALLON AT A TIME.

Mastitis hurts your profits and the environment.

Research shows that a cow with a case of mastitis has 6% higher emissions per gallon of milk during that lactation compared to a cow without mastitis¹. Select Sires′ Herd Health Profit Dollars™ (HHP\$™) index places 4-5 times the emphasis on mastitis resistance traits compared to other indexes. Ask your CentralStar team about HHP\$.





2 in 1 protection that kills and conditions

4XLA™ pre and post teat dip

4XLA is specifically designed for daily teat disinfection before and after milking. This powerful, yet gentle, teat dip provides fast kill of mastitis causing organisms and is a time-tested aid in the reduction of hyperkeratosis.

Disinfection POWERED BY ASC TECHNOLOG

Powerful



Residue Safe

- NPE free
- Leaves no residue and biodegrades rapidly

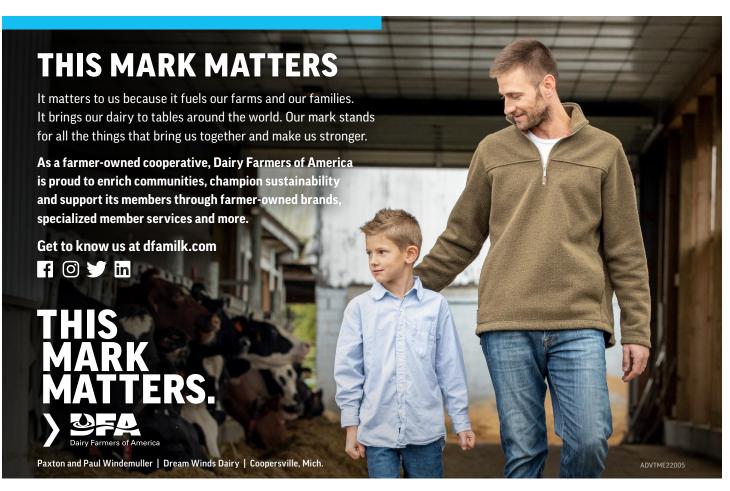
Promotes Teat Skin Health

- Emollient with 5% glycerin
- Exfoliant with Alpha Hydroxy Acid
- Replenishes the skin's natural protective acid mantle

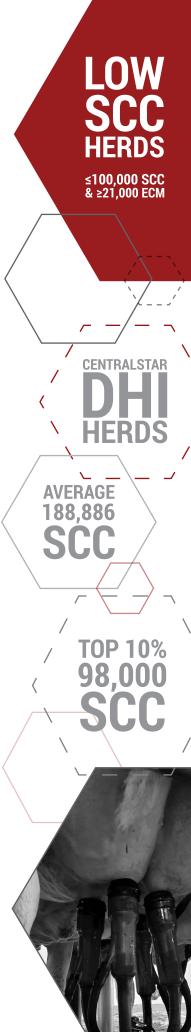


For more information, please contact greg.stumpf@ecolab.com

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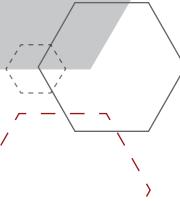


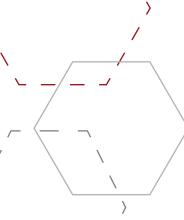
| 2V | Uoud | Drood | Cina | Mills | Ent | ⊏ 0/ | Duct | D0/ | CED | ECM | 200 |
|---------|---|-------------|-------------------|------------------|------------------|-------------|------------------|---------------|----------------|-------------------|-------------------|
| 3X * | Herd Oesch Swisslane, Alto, MI | Breed HO | Size 1,571 | Milk 29,436 | Fat 1,292 | F% 4.4 | Prot. 960 | P% 3.3 | CFP 6.2 | ECM 33,701 | SCC 42,000 |
| | Lyle Borkholder, Nappanee, IN | JE | 83 | 17,567 | 920 | 5.2 | 615 | 3.5 | 4.2 | 22,363 | 47,000 |
| * | Maple Leaf Acres, Elk Mound, WI | HO | 354 | 28,018 | 1,227 | 4.4 | 910 | 3.2 | 5.9 | 32,013 | 50,000 |
| | Mike Bosscher, McBain, MI | НО | 211 | 27,827 | 1,104 | 4.0 | 850 | 3.1 | 5.4 | 29,899 | 51,000 |
| | Raymond Dairy Inc., New Richmond, WI | НО | 88 | 27,210 | 1,124 | 4.1 | 886 | 3.3 | 5.5 | 30,231 | 52,000 |
| | Jonathan Burkholder, Sheridan, MI | НО | 82 | 25,679 | 1,039 | 4.0 | 815 | 3.2 | 5.1 | 28,087 | 52,000 |
| | Ed & Bob Meier, Belleville, WI | НО | 59 | 23,059 | 1,028 | 4.5 | 800 | 3.5 | 5.0 | 26,973 | 56,000 |
| | Hendel Farms, Caledonia, MN | НО | 379 | 28,384 | 1,277 | 4.5 | 944 | 3.3 | 6.1 | 33,040 | 59,000 |
| | Keith & Cindy Binder, Monticello, WI | НО | 99 | 27,993 | 1,084 | 3.9 | 883 | 3.2 | 5.4 | 29,946 | 60,000 |
| | Hendel Farms, Caledonia, MN | BS | 28 | 23,159 | 1,067 | 4.6 | 814 | 3.5 | 5.2 | 27,618 | 60,000 |
| | Eric Frahm, Frankenmuth, MI | BS | 25 | 24,209 | 975 | 4.0 | 818 | 3.4 | 4.9 | 26,800 | 60,000 |
| | R A Schanbacher Inc., Newhall, IA | НО | 141 | 27,790 | 1,022 | 3.7 | 859 | 3.1 | 5.2 | 28,894 | 61,000 |
| | Mike Bosscher, McBain, MI | HO | 53 67 | 25,963 | 1,050 | 4.0 4.2 | 802 831 | 3.1 | 5.1 | 28,223 | 61,000 62,000 |
| | Auburnvale Swiss, Fremont, WI Paige Mier, Prescott, MI | XX HO | 67 65 | 24,218 19,502 | 1,021 786 | 4.2 | 609 | 3.4 3.1 | 5.1 3.8 | 27,498 21,215 | 62,000 |
| * | Crandall Farms LLC, Battle Creek, MI | НО | 355 | 32,160 | 1,372 | 4.0 | 1,047 | 3.3 | 6.6 | 36,293 | 64,000 |
| * | Mike Zagata, Sebewaing, MI | НО | 709 | 31,395 | 1,352 | 4.3 | 969 | 3.1 | 6.4 | 35,187 | 64,000 |
| | Stuart Farms, Lowell, MI | НО | 433 | 30,693 | 1,325 | 4.3 | 1,007 | 3.3 | 6.4 | 34,899 | 67,000 |
| * | Nichols Hill Dairy, Krakow, WI | НО | 352 | 31,101 | 1,240 | 4.0 | 1,003 | 3.2 | 6.1 | 33,901 | 67,000 |
| | Eric Frahm, Frankenmuth, MI | НО | 133 | 29,452 | 1,135 | 3.9 | 938 | 3.2 | 5.7 | 31,505 | 67,000 |
| | Jesse & Rachel Thoma, Manawa, WI | НО | 79 | 26,855 | 1,101 | 4.1 | 869 | 3.2 | 5.4 | 29,687 | 67,000 |
| * | MSU Dairy Dept, Lansing, MI | НО | 247 | 29,103 | 1,096 | 3.8 | 929 | 3.2 | 5.5 | 30,817 | 68,000 |
| | John Zewen, New Vienna, IA | НО | 68 | 26,604 | 1,026 | 3.9 | 867 | 3.3 | 5.2 | 28,619 | 68,000 |
| | Terry Deutmeyer, Dyersville, IA | НО | 110 | 30,514 | 1,284 | 4.2 | 946 | 3.1 | 6.1 | 33,843 | 71,000 |
| * | Olson's Best Dairy LLC, Shiocton, WI | НО | 320 | 31,332 | 1,231 | 3.9 | 984 | 3.1 | 6.1 | 33,715 | 71,000 |
| * | Maly Farms, Bryant, WI | HO | 511 | 32,355 | 1,231 | 3.8 | 987 | 3.1 | 6.1 | 34,072 | 72,000 |
| | Silvershea Holsteins LLC, Omro, WI | НО | 188 | 30,997 | 1,200 | 3.9 | 953 | 3.1 | 5.9 | 32,966 | 72,000 |
| | Leon Henneman, Ellsworth, WI Dale Brinks, McBain, MI | HO HO | 54 205 | 27,511 31,147 | 1,101 1,284 | 4.0 4.1 | 941 1,010 | 3.4 3.2 | 5.6 6.3 | 30,453 34,539 | 72,000 74,000 |
| * | Norm & Derrick Hammond, Dowling, MI | HO | 521 | 30,933 | 1,182 | 3.8 | 957 | 3.2 3.1 | 5.9 | 32,743 | 74,000 |
| | David & Peter Score, Boyceville, WI | НО | 119 | 23,711 | 998 | 4.2 | 783 | 3.3 | 4.9 | 26,668 | 74,000 |
| * | Brightside Dairy LLC, Greenleaf, WI | НО | 830 | 32,276 | 1,143 | 3.5 | 999 | 3.1 | 5.9 | 32,998 | 75,000 |
| * | Gilde Farms LLC, Lake City, MI | НО | 247 | 27,720 | 1,267 | 4.6 | 814 | 2.9 | 5.7 | 31,699 | 75,000 |
| * | Voight Acres, Shiocton, WI | НО | 290 | 29,780 | 1,138 | 3.8 | 925 | 3.1 | 5.7 | 31,551 | 75,000 |
| | Volmering Family Dairy, Harbor Beach, MI | НО | 192 | 28,607 | 1,088 | 3.8 | 900 | 3.1 | 5.4 | 30,329 | 75,000 |
| | Joel Schultz, Hammond, WI | НО | 53 | 20,337 | 802 | 3.9 | 609 | 3.0 | 3.9 | 21,695 | 75,000 |
| * | Todd & Bryce Mark, Elmwood, WI | НО | 165 | 32,312 | 1,238 | 3.8 | 1,060 | 3.3 | 6.3 | 34,707 | 76,000 |
| * | Horsens Homestead Farms, Cecil, WI | НО | 1,451 | 34,785 | 1,483 | 4.3 | 1,148 | 3.3 | 7.2 | 39,362 | 77,000 |
| | Johnson Family Dairy LLC, Juda, WI | НО | 85 | 25,550 | 1,067 | 4.2 | 845 | 3.3 | 5.2 | 28,637 | 77,000 |
| | Todd & Jessica Ertl, Unity, WI | HO | 107 | 22,913 | 926 | 4.0 | 701 | 3.1 | 4.5 | 24,847 | 77,000 |
| * | Blaser Farms Inc., Gillett, WI | HO | 605 | 34,486 | 1,421 | 4.1 5.2 | 1,093 | 3.2 | 6.9 | 38,040 | 78,000 79,000 |
| * | Grass Ridge Farm LLC, Pittsville, WI Wilnore Holsteins, Milton, WI | JE HO | 111 90 | 21,778 33,415 | 1,128 1,251 | 3.7 | 822 1,053 | 3.8 3.2 | 5.3 6.3 | 28,017 35,183 | 80,000 |
| * | Ed Walter Farm Inc., Oshkosh, WI | НО | 318 | 31,344 | 1,310 | 4.2 | 998 | 3.2 | 6.3 | 34,849 | 80,000 |
| * | Grass Ridge Farm LLC, Pittsville, WI | НО | 591 | 30,619 | 1,271 | 4.2 | 1,013 | 3.3 | 6.3 | 34,221 | 80,000 |
| | Dominic & Jamie Mastey, Bonduel, WI | НО | 160 | 31,219 | 1,195 | 3.8 | 932 | 3.0 | 5.8 | 32,814 | 80,000 |
| * | Kris Wardin, St Johns, MI | НО | 633 | 29,702 | 1,142 | 3.8 | 945 | 3.2 | 5.7 | 31,731 | 80,000 |
| * | Mitchell Ronnebaum, Earlville, IA | НО | 183 | 32,071 | 1,376 | 4.3 | 1,049 | 3.3 | 6.6 | 36,331 | 81,000 |
| | Brian & Monica Enyart, Postville, IA | НО | 140 | 29,445 | 1,146 | 3.9 | 894 | 3.0 | 5.6 | 31,308 | 82,000 |
| | Dave & Rick Tacoma, Falmouth, MI | НО | 405 | 29,122 | 1,107 | 3.8 | 943 | 3.2 | 5.6 | 31,072 | 82,000 |
| | James Reid, Jeddo, MI | НО | 260 | 27,996 | 1,088 | 3.9 | 935 | 3.3 | 5.5 | 30,397 | 82,000 |
| _ | Morgan Long, Brillion, WI | НО | 117 | 27,315 | 984 | 3.6 | 839 | 3.1 | 5.0 | 28,093 | 82,000 |
| * | Brickstead Dairy LLC, Greenleaf, WI | НО | 987 | 30,917 | 1,210 | 3.9 | 984 | 3.2 | 6.0 | 33,307 | 83,000 |
| * | Matthew & Susan Smith, Hudson, MI | HO | 72 433 | 29,163 | 1,181 | 4.0 | 925 | 3.2 | 5.8 | 31,907 | 83,000 |
| | Vande Hei Dairy Farms, De Pere, WI Derek Hammerand, Dubuque, IA | HO HO | 433 221 | 29,871 31,054 | 1,129 1,317 | 3.8 4.2 | 912 986 | 3.1 3.2 | 5.6 6.3 | 31,365 34,753 | 84,000 86,000 |
| * | Jeremy Seiler, Carson City, MI | HO | 379 | 32,588 | 1,222 | 3.7 | 1,018 | 3.2 3.1 | 6.1 | 34,269 | 86,000 |
| * | Ryan Litwiller, Middleton, MI | НО | 317 | 32,240 | 1,152 | 3.6 | 1,015 | 3.1 | 5.9 | 33,226 | 86,000 |
| | Earl & Jeff Horning, Manchester, MI | НО | 437 | 29,675 | 1,227 | 4.1 | 924 | 3.1 | 5.9 | 32,662 | 86,000 |
| | Jeff & Kate Hendrickson, Belleville, WI | НО | 123 | 28,749 | 1,137 | 4.0 | 917 | 3.2 | 5.6 | 31,140 | 86,000 |
| | Roth Farms, Lowell, MI | НО | 57 | 27,889 | 1,060 | 3.8 | 868 | 3.1 | 5.3 | 29,487 | 86,000 |
| | Gary Sulzer, Marathon, WI | JE | 87 | 19,895 | 1,056 | 5.3 | 757 | 3.8 | 5.0 | 25,972 | 86,000 |
| * | Yonkman Dairy, McBain, MI | НО | 1,885 | 31,481 | 1,312 | 4.2 | 952 | 3.0 | 6.2 | 34,567 | 87,000 |
| | Auburnvale Swiss, Fremont, WI | XX | 202 | 28,445 | 1,205 | 4.2 | 927 | 3.3 | 5.8 | 31,998 | 87,000 |
| | Nienhuis Dairy Farm, Zeeland, MI | НО | 304 | 28,219 | 1,084 | 3.8 | 876 | 3.1 | 5.4 | 29,967 | 87,000 |
| * | Baker Lads Farm, Clayton, MI | НО | 530 | 29,318 | 992 | 3.4 | 882 | 3.0 | 5.1 | 29,181 | 87,000 |
| | Jeff & Nancy Taylor, Colfax, WI | XX | 143 | 21,828 | 926 | 4.2 | 759 | 3.5 | 4.6 | 24,936 | 87,000 |
| | Troy & Sara Blazek, Oconto Falls, WI | НО | 199 | 28,944 | 1,136 | 3.9 | 943 | 3.3 | 5.7 | 31,390 | 88,000 |
| | | | | | | | | | | | |



LOW SCC HERDS

≤100,000 SCC & ≥21,000 ECM





| 3X | Herd | Breed | Size | Milk | Fat | F% | Prot. | Р% | CFP | ECM | SCC |
|----|--|----------|------------|------------------|----------------|------------|------------|------------|------------|------------------|--------------------|
| | Melanie Junk, Epworth, IA | НО | 90 | 22,043 | 935 | 4.2 | 731 | 3.3 | 4.6 | 24,908 | 88,000 |
| | Tom Engelken, Earlville, IA | НО | 221 | 34,543 | 1,385 | 4.0 | 1,124 | 3.3 | 6.9 | 37,830 | 89,000 |
| * | Fischer & Clark Dairy, Hatley, WI | XX | 1,014 | 32,301 | 1,390 | 4.3 | 1,051 | 3.3 | 6.7 | 36,603 | 90,000 |
| * | Tony Rosbrugh, West Branch, MI | XX | 788 | 32,871 | 1,310 | 4.0 | 1,014 | 3.1 | 6.4 | 35,470 | 90,000 |
| | Tom Engelken, Earlville, IA | XX | 27 | 28,483 | 1,217 | 4.3 | 962 | 3.4 | 6.0 | 32,433 | 90,000 |
| | Duane, Mel & Chad See, Chilton, WI | НО | 816 | 28,134 | 1,242 | 4.4 | 864 | 3.1 | 5.8 | 31,893 | 90,000 |
| | Bill Deruiter, Marion, MI | НО | 377 | 29,996 | 1,045 | 3.5 | 914 | 3.0 | 5.4 | 30,334 | 90,000 |
| | Milk Source Genetics LLC, Kaukauna, WI | НО | 69 | 21,701 | 956 | 4.4 | 684 | 3.2 | 4.5 | 24,709 | 90,000 |
| | Furseth Farms Inc., Stoughton, WI | НО | 192 | 30,004 | 1,223 | 4.1 | 951 | 3.2 | 6.0 | 32,924 | 91,000 |
| | Oneeda Farms LLC, Syracuse, IN | НО | 199 | 25,174 | 995 | 4.0 | 814 | 3.2 | 5.0 | 27,344 | 91,000 |
| * | W-R-L Daniels Farm, Whittemore, MI | НО | 671 | 29,734 | 1,403 | 4.7 | 956 | 3.2 | 6.5 | 35,205 | 92,000 |
| | Darren Rusch, Pound, WI | НО | 407 | 30,749 | 1,328 | 4.3 | 975 | 3.2 | 6.3 | 34,711 | 92,000 |
| | Lyle & Carla Weaver, Goshen, IN | НО | 142 | 29,539 | 1,243 | 4.2 | 950 | 3.2 | 6.0 | 33,024 | 92,000 |
| | Ron Folkema, Fremont, MI | XX | 1,063 | 28,869 | 1,173 | 4.1 | 880 | 3.0 | 5.6 | 31,363 | 92,000 |
| | Chad Beck, West Branch, MI | НО | 941 | 28,102 | 1,109 | 3.9 | 872 | 3.1 | 5.4 | 30,222 | 92,000 |
| | Raterink Dairy Farm, Zeeland, MI | НО | 121 | 28,525 | 1,151 | 4.0 | 858 | 3.0 | 5.5 | 30,797 | 93,000 |
| | John W Nolt, Orchard, IA | НО | 58 | 28,339 | 1,149 | 4.1 | 866 | 3.1 | 5.5 | 30,771 | 93,000 |
| * | Zoromski Family Farms LLC, Custer, WI | НО | 469 | 33,838 | 1,491 | 4.4 | 1,111 | 3.3 | 7.1 | 38,873 | 94,000 |
| | McCulloch Farms, Rockford, IL | НО | 101 | 26,966 | 1,054 | 3.9 | 835 | 3.1 | 5.2 | 28,855 | 94,000 |
| | Jeremy Beebe, Whittemore, MI | НО | 168 | 24,797 | 1,029 | 4.1 | 797 | 3.2 | 5.0 | 27,531 | 94,000 |
| * | Hilger Farms Inc., Bloomer, WI | НО | 444 | 25,139 | 1,036 | 4.1 | 766 | 3.0 | 4.9 | 27,497 | 94,000 |
| | Seth Huizenga, Brandon, WI | НО | 158 | 23,548 | 922 | 3.9 | 756 | 3.2 | 4.6 | 25,424 | 94,000 |
| * | Buning Dairy LLC, Falmouth, MI | НО | 710 | 32,791 | 1,253 | 3.8 | 1,025 | 3.1 | 6.2 | 34,790 | 95,000 |
| * | Rusk-Rose Holsteins, Ladysmith, WI | НО | 513 | 32,380 | 1,194 | 3.7 | 973 | 3.0 | 5.9 | 33,494 | 95,000 |
| | Doug Roth, Mt. Pleasant, IA | НО | 188 | 28,059 | 1,138 | 4.1 | 898 | 3.2 | 5.6 | 30,782 | 95,000 |
| | Bo-Te Farms Inc., West Branch, MI | XX | 297 | 22,066 | 838 | 3.8 | 678 | 3.1 | 4.2 | 23,254 | 95,000 |
| * | George Kasbergen, Mansfield, IL | НО | 3,707 | 33,703 | 1,281 | 3.8 | 1,017 | 3.0 | 6.3 | 35,390 | 96,000 |
| | Royal Vista Holsteins LLC, Pickett, WI | НО | 371 | 29,987 | 1,218 | 4.1 | 957 | 3.2 | 6.0 | 32,900 | 96,000 |
| | Dan & Becky Meyer Family, Kiel, WI | НО | 182 | 27,645 | 1,113 | 4.0 | 903 | 3.3 | 5.5 | 30,361 | 96,000 |
| | Troy Pauli, New Glarus, WI | НО | 46 | 26,807 | 1,016 | 3.8 | 850 | 3.2 | 5.1 | 28,426 | 96,000 |
| | Andy Kortman, McBain, MI | НО | 254 | 28,893 | 1,121 | 3.9 | 905 | 3.1 | 5.6 | 30,888 | 97,000 |
| | Smith Dairy Farm, Fremont, MI | HO | 109 | 21,374 | 839 | 3.9 | 661 | 3.1 | 4.1 | 22,911 | 97,000 |
| * | Al Ledvina, Luxemburg, WI | HO | 60 | 20,988 | 789 | 3.8 | 641 | 3.1 | 3.9 | 21,984 | 97,000 |
| • | Ambrosius Dairy Farm, Seymour, WI | HO | 126 | 33,137 | 1,318 | 4.0 | 1,023 | 3.1 | 6.4 | 35,730 | 98,000 |
| | Rolling Hills Dairy LLC, Luxemburg, WI | HO | 1,813 | 30,756 | 1,260 | 4.1 | 964 | 3.1 | 6.1 | 33,749 | 98,000 |
| - | Jay & Amy Krahn, Brillion, WI | HO | 177 | 31,149 | 1,250 | 4.0 | 941 | 3.0 | 6.0 | 33,572 | 98,000 |
| | Bill & Bob Gruppen, Zeeland, MI | НО | 110 | 24,324 | 1,173 | 4.8 | 868 | 3.6 | 5.6 | 29,785 | 98,000 |
| | Len-Don Farms, Bloomer, WI | HO | 78 72 | 27,957 | 1,101 | 3.9 | 878 | 3.1 | 5.4 | 30,117 | 99,000 |
| | Mitch-Haven, Dakota, IL | HO HO | 73 | 25,591 | 892 | 3.5 | 765 | 3.0 3.3 | 4.5 6.4 | 25,772 | 99,000 |
| | River Crest Dairy LLC, Greenwood, WI | | 256 | 30,190 | 1,310 | 4.3 | 1,010 | | | 34,563 | 100,000 |
| | Ron Brinks, McBain, MI | HO | 133 207 | 28,972 | 1,142 | 3.9 | 943 | 3.3 3.1 | 5.7 | 31,477 | 100,000 |
| | Wilwert Bros, Holy Cross, IA | HO HO | 207 291 | 27,266 | 1,122 | 4.1 3.9 | 856 854 | 3.1 | 5.4 5.3 | 29,994 | 100,000 100,000 |
| * | Kemridge Farm 2 Inc., Westfield, WI | HO | 425 | 27,508 | 1,083 | | 832 | 3.1 | 5.3 | 29,553 | , |
| | Dall Dairy, Aviston, IL | XX | 425 277 | 25,710 26,273 | 1,059 1,009 | 4.1 3.8 | 832 806 | 3.2 3.1 | 5.2 5.0 | 28,486 27,824 | 100,000 |
| | Fisk Farms, Sand Lake, MI | XX | 94 | 26,273 24,900 | 1,009 | 3.0 4.1 | 815 | 3.3 | 5.0 5.0 | 27,824 27,638 | 100,000 100,000 |
| | Tom & Jeni Melcher, Castalia, IA Ramer & Sons Dairy, New Paris, IN | HO | 168 | 24,563 | 942 | 3.8 | 787 | 3.2 | 4.7 | 26,252 | 100,000 |
| | Robert C Miller, Orangeville, IL | НО | 68 | 22,454 | 942 871 | 3.9 | 698 | 3.2 3.1 | 4.7 | 23,962 | 100,000 |
| | Nobelt O Miller, Orangeville, IL | 110 | 00 | 22,404 | 071 | 3.5 | 030 | J. I | 4.0 | 25,502 | 100,000 |

OF YOUR MILK SAMPLES

Testing milk samples to gain insights for production, health and physiology, eliminates labor to find, sort, and lock-up cows. Submit samples through DHI testing or direct to a CentralStar lab.

PREGNANCY

JOHNE'S

··· A1/A2

BVD

LEUKOSIS

NEOSPORA

· MASTITIS PCR



POUR ON THE POUNDS

EPRINEX IMPORTANT SAFETY INFORMATION:

No meat or milk withdrawal is required when used according to label. Do not use in calves intended for veal or unapproved animal species, as severe adverse reactions, including fatalities in dogs, may result.

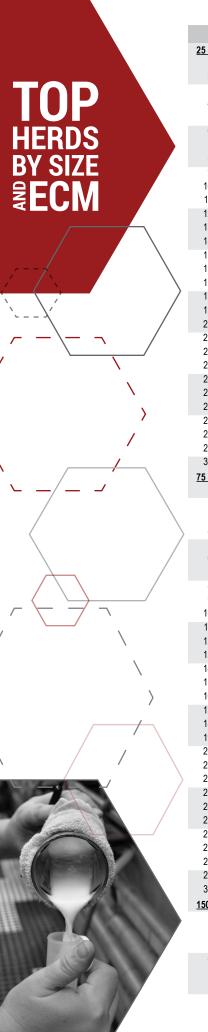
 $^1\,Watson\,CL, Forbes\,AB.\,An\,outbreak\,of\,s arcoptic\,mange\,in\,dairy\,cows.\,\textit{UK-Vet}\,\textit{Livestock}\,2000; 5(4): 48-50.$



Cattle First.

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| | ; | 3X | Herd | Breed | Size | Milk | Fat | F% | Prot. | P% | CFP | ECM |
|-----------|----------------|------|--|----------|------------|------------------|----------------|------------|----------------|------------|------------|------------------|
| 25 | 5 - 74 (| Cow | <u> </u> | | | | | | | | | |
| | 1 | * | Nor-Bert Farms, Bremen, IN | BS | 27 | 29,632 | 1,576 | 5.3 | 1,080 | 3.6 | 7.3 | 38,361 |
| | 2 | | Jim & Matt Wautier, Brussels, WI | НО | 56 | 31,341 | 1,312 | 4.2 | 990 | 3.2 | 6.3 | 34,812 |
| | 3 | | Hillebrand Farms, Cornell, WI | НО | 57 | 30,400 | 1,320 | 4.3 | 977 | 3.2 | 6.3 | 34,509 |
| | 4 | * | Country Dairy, New Era, MI | НО | 65 | 33,954 | 1,173 | 3.5 | 1,049 | 3.1 | 6.1 | 34,318 |
| | 5 | * | Nathan & Tajia Retzlaff, Shawano, WI | XX | 44 | 31,510 | 1,251 | 4.0 | 989 | 3.1 | 6.1 | 34,070 |
| | 6 | | David Martin, Fenwick, MI | НО | 70 | 26,415 | 1,448 | 5.5 | 826 | 3.1 | 6.2 | 33,708 |
| | 7 | | Nathan & Kristy Mulder, Ridott, IL | HO | 67 | 32,068 | 1,172 | 3.7 | 992 | 3.1 | 5.9 | 33,252 |
| | 8 | | Reuben Nolt, Alta Vista, IA Duane, Jeanne & Dave Meier, Monticello, WI | HO HO | 65 74 | 28,614 29,321 | 1,256 1,203 | 4.4 4.1 | 923 958 | 3.2 3.3 | 6.0 5.9 | 32,683 32,496 |
| | 10 | | Tom Engelken, Earlville, IA | XX | 27 | 28,483 | 1,203 | 4.3 | 962 | 3.4 | 6.0 | 32,433 |
| | 11 | | Brent & Carrie Pollard, Rockford, IL | НО | 63 | 28,354 | 1,221 | 4.3 | 920 | 3.2 | 5.9 | 32,122 |
| | 12 | | Matthew & Susan Smith, Hudson, MI | НО | 72 | 29,163 | 1,181 | 4.0 | 925 | 3.2 | 5.8 | 31,907 |
| | 13 | | Rolling Valley Jerseys, Waterville, IA | XX | 34 | 27,232 | 1,219 | 4.5 | 942 | 3.5 | 5.9 | 31,897 |
| | 14 | | Kandy-Bahr Holsteins, Waukon, IA | НО | 69 | 29,836 | 1,132 | 3.8 | 964 | 3.2 | 5.7 | 31,790 |
| | 15 | | Heather Krueger, Clintonville, WI | НО | 72 | 28,825 | 1,159 | 4.0 | 919 | 3.2 | 5.7 | 31,465 |
| | 16 | | Twinkle-Hill Brown Swiss, Watertown, WI | XX | 27 | 28,904 | 1,098 | 3.8 | 949 | 3.3 | 5.6 | 30,931 |
| | 17 | | John W Nolt, Orchard, IA | НО | 58 | 28,339 | 1,149 | 4.1 | 866 | 3.1 | 5.5 | 30,771 |
| | 18 | | Daryl & Pam Nunes, Deerfield, WI | HO | 39 | 27,621 | 1,168 | 4.2 | 859 | 3.1 | 5.6 | 30,729 |
| | 19 | | Eric Zutz, Valders, WI | HO | 68 | 30,351 | 1,098 | 3.6 | 860 | 2.8 | 5.4 | 30,723 |
| | 20 21 | | Leon Henneman, Ellsworth, WI David & Julie Marcks, Black Creek, WI | HO HO | 54 49 | 27,511 28,756 | 1,101 1,102 | 4.0 3.8 | 941 881 | 3.4 3.1 | 5.6 5.4 | 30,453 30,414 |
| | 22 | | Vil-Edge Farms, Fond Du Lac, WI | НО | 72 | 28,686 | 1,102 | 3.8 | 897 | 3.1 | 5.5 | 30,414 |
| | 23 | | Trent & Matt Henkes, Luana, IA | HO | 56 | 27,994 | 1,126 | 4.0 | 869 | 3.1 | 5.5 | 30,384 |
| | 24 | | Alvin & Sylvia Sauder, Charles City, IA | НО | 62 | 28,144 | 1,096 | 3.9 | 896 | 3.2 | 5.5 | 30,251 |
| | 25 | | White Gold Dairy LLC, Plainfield, IA | НО | 60 | 28,647 | 1,085 | 3.8 | 886 | 3.1 | 5.4 | 30,196 |
| | 26 | | Steve Landis, Goshen, IN | НО | 34 | 26,629 | 1,175 | 4.4 | 810 | 3.0 | 5.4 | 30,120 |
| | 27 | | Twinkle-Hill Brown Swiss, Watertown, WI | BS | 67 | 25,884 | 1,120 | 4.3 | 926 | 3.6 | 5.6 | 30,052 |
| | 28 | | Mike Quilling, Menomonie, WI | НО | 57 | 25,939 | 1,117 | 4.3 | 897 | 3.5 | 5.5 | 29,809 |
| | 29 | * | Doug Fairbanks, Anamosa, IA | BS | 51 | 25,508 | 1,144 | 4.5 | 859 | 3.4 | 5.5 | 29,727 |
| | 30 | * | Erdman Dairy, Chenoa, IL | XX | 70 | 24,660 | 1,189 | 4.8 | 817 | 3.3 | 5.5 | 29,711 |
| <u>7:</u> | <u>5 - 149</u> | * | | 110 | 400 | 00.407 | 4.040 | 4.0 | 4.000 | 0.4 | 0.4 | 05 700 |
| | 1 | * | Ambrosius Dairy Farm, Seymour, WI Wilnore Holsteins, Milton, WI | HO HO | 126 90 | 33,137 33,415 | 1,318 1,251 | 4.0 3.7 | 1,023 1,053 | 3.1 3.2 | 6.4 6.3 | 35,730 35,183 |
| | 3 | | Terry Deutmeyer, Dyersville, IA | НО | 110 | 30,514 | 1,284 | 4.2 | 946 | 3.1 | 6.1 | 33,843 |
| | 4 | | Charles Maurer, Chilton, WI | НО | 112 | 31,633 | 1,231 | 3.9 | 986 | 3.1 | 6.1 | 33,828 |
| _ | 5 | * | Nor-Bert Farms, Bremen, IN | НО | 86 | 27,545 | 1,305 | 4.7 | 993 | 3.6 | 6.3 | 33,503 |
| | 6 | | New-Day Dairy-Robert Strack, Athens, WI | НО | 120 | 31,522 | 1,187 | 3.8 | 981 | 3.1 | 5.9 | 33,184 |
| | 7 | * | Lance & Jonna Schutte, Monona, IA | НО | 103 | 30,770 | 1,192 | 3.9 | 988 | 3.2 | 6.0 | 33,056 |
| | 8 | | Lyle & Carla Weaver, Goshen, IN | НО | 142 | 29,539 | 1,243 | 4.2 | 950 | 3.2 | 6.0 | 33,024 |
| | 9 | | Tracy Lacrosse & Dale Uecker, Forestville, WI | НО | 86 | 29,706 | 1,238 | 4.2 | 949 | 3.2 | 6.0 | 33,006 |
| | 10 | * | Larry & Jennifer Meyer, Chilton, WI | НО | 125 | 30,841 | 1,182 | 3.8 | 982 | 3.2 | 5.9 | 32,904 |
| | 11 | * | Jonas Zimmerman, Wakarusa, IN | HO | 127 | 26,958 | 1,335 | 5.0 | 875 | 3.2 | 6.1 | 32,797 |
| | 12 13 | | Jeff & Melinda Walz, West Union, IA Production Unlimited LLC, Twin Lakes, WI | HO HO | 124 130 | 30,472 28,731 | 1,212 1,225 | 4.0 4.3 | 915 950 | 3.0 3.3 | 5.8 6.0 | 32,659 32,526 |
| | 14 | | Troy & Don Meyer, Maynard, IA | НО | 97 | 28,733 | 1,223 | 4.2 | 931 | 3.2 | 5.9 | 32,320 |
| | 15 | | Lehman Dairy, Sherrill, IA | НО | 139 | 29,849 | 1,169 | 3.9 | 941 | 3.2 | 5.8 | 32,098 |
| | 16 | | Charles & Kappy Koch, Tremont, IL | НО | 148 | 26,775 | 1,250 | 4.7 | 935 | 3.5 | 6.0 | 32,096 |
| | 17 | | Martin Kevin, Warren, IL | НО | 113 | 29,847 | 1,161 | 3.9 | 952 | 3.2 | 5.8 | 32,078 |
| | 18 | * | Carson Acres LLC, Hesperia, MI | НО | 139 | 29,875 | 1,150 | 3.8 | 952 | 3.2 | 5.8 | 31,944 |
| | 19 | | Tom & Sara Kruse, Dyersville, IA | НО | 78 | 27,922 | 1,205 | 4.3 | 939 | 3.4 | 5.9 | 31,919 |
| | 20 | | Andrew Houlberg, Monticello, WI | НО | 117 | 28,965 | 1,173 | 4.0 | 939 | 3.2 | 5.8 | 31,845 |
| | 21 | | Bill & Bob Gruppen, Zeeland, MI | НО | 86 | 30,893 | 1,115 | 3.6 | 951 | 3.1 | 5.7 | 31,816 |
| | 22 | * | Keith Wood, Kingston, MI | HO | 137 | 28,410 | 1,178 | 4.1 | 945 | 3.3 | 5.8 | 31,774 |
| | 23 | | Dair-E-Land Holsteins, Shobonier, IL | HO | 140 | 29,263 | 1,149 | 3.9 | 945 | 3.2 | 5.7 | 31,678 |
| | 24 25 | | Charles & Kappy Coch, Tremont, IL Virgil Martin, Boscobel, WI | XX HO | 147 125 | 25,289 29,492 | 1,265 1,145 | 5.0 3.9 | 909 923 | 3.6 3.1 | 6.0 5.7 | 31,605 31,533 |
| | 26 | | Eric Frahm, Frankenmuth, MI | НО | 133 | 29,452 | 1,145 | 3.9 | 938 | 3.2 | 5.7 | 31,505 |
| | 20 27 | | Ron Brinks, McBain, MI | НО | 133 | 28,972 | 1,133 | 3.9 | 943 | 3.3 | 5.7 | 31,477 |
| | 28 | | Duane & Joan Lisowe, Chilton, WI | НО | 102 | 28,379 | 1,169 | 4.1 | 917 | 3.2 | 5.7 | 31,434 |
| | 29 | | Marvin Martin, Carson City, MI | НО | 76 | 29,340 | 1,136 | 3.9 | 929 | 3.2 | 5.7 | 31,412 |
| | 30 | | Dave Beuschel, Conklin, MI | НО | 114 | 28,075 | 1,196 | 4.3 | 868 | 3.1 | 5.7 | 31,309 |
| 15 | 50 - 29 | 9 Co | w <u>s</u> | | | | | | | | | |
| | 1 | | Tom Engelken, Earlville, IA | НО | 221 | 34,543 | 1,385 | 4.0 | 1,124 | 3.3 | 6.9 | 37,830 |
| | 2 | * | Tom Kunkel, Cuba City, WI | НО | 244 | 33,593 | 1,437 | 4.3 | 1,035 | 3.1 | 6.8 | 37,512 |
| | 3 | * | Nathan & Tajia Retzlaff, Shawano, WI | HO | 150 | 34,665 | 1,364 | 3.9 | 1,091 | 3.1 | 6.7 | 37,345 |
| | 4 | * | Mark Vanderhyde - Spartan Farm, Sparta, MI | HO | 269 | 29,755 | 1,528 | 5.1 | 920 | 3.1 | 6.7 | 36,555 |
| | 5 6 | * | Dan & Tim Liner, Van Dyne, WI Mitchell Ronnebaum, Earlville, IA | HO HO | 261 183 | 33,542 32,071 | 1,317 1,376 | 3.9 4.3 | 1,102 1,049 | 3.3 3.3 | 6.6 6.6 | 36,454 36,331 |
| | U | | mitoriori Normicoadin, Editville, IA | 110 | 100 | JZ,011 | 1,370 | 7.0 | 1,040 | 0.0 | 0.0 | 00,001 |

| | 3X | Herd | Breed | Size | Milk | Fat | F% | Prot. | Р% | CFP | ECM |
|-------------------|-------|---|----------|------------|------------------|----------------|------------|----------------|------------|------------|------------------|
| 7 | * | Neil Christianson, Shiocton, WI | НО | 189 | 31,383 | 1,324 | 4.2 | 994 | 3.2 | 6.4 | 35,012 |
| 8 | | Greg & Jenny Conway, Lansing, IA | НО | 170 | 30,719 | 1,345 | 4.4 | 973 | 3.2 | 6.4 | 34,906 |
| 9 | | Derek Hammerand, Dubuque, IA | НО | 221 | 31,054 | 1,317 | 4.2 | 986 | 3.2 | 6.3 | 34,753 |
| 10 | * | Doug Fairbanks, Anamosa, IA | НО | 285 | 31,286 | 1,307 | 4.2 | 991 | 3.2 | 6.3 | 34,737 |
| 11 | * | Todd & Bryce Mark, Elmwood, WI | НО | 165 | 32,312 | 1,238 | 3.8 | 1,060 | 3.3 | 6.3 | 34,707 |
| 12 | * | Jordan Prairie Holsteins, Brodhead, WI | НО | 220 | 32,180 | 1,251 | 3.9 | 1,029 | 3.2 | 6.2 | 34,595 |
| 13 | | River Crest Dairy LLC, Greenwood, WI | НО | 256 | 30,190 | 1,310 | 4.3 | 1,010 | 3.3 | 6.4 | 34,563 |
| 14 | * | Dale Brinks, McBain, MI | НО | 205 | 31,147 | 1,284 | 4.1 | 1,010 | 3.2 | 6.3 | 34,539 |
| 15 16 | - | Prairie View Dairy LLC, Fairbury, IL | HO | 207 | 31,878 | 1,236 | 3.9 | 977 | 3.1 3.4 | 6.1 | 33,904 |
| 17 | | Jerangle Dairy, Wakarusa, IN Ross Simler, Monticello, WI | HO HO | 234 181 | 29,822 30,328 | 1,259 1,257 | 4.2 4.1 | 1,006 968 | 3.4 | 6.2 6.1 | 33,752 33,601 |
| 18 | * | Jay & Amy Krahn, Brillion, WI | НО | 177 | 31,149 | 1,250 | 4.0 | 941 | 3.0 | 6.0 | 33,572 |
| 19 | | David Dezeeuw, Falmouth, MI | НО | 173 | 30,802 | 1,247 | 4.0 | 947 | 3.1 | 6.0 | 33,465 |
| 20 | | Bergan Dairy LLC, Elkader, IA | XX | 253 | 32,826 | 1,160 | 3.5 | 1,002 | 3.1 | 5.9 | 33,421 |
| 21 | | Turner Dairy LLC, Centuria, WI | НО | 172 | 29,744 | 1,242 | 4.2 | 989 | 3.3 | 6.1 | 33,376 |
| 22 | | Derek Brimeyer, Sherrill, IA | НО | 166 | 31,573 | 1,205 | 3.8 | 973 | 3.1 | 6.0 | 33,373 |
| 23 | | McAllister Family Dairy LLC, New Vienna, IA | НО | 252 | 30,835 | 1,208 | 3.9 | 989 | 3.2 | 6.0 | 33,293 |
| 24 | | Marty Bahl, Dubuque, IA | НО | 206 | 29,256 | 1,258 | 4.3 | 963 | 3.3 | 6.1 | 33,225 |
| 25 | | Charles & Christopher Weber, Elmwood, WI | НО | 181 | 28,002 | 1,282 | 4.6 | 957 | 3.4 | 6.1 | 33,080 |
| 26 | * | Wesselcrest, Greeley, IA | НО | 282 | 28,424 | 1,264 | 4.4 | 966 | 3.4 | 6.1 | 33,053 |
| 27 | | Silvershea Holsteins LLC, Omro, WI | НО | 188 | 30,997 | 1,200 | 3.9 | 953 | 3.1 | 5.9 | 32,966 |
| 28 | | Furseth Farms Inc., Stoughton, WI | НО | 192 | 30,004 | 1,223 | 4.1 | 951 | 3.2 | 6.0 | 32,924 |
| 29 30 | | Golden Corners Dairy, Oconto Falls, WI | HO | 284 | 29,757 | 1,229 | 4.1 | 951 | 3.2 | 6.0 | 32,921 |
| | 400.0 | Dominic & Jamie Mastey, Bonduel, WI | НО | 160 | 31,219 | 1,195 | 3.8 | 932 | 3.0 | 5.8 | 32,814 |
| <u>300 -</u> 1 | 499 C | <u>bws</u> Koester Dairy Inc., Dakota, IL | НО | 412 | 36,429 | 1,578 | 4.3 | 1,154 | 3.2 | 7.5 | 41,175 |
| 2 | * | Kellercrest Reg Hol Inc., Mount Horeb, WI | НО | 334 | 33,750 | 1,506 | 4.5 | 1,115 | 3.3 | 7.2 | 39,069 |
| 3 | * | Zoromski Family Farms LLC, Custer, WI | НО | 469 | 33,838 | 1,491 | 4.4 | 1,111 | 3.3 | 7.1 | 38,873 |
| 4 | * | Whitetail Valley Dairy LLC, Waupaca, WI | НО | 327 | 34,312 | 1,332 | 3.9 | 1,072 | 3.1 | 6.6 | 36,670 |
| 5 | * | Crandall Farms LLC, Battle Creek, MI | НО | 355 | 32,160 | 1,372 | 4.3 | 1,047 | 3.3 | 6.6 | 36,293 |
| 6 | * | Newell Farms, Trufant, MI | НО | 473 | 33,328 | 1,322 | 4.0 | 1,075 | 3.2 | 6.6 | 36,242 |
| 7 | * | Weishaar Family Farm, Westfield, WI | НО | 353 | 33,286 | 1,353 | 4.1 | 1,023 | 3.1 | 6.5 | 36,232 |
| 8 | | Devon & Doreen Zimmerman, Claypool, IN | НО | 332 | 31,869 | 1,319 | 4.1 | 1,051 | 3.3 | 6.5 | 35,542 |
| 9 | * | Scott & Dawn Seward, Pine River, WI | НО | 455 | 32,711 | 1,313 | 4.0 | 1,010 | 3.1 | 6.4 | 35,426 |
| 10 | | Gav-N-View Farm, Lansing, IA | НО | 477 | 30,071 | 1,392 | 4.6 | 963 | 3.2 | 6.5 | 35,227 |
| 11 | | Stuart Farms, Lowell, MI | НО | 433 | 30,693 | 1,325 | 4.3 | 1,007 | 3.3 | 6.4 | 34,899 |
| 12 | * | Ed Walter Farm Inc., Oshkosh, WI | НО | 318 | 31,344 | 1,310 | 4.2 | 998 | 3.2 | 6.3 | 34,849 |
| 13 14 | | Ronald & Nancy Felten, St. Cloud, WI Darren Rusch, Pound, WI | HO HO | 470 | 31,050 | 1,306 | 4.2 4.3 | 1,014 | 3.3 | 6.4 | 34,823 |
| 15 | * | Enyart Farms LLC, Postville, IA | НО | 407 314 | 30,749 32,116 | 1,328 1,281 | 4.0 | 975 980 | 3.2 3.1 | 6.3 6.2 | 34,711 34,588 |
| 16 | | Craig Hedrich, Brillion, WI | НО | 439 | 31,343 | 1,283 | 4.1 | 990 | 3.2 | 6.2 | 34,438 |
| 17 | * | Curt Kohls, Gillett, WI | НО | 496 | 30,301 | 1,305 | 4.3 | 976 | 3.2 | 6.2 | 34,275 |
| 18 | * | Jeremy Seiler, Carson City, MI | НО | 379 | 32,588 | 1,222 | 3.7 | 1,018 | 3.1 | 6.1 | 34,269 |
| 19 | * | Nichols Hill Dairy, Krakow, WI | НО | 352 | 31,101 | 1,240 | 4.0 | 1,003 | 3.2 | 6.1 | 33,901 |
| 20 | * | Granitehill Dairy, Mosinee, WI | НО | 389 | 30,228 | 1,273 | 4.2 | 983 | 3.3 | 6.2 | 33,890 |
| 21 | | Hulstein Brothers Dairy, Hull, IA | НО | 316 | 30,522 | 1,236 | 4.0 | 1,023 | 3.4 | 6.2 | 33,813 |
| 22 | * | Olson's Best Dairy LLC, Shiocton, WI | НО | 320 | 31,332 | 1,231 | 3.9 | 984 | 3.1 | 6.1 | 33,715 |
| 23 | | Jeff Lambrecht, Kewaunee, WI | НО | 351 | 28,548 | 1,348 | 4.7 | 903 | 3.2 | 6.2 | 33,700 |
| 24 | * | Pasch MBM, Weidman, MI | НО | 370 | 32,469 | 1,187 | 3.7 | 999 | 3.1 | 6.0 | 33,631 |
| 25 | * | Neal Burken, Galesville, WI | НО | 459 | 31,066 | 1,223 | 3.9 | 955 | 3.1 | 6.0 | 33,302 |
| 26 | * | Ryan Litwiller, Middleton, MI | HO | 317 | 32,240 | 1,152 | 3.6 | 1,015 | 3.1 | 5.9 | 33,226 |
| 27 28 | | Glendale Farms, Clintonville, WI Hendel Farms, Caledonia, MN | HO HO | 301 379 | 29,952 28,384 | 1,228 1,277 | 4.1 4.5 | 978 944 | 3.3 3.3 | 6.0 6.1 | 33,179 33,040 |
| 29 | | Royal Vista Holsteins LLC, Pickett, WI | HO | 379 371 | 20,304 29,987 | 1,211 | 4.5 4.1 | 957 | 3.3 3.2 | 6.0 | 32,900 |
| 30 | * | Stutzman Family Farms LLC, Conrath, WI | НО | 365 | 30,380 | 1,216 | 4.0 | 913 | 3.0 | 5.9 | 32,795 |
| | 999 C | · | | 000 | 00,000 | ., | | 0.0 | 0.0 | 0.0 | 02,.00 |
| 1 | * | Lew-Max LLC, Belding, MI | НО | 690 | 34,119 | 1,568 | 4.6 | 1,074 | 3.1 | 7.2 | 39,679 |
| 2 | * | Sand Creek Dairy LLC, Hastings, MI | НО | 962 | 35,658 | 1,434 | 4.0 | 1,153 | 3.2 | 7.1 | 39,051 |
| 3 | * | Blaser Farms Inc., Gillett, WI | НО | 605 | 34,486 | 1,421 | 4.1 | 1,093 | 3.2 | 6.9 | 38,040 |
| 4 | * | Feltz Family Farm, Stevens Point, WI | НО | 791 | 34,445 | 1,376 | 4.0 | 1,101 | 3.2 | 6.8 | 37,505 |
| 5 | * | First Farms, Ionia, MI | НО | 568 | 33,658 | 1,388 | 4.1 | 1,043 | 3.1 | 6.7 | 36,960 |
| 6 | * | Top-Deck Farms, Westgate, IA | НО | 719 | 32,224 | 1,431 | 4.4 | 1,010 | 3.1 | 6.7 | 36,795 |
| 7 | * | Gibbs Family Dairy, Waterville, IA | НО | 592 | 31,978 | 1,429 | 4.5 | 1,004 | 3.1 | 6.7 | 36,643 |
| 8 | * | Harry & Gary Sanborn, Hubbardston, MI | HO | 700 | 33,363 | 1,353 | 4.1 | 1,038 | 3.1 | 6.6 | 36,372 |
| 9 | • | Heimans Holsteins LLC, Marshfield, WI | HO | 535 501 | 32,008 | 1,372 | 4.3 | 1,038 | 3.2 | 6.6 6.4 | 36,175 35,896 |
| 10 11 | * | Srnka Farms LLC, Algoma, WI Sugar Creek Dairy, Elkhorn, WI | HO HO | 501 637 | 33,612 32,673 | 1,323 1,305 | 3.9 4.0 | 1,016 1,057 | 3.0 3.2 | 6.4 6.5 | 35,896 35,670 |
| 12 | * | Tony Rosebrugh, West Branch, MI | XX | 788 | 32,871 | 1,310 | 4.0 | 1,037 | 3.2 3.1 | 6.4 | 35,470 |
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TOP HERDS BY SIZE ECM

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| | 3X | Herd | Breed | Size | Milk | Fat | F% | Prot. | P% | CFP | ECM |
|--------------|-------|--|-------|-------|--------|-------|-----|-------|-----|-----|--------|
| 13 | * | Banner Ridge Farms LLC, Platteville, WI | НО | 551 | 32,407 | 1,307 | 4.0 | 1,030 | 3.2 | 6.4 | 35,402 |
| 14 | | Mark Lensing, Calmar, IA | НО | 939 | 31,420 | 1,336 | 4.3 | 1,001 | 3.2 | 6.4 | 35,233 |
| 15 | * | W-R-L Daniels Farm, Whittemore, MI | НО | 671 | 29,734 | 1,403 | 4.7 | 956 | 3.2 | 6.5 | 35,205 |
| 16 | * | Mike Zagata, Sebewaing, MI | НО | 709 | 31,395 | 1,352 | 4.3 | 969 | 3.1 | 6.4 | 35,187 |
| 17 | * | Katie & Jeff Falk, Monroe, WI | НО | 603 | 31,927 | 1,321 | 4.1 | 962 | 3.0 | 6.3 | 34,906 |
| 18 | * | Buning Dairy LLC, Falmouth, MI | НО | 710 | 32,791 | 1,253 | 3.8 | 1,025 | 3.1 | 6.2 | 34,790 |
| 19 | * | Rahm Dairy LLC, Colby, WI | НО | 990 | 31,046 | 1,312 | 4.2 | 961 | 3.1 | 6.2 | 34,494 |
| 20 | * | Egan Bros & Trevor Crain, New London, WI | НО | 954 | 31,463 | 1,281 | 4.1 | 994 | 3.2 | 6.2 | 34,481 |
| 21 | * | Oesch Swisslane, Alto, MI | НО | 516 | 31,491 | 1,264 | 4.0 | 1,019 | 3.2 | 6.3 | 34,462 |
| 22 | * | Car Mer Farm, Galena, IL | НО | 565 | 32,005 | 1,250 | 3.9 | 1,020 | 3.2 | 6.2 | 34,456 |
| 23 | * | S & B Dairy Farm, Sigel, IL | НО | 667 | 32,755 | 1,238 | 3.8 | 1,007 | 3.1 | 6.2 | 34,447 |
| 24 | * | Joseph & Susan Rieden, Mount Calvary, WI | XX | 675 | 31,424 | 1,255 | 4.0 | 1,025 | 3.3 | 6.2 | 34,369 |
| 25 | | Tim Greer, West Branch, MI | НО | 633 | 29,946 | 1,371 | 4.6 | 889 | 3.0 | 6.2 | 34,348 |
| 26 | * | Pickart Dairy LLC, Malone, WI | НО | 810 | 31,879 | 1,276 | 4.0 | 958 | 3.0 | 6.1 | 34,277 |
| 27 | | Tim & Carla Kane, Denmark, WI | НО | 885 | 32,898 | 1,209 | 3.7 | 1,021 | 3.1 | 6.1 | 34,225 |
| 28 | * | Grass Ridge Farm LLC, Pittsville, WI | НО | 591 | 30,619 | 1,271 | 4.2 | 1,013 | 3.3 | 6.3 | 34,221 |
| 29 | * | Maly Farms, Bryant, WI | НО | 511 | 32,355 | 1,231 | 3.8 | 987 | 3.1 | 6.1 | 34,072 |
| 30 | * | Kevin & Diane Skinner, Junction City, WI | НО | 557 | 31,404 | 1,245 | 4.0 | 980 | 3.1 | 6.1 | 33,889 |
| <u>1,000</u> | + Cov | | | | | | | | | | |
| 1 | * | Horsens Homestead Farms, Cecil, WI | НО | 1,451 | 34,785 | 1,483 | 4.3 | 1,148 | 3.3 | 7.2 | 39,362 |
| 2 | * | Shiloh Dairy, Greenleaf, WI | НО | 2,665 | 32,733 | 1,468 | 4.5 | 1,056 | 3.2 | 6.9 | 37,793 |
| 3 | * | Nobis Dairy Farms, St Johns, MI | НО | 1,004 | 35,275 | 1,382 | 3.9 | 1,064 | 3.0 | 6.7 | 37,571 |
| 4 | * | Abel Dairy Farms, Fond Du Lac, WI | НО | 4,247 | 32,207 | 1,459 | 4.5 | 1,018 | 3.2 | 6.8 | 37,213 |
| 5 | * | Fischer & Clark Dairy, Hatley, WI | XX | 1,014 | 32,301 | 1,390 | 4.3 | 1,051 | 3.3 | 6.7 | 36,603 |
| 6 | * | Fred & Pat Beer, Milford, IN | НО | 1,055 | 32,678 | 1,382 | 4.2 | 1,028 | 3.1 | 6.6 | 36,447 |
| 7 | * | Lucky 7 Dairy, McBain, MI | НО | 2,008 | 34,656 | 1,295 | 3.7 | 1,071 | 3.1 | 6.5 | 36,296 |
| 8 | * | Wayside Dairy, Greenleaf, WI | НО | 2,571 | 31,389 | 1,398 | 4.5 | 995 | 3.2 | 6.6 | 35,980 |
| 9 | * | Five Star Dairy, Elk Mound, WI | НО | 1,080 | 31,027 | 1,399 | 4.5 | 987 | 3.2 | 6.5 | 35,813 |
| 10 | * | Quantum Dairy LLC, Weyauwega, WI | НО | 3,547 | 30,639 | 1,393 | 4.5 | 974 | 3.2 | 6.5 | 35,509 |
| 11 | * | George Kasbergen, Mansfield, IL | НО | 3,707 | 33,703 | 1,281 | 3.8 | 1,017 | 3.0 | 6.3 | 35,390 |
| 12 | | Kevin Solum, Deer Park, WI | НО | 1,347 | 30,463 | 1,355 | 4.4 | 1,029 | 3.4 | 6.5 | 35,381 |
| 13 | * | J-Max, LLC, Fremont, MI | НО | 1,634 | 32,469 | 1,296 | 4.0 | 990 | 3.0 | 6.3 | 34,974 |
| 14 | * | Dairy Dreams, Casco, WI | XX | 4,529 | 29,131 | 1,381 | 4.7 | 982 | 3.4 | 6.5 | 34,922 |
| 15 | * | Spring Breeze Dairy, Bryant, WI | НО | 4,446 | 32,722 | 1,262 | 3.9 | 1,028 | 3.1 | 6.3 | 34,907 |
| 16 | * | Yonkman Dairy, McBain, MI | НО | 1,885 | 31,481 | 1,312 | 4.2 | 952 | 3.0 | 6.2 | 34,567 |
| 17 | * | Foresight Farms, LLC, Decorah, IA | НО | 1,128 | 31,794 | 1,256 | 4.0 | 1,030 | 3.2 | 6.3 | 34,541 |
| 18 | * | Seidls Mtn View Dairy, Luxemburg, WI | НО | 1,149 | 32,821 | 1,243 | 3.8 | 1,000 | 3.0 | 6.1 | 34,479 |
| 19 | * | Pagels Ponderosa, Kewaunee, WI | XX | 6,802 | 27,852 | 1,389 | 5.0 | 957 | 3.4 | 6.4 | 34,416 |
| 20 | * | Heller Farm Inc., Alma Center, WI | НО | 1,252 | 31,668 | 1,219 | 3.8 | 1,008 | 3.2 | 6.1 | 33,853 |
| 21 | | Schuh View Dairy LLC, Kaukauna, WI | НО | 1,372 | 28,277 | 1,404 | 5.0 | 830 | 2.9 | 6.1 | 33,778 |
| 22 | | Rolling Hills Dairy LLC, Luxemburg, WI | НО | 1,813 | 30,756 | 1,260 | 4.1 | 964 | 3.1 | 6.1 | 33,749 |
| 23 | * | Many Blessings Dairy Inc., McBain, MI | НО | 1,906 | 31,582 | 1,224 | 3.9 | 987 | 3.1 | 6.1 | 33,729 |
| 24 | * | Oesch Swisslane, Alto, MI | НО | 1,571 | 29,436 | 1,292 | 4.4 | 960 | 3.3 | 6.2 | 33,701 |
| 25 | * | Pine Breeze Dairy LLC, Pine River, WI | НО | 3,256 | 29,871 | 1,281 | 4.3 | 944 | 3.2 | 6.1 | 33,578 |
| 26 | * | Rosy-Lane Holsteins LLC, Watertown, WI | НО | 1,757 | 29,077 | 1,285 | 4.4 | 950 | 3.3 | 6.1 | 33,416 |
| 27 | * | Terry Vanmaanen, Rock Valley, IA | НО | 1,843 | 31,112 | 1,206 | 3.9 | 988 | 3.2 | 6.0 | 33,350 |
| 28 | * | Country Aire Farms, Greenleaf, WI | НО | 3,429 | 30,615 | 1,236 | 4.0 | 954 | 3.1 | 6.0 | 33,315 |
| 29 | | El-Na Farms LLC, Algoma, WI | НО | 2,295 | 31,118 | 1,223 | 3.9 | 953 | 3.1 | 6.0 | 33,304 |
| 30 | * | Hillside Dairy, Rockvalley, IA | НО | 3,007 | 30,558 | 1,209 | 4.0 | 986 | 3.2 | 6.0 | 33,192 |

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Dewormer Fly and Insect Control

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EAR TAGS

RFID Tags RFID Stick Readers Sheep, Goat, and Swine Tags Taggers and Accessories Visual Tags

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ORGANIC OPTIONS

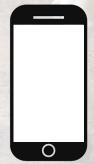
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A probiotic source to improve digestive microflora. Promotes the early establishment of beneficial digestive bacteria necessary for proper digestion of milk and grain diets. Aids in rumen development when transitioning to a dry feed diet. Reduces the occurrence and severity of scours and helps re-establish digestive bacteria following antibiotic treatment, illness or environmental stress.



A0048 - 500gram A0049 - 5kg \$23.50 \$189.50

Tri-Start Jr.+ Paste

Helps stimulate feed intake during periods of change. Contains live, viable, naturally occurring microorganisms, a short-chain fatty acid, egg



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A direct-fed microbial bolus that benefits both the rumen and intestinal tract of calves. Each capsule has a guaranteed viable (live) count of 20 billion colony forming units (CFU) of naturally occurring microorganisms. Helps to stimulate feed intake during periods of change. Contains beneficial microbes to jump-start a calf's stalled digestive system.



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| First Day Formula Colostrum Replacer Deluxe | • | • | | | | | | | |
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| Tri-Purify | | | | | | | | | |
| Tri-Start Jr | | | • | | • | | | | |
| Tri-Start Jr Plus | | | | | | | | • | |



Supplements

First 21™

Bridge the immunity gap during the first three weeks of life. Available as a complete milk replacer or nutritional supplement. Incorporates three natural sources of antibodies (plasma, egg yolk, and colostrum) to promote gut health and immune support.

A0080 - Complete Milk Replacer 50lb

A0083 - Supplement 20lb



\$84.00 \$221.50

Accel Whole Milk Protein Pivot

A pasteurized whole milk (PWM) balancer to be added to PWM and fed to pre-weaned calves. Protein Pivot allows for optimizing PWM by increasing the solids percent to achieve dry matter intake target goals, shifts the protein:fat ratio in favor of optimal performance to meet heifer development goals, and extends supply to meet daily calf feeding needs. Contains 28% protein; 8% fat.

A0064 - 50lb



\$61.10

Accel Energy

An energy supplement containing 60% fat and 7% protein with added vitamins and minerals. Add to milk replacer or whole milk during cold weather stress. Provides readily utilizable energy via spray-dried animal fat to increase the calorie content in a calf's diet.

A0035 - 25lb



\$56.00

Tri-Purify - Blue Bolus

Dietary feed supplement that provides pure, natural essential oils that have a strong antibacterial effect to improve the natural immune system. Combines live, naturally occurring microorganisms to enhance the

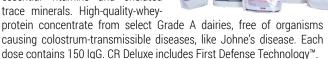


environment of the digestive tract. Tri-Purify also contains nutraceuticals, intestinal bacteria and live cell yeast; all of which can attribute to a reduction in the severity and occurrence of scours.

A0051 - 36ct \$89.50

First Day Formula®

Colostrum replacer or supplement for newborn calves. Fortified with essential vitamins and chelated trace minerals. High-quality-whey-



| A0043 - CR (replacer or supplement) 500gram | \$39.25 |
|---|----------|
| A0044 - CR (replacer or supplement) 20lb | \$655.00 |
| A0045 - CR Deluxe (replacer) 500gram | \$46.25 |
| A0046 - CR Deluxe (replacer) 20lb | \$780.00 |
| A0047 - CS (supplement) 200gram | \$16.95 |

Misco Digital Refractometer

Test colostrum to determine quality and IgG scale. Measures colostrum quality and serum total protein. A0668 also measures milk-solids percent or hydration.



A0667 - Measures colostrum quality or serum total protein \$535.00 A0668 - A0667 plus measures milk solids %, or hydration \$630.00

Milk Replacers

Stocked Milk Replacer

Unique manufacturing technology results in a 100% instantized product. Powder combines with minimal mixing. Mos* is included in each formulation at research levels to promote gut and intestinal health. Chelated (organic) trace minerals are used to support growth and immune function. Tri-Mic WD in all formulas, optimizes feed intakes and utilization, digestive health, and immune system response. Bovatec® is available for control of coccidiosis.

Milk replacers available only in Wisconsin. Call for pricing.

*Mos increases appetite, normalizes gut microflora, and reinforces the digestive tract.

| | | | | | | Guaranteed Analysis | | | Chelated | | |
|-------|---|-------------------|--------------|-------|----------------|-----------------------------|----------------|------------------|-----------------------|--|--|
| Code | Description | Protein Source | % Protein | % Fat | IU/lb Vit A | IU/lb Vit D ₃ | IU/lb Vit E | Mineral/Selenium | Medication | | |
| A0061 | APL Calf Accelerator* | APL | 26 | 20 | 30,000 | 5,000 | 200 | YES | Bovatec®-43 grams/ton | | |
| A0069 | Performance Plus | All-Milk | 20 | 20 | 30,000 | 10,000 | 150 | YES | NO | | |
| A0070 | Performance Plus | All-Milk | 20 | 20 | 30,000 | 10,000 | 150 | YES | Bovatec®-90 grams/ton | | |
| A0071 | Performance Plus* | All-Milk | 20 | 20 | 30,000 | 10,000 | 150 | YES | Bovatec®-90 grams/ton | | |
| A0074 | Hi-Performance Plus | All-Milk | 22 | 20 | 30,000 | 10,000 | 200 | YES | NO | | |
| A0075 | Hi-Performance Plus | All-Milk | 22 | 20 | 30,000 | 10,000 | 200 | YES | Bovatec®-90 grams/ton | | |
| A0076 | Hi-Performance Plus* | All-Milk | 22 | 20 | 30,000 | 10,000 | 200 | YES | Bovatec®-90 grams/ton | | |
| A0078 | Calf Accelerator | APL | 26 | 20 | 30,000 | 5,000 | 200 | YES | Bovatec®-43 grams/ton | | |
| A0079 | 28-26 Jersey | All-Milk | 28 | 26 | 20,000 | 2,500 | 100 | YES | Bovatec®-72 grams/ton | | |
| | *Formulated with Clariflu® seasonally and may require volume purchase | | | | | | | | | | |

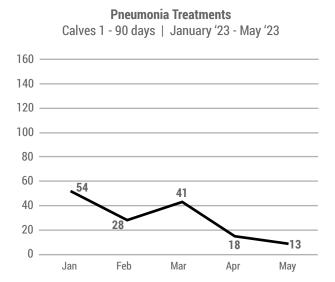


How it worked

At a commercial dairy farm in South Dakota, 3,100 Jersey and Crossbred heifer and bull calves were fed AccelAlRate in a complete pellet from birth to 90 days and 121 to 200 days of age. This on-farm demonstration evaluated the effects of AccelAlRate on pneumonia treatments and average daily gain at a half dose based on animal body weight for an extended period. Body weights and pneumonia treatment data were collected and analyzed on different groups of calves from August 2022 through May 2023.

The results

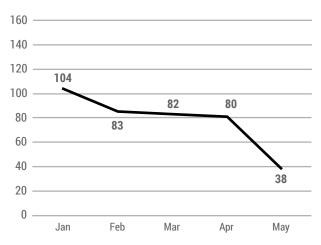
Supplementing AccelAIRate at half dose for an extended period reduced the use of antibiotics by 72.6% and cut pneumonia treatment by 83% on-farm. At the same time it improved average daily gain by an additional .28 - .55lb depending on the calf's age.



AccelAIRate is formulated to preserve respiratory health, alleviate symptoms of respiratory disease, and support the recovery process. Bioactive compounds help stimulate appetite and drive feed intake. All-natural, no VFD or prescription required. Mix in milk, milk replacer, water, and dry calf feed.

Pneumonia Treatments

Calves 91 - 200 days | January '23 - May '23



Learn more: https://centralstar.info/accelairate





Electrolytes

Calf Accellyte

A complete electrolyte treatment for calves experiencing scours or dehydration. Contains potassium and sodium to replenish electrolytes and restore proper fluid balance. Blended with glycine and citrate to improve electrolyte and water absorption. Added dextrose provides nutritional energy and buffers to help minimize metabolic acidosis. Easily mixes with water.



Accel RS @

A recovery solution aiding in hydration and digestive health for calves. Contains Tri-Mic WD as a source of live, viable, naturally occurring microorganisms. Accel RS works to restore, re-energize, recolonize, and rehydrate calves.

A0596 - Single Dose 4oz

A0599 - 6lb

A0597 - 25lb

AccelAlRate @ Alleviates symptoms of respiratory disease and supports recovery from respiratory distress. Helps reduce irritation of the throat and suppress coughing,

stimulates appetite, and drives feed intake. Contains Mannon-Oligosaccharides (MOS), Beta-Glucans and Nucleotides to protect against secondary pathogens.

A0040 - 4.4lb

A0041 - 22lb



| \$31.00 |
|----------|
| \$75.00 |
| \$165.00 |



\$64.50 \$164.00



\$74.00 \$298.00

Calf Coats

Woolover®

Original Woolover is a high-performance blanket that keeps animals warm and dry, allowing nutrients to be used for growth. Made of 70% wool and 30% polyester. Limited supply.

| UM3602 - w/o Buckle Small *Special ends 3/31/24 | \$42.00 \$24.00 |
|--|-----------------------------------|
| UM3605 - w/o Buckle Medium *Special ends 3/31/24 | \$42.00 \$24.00 |
| UM3603 - w/o Buckle Large *Special ends 3/31/24 | \$42.00 \$24.00 |
| UM3683 - w/ Buckle Medium | \$44.00 |
| UM3684 - w/ Buckle Large | \$44.00 |
| UM3667 - Ultra w/o Buckle Small | \$45.00 |
| UM3668 - Ultra w/o Buckle Medium | \$45.00 |
| UM3669 - Ultra w/o Buckle Large | \$45.00 |
| UM3686 - Ultra Lite w/ Buckle Medium | \$48.00 |

AccelCoat

Provides additional protection to calves during cold weather. Made with our exclusive insulation which wicks moisture away from the calf and provides superior thermal capabilities. The outer shell is made of highstrength polyester with a urethane back, making it water resistant. Machine washable



and durable against the harshest conditions. A smooth, quilted liner provides warmth and comfort for the calf. Small fits Jersey calves and large fits Holstein calves. Embroidered with the Select Sires Logo.

A0605 - Single Insulated Small \$39.00 A0606 - Single Insulated Large \$39.00



CONVERT BIG Calf Powder

Beneficial bacteria and egg-based specialized proteins improve nutrient absorption, restrict pathogen growth, enhance immune function, and stimulate starter-feed intake. Feed from birth through weaning in milk or milk replacer.



"I used this product on my own calves and first noticed I had zero scouring calves, no matter how hard I pushed them on milk. Treatment for sickness was significantly cut down, and I had much healthier calves.

Producers I work with who use BIG Calf say their calves gain way more weight in a much shorter time. This means they started to wean calves up to a week to 10 days earlier than before. Also, they noticed the calves seem to have a much stronger immune system due to much less sickness and pneumonia. Previously, they used multiple products in the milk for calves. They've since dropped the others, only use BIG Calf, and are seeing far better results for much less money."



Calf Housing

Calf-Tel® "O" Series (Outdoor)

Hutches designed specifically for outdoor use. No matter the size or scope of your operation, Calf-Tel products can help improve labor efficiency, calf health, and overall profitability.

A0625 - Deluxe II Left Opening 24|74 A0626 - Deluxe II Right Opening 24|74 \$375.00 \$375.00

16% more interior space than competitive models and oneof-a-kind customizable ventilation. All plastic extrusion base makes hutches virtually impervious to destruction. Deluxe hutch parts box includes: feed door, double inside pail holder, two black pails and fence attachment hardware. L-rod sold separately.

A0372 - XXL Left Opening 35|85 A0373 - XXL Right Opening 35|85 \$407.00 \$407.00





A0625 - Deluxe II

A0372 - XXL

Calf-Tel® "I" Series (Indoor)

Easy to configure indoor calf pens to make the most of your space and time. Ultra-durable with a wide range of available accessories. Effective and economical solution for raising calves indoors.

| economical condition for raising carres indecion | |
|--|----------|
| A0376 - Calf Pen Back Airmax | \$95.00 |
| A0377 - Calf Pen Back Vented | \$90.00 |
| A0380 - Calf Pen Front Generation 3 | \$195.00 |
| A0382 - Calf Pen Side 4.5' & 2 rods | \$105.00 |
| A0383 - Calf Pen Side 6' & 2 rods | \$140.00 |
| A0384 - Calf Pen Side 7' & 2 rods | \$150.00 |





A0376 - Calf Pen Back Airmax

A0377 - Calf Pen Back Vented



Calf-Tel® Group Housing

Weaned calves placed in large groups can face growth and health setbacks. Placing 4-5 similarly sized weaned calves in group housing is the best way to ease the transition.



Calf-Tel® Accessories

Broad range of accessories designed for ease-of-use, operational efficiency and years of reliable performance

| and years of reliable performance. | |
|---|---------|
| A0417 - L-Rod Pen | \$7.00 |
| A0433 - L-Rod Hutch | \$4.50 |
| A0393 - Bottle Holder Hutch mounted 2qt | \$15.00 |
| A0394 - Bottle Holder Hutch mounted 3qt wide | \$22.00 |
| A0395 - Bottle Holder Hutch mounted 3qt & 4qt | \$16.00 |
| A0398 - Bottle Holder Pen mounted 2qt | \$12.75 |
| A0399 - Bottle Holder Pen mounted 3qt & 4qt | \$9.50 |
| A0590 - Bottle Chute Fence mounted 2qt | \$15.75 |
| A0628 - Bottle Chute Pen mounted 2qt | \$8.50 |
| A0400 - Bottle/Nipple Set 2qt | \$8.00 |
| A0401 - Bottle/Nipple Set 3qt | \$10.25 |
| A0402 - Bottle/Nipple Set 4qt | \$11.50 |
| A0407 - Calf Nipple Super | \$3.50 |
| A0409 - Calf Pail Black | \$5.25 |
| A0410 - Calf Pail White | \$5.50 |
| A0598 - Calf Pail Fence Mounted Black | \$10.50 |
| A0600 - Calf Pail Fence Mounted Gray | \$10.50 |
| A0437 - Pail Holder Fence Mounted Double | \$12.75 |
| A0438 - Pail Holder Fence Mounted Single | \$8.25 |







COW PRODUCTS

Direct-Fed Microbials

Tri-Mic 1:50

Improve feed intake and feed utilization for maximum production and reproductive performance. Uses patented methods of stabilization and packaging to ensure live, viable and fast-acting microbes for maximum performance.



\$32.00 \$148.00

A0000 - 4lb

A0001 - 20lb

Select DTX™ ⊘

Research-tested and field-proven effective for protecting cattle against mycotoxin challenges. Proprietary cell wall-deficient bacteria provide broad-range protection against mycotoxins. Use when symptoms are present and feed tests show problems. Available in concentrate for easy mixing at feed mills.



\$277.00

\$267.00

\$364.00

\$270.00

AC9004 - 50lb

- 10 to 35 boxes - 36+ boxes

AC9009 - Concentrate 50lb

- 40+ bags

BioFresh® Microbial Bolus @

Gets fresh cows on feed faster, reducing potential metabolic disorders and DAs. Proven effective in reducing SCC by boosting immune function of cows affected by environmental challenges. Supplies critical vitamins and minerals, beneficial bacteria, and egg-based specialized proteins.





\$125.00 \$860.00

Select BioCycle Plus™ @

Producers feeding BioCycle Plus report reduced SCC, improved reproductive performance, increased digestive capacity and improved general health. Use when metabolic diseases and toxin challenges are present. Available in concentrate for easy mixing at feed mills.



| \$386.00 |
|----------|
| \$371.00 |
| \$361.00 |
| \$472.00 |
| \$467.00 |
| \$417.00 |
| \$490.00 |
| \$430.00 |
| |

BioFresh® Microbial Gel

Enhances feed intake, improves ruminal fermentation, and supports immune function for



dairy and beef cattle of all ages at weaning, receiving, transporting, calving, off-feed or during low-intake periods. Supplies beneficial bacteria, egg-based specialized proteins and critical vitamins and minerals. 5ml for calves under 500lbs., 10ml for calves 500lbs. – adult cattle.

AC11020 - Tube 280cc AC11022 - Gel Applicator Gun \$55.00 \$46.00

Tri-Start Bolus

An encapsulated, highly concentrated source of rumenspecific microbes in bolus form. Each capsule has a



guaranteed viable count of 100 billion CFU. Tri-Start enhances the rumen environment to improve digestive performance and repopulate rumen microflora after periods of stress. Contains lactic acid bacteria, live cell yeast and fungal extracts.

A0003 - 25ct A0004 - 100ct \$51.00 \$185.25

Select BioCycle™ ⊘

Aids in boosting immune function, digestion, and fights environmental challenges. Producers report increased estrus expression and improved feed intake. Contains two types of L-form Lactobacillus, two sources of yeast, four digestive enzymes, microbial sugars and



specialized proteins. Recommended when performance improvements are needed in reproduction, and overall herd health. Not appropriate when mold-related challenges are the major problem.

| AC9003 - 50lb | \$234.00 |
|---------------------------|----------|
| - 10 to 35 boxes | \$219.00 |
| - 36+ boxes | \$209.00 |
| AC9091 - Concentrate 50lb | \$438.00 |
| - 20+ bags | \$373.00 |

Accel MXL 600

Combats feed quality challenges and enhances liver function. MXL 600 is a combination of beneficial micronutrients designed to assist animal performance during periods of feed quality challenges. Use when toxins are present. **A0008 - 50lb**



\$82.50

MYSTERY SAVINGS!

Scan or visit: centralstar.info/mysterysavings Check back regularly for **NEW** Mystery Savings!





Which supplement is right for your cows?

Healthy cows produce more high-quality milk, breed back easier, require less time and labor to manage, and live longer. How much support does your herd need? Below are solutions to address the light (\bullet) , moderate (\bullet) , and heavy (\bullet) challenges your herd faces.

| | FRESH COW SUPPORT | IMMUNE SYSTEM SUPPORT | MYCOTOXIN CHALLENGES | ERRATIC MANURE | KETOSIS SYMPTOMS | POOR FEED INTAKE | ABORTS, EARLY EMBRYONIC DEATH | LOW PRODUCTION | OOS HOIH | POOR REPRODUCTIVE PERFORMANCE | BEEF | SHOW ANIMAL STRESS |
|--------------------------|-------------------|-----------------------|----------------------|----------------|------------------|------------------|----------------------------------|----------------|----------|----------------------------------|------|--------------------|
| Accel Fortifier 1:50 | | • | | | | | | | | | • | |
| BioCycle | | • | | | | | | | | • | | |
| BioCycle Plus | | • | • | • | | • | • | | | • | • | |
| BioFresh Microbial Bolus | | | | | | | | | | | | |
| BioFresh Microbial Gel | | • | | | | | | | • | | • | |
| BioFresh Showcase | | • | | | | • | | | | | | • |
| Bovikalc | | | | | | | | | | | | |
| Bovine Accellyte II | | | | | | | | | | | | |
| Ca3 BioFresh | | | | | | | | | | | | |
| DTX | | | • | • | | • | • | | | | | |
| Freshen Up | | • | | | | | | | | | • | |
| Tri-Mic 1:50 | | | | | | • | | | | | | |
| Tri-Start Bolus | • | • | | | | • | | | | | • | |

Minerals

Mineral Premixes

Premixes are formulated to meet all the mineral and vitamin needs of your herd. Add to any ration or supplement protein-grain mix.





| \$ | 59.00 |
|----|-------|
| \$ | 55.00 |
| Ś | 39.50 |

Accel Fortifier 1:50

Add to beef and dairy cattle diets during periods when added nutrients are required, such as; calving, high production, breeding or during environmental challenges. A concentrated source of chelated and inorganic trace minerals and vitamins. Mix into premixes, minerals, supplements and total mixed rations (TMR).



\$58.50

Forage Inoculant

Accel Ensile+

A0019 - 25lb

Assists with expediting pH decline to stabilize feed, reducing dry-matter losses and improving digestibility and forage quality. Contains three enzymes which work together to aid in fiber break down and increase nutrient absorption. One of the most economical products on the market.



A0611 - 100W - Wet Applied 100gram \$86.50 A0612 - 500W - Wet Applied 500gram \$382.00 A0613 - 100D - Dry Applied 50lb \$99.50 A0653 - ASB - Contains L. bucherni 500gram \$440.00

"I TRUST IT!"

Tri-Mic 1:50



"Tri-Mic 1:50 helps keep a cow's digestive system working efficiently so they eat and function normally. I've recommended Tri-Mic for years when

producers share intakes are down, or they are battling winter dysentery. It has always performed as expected and I trust it!"



Bob Brock CentralStar Area Sales Manager



Fresh Cow Care

Ca3 BioFresh®

Unique calcium bolus contains very high levels of fast and slow availability calcium (45.5g) and vitamin D3 (50,000 I.E.) per bolus. Calcium sources have varying release rates to supply calcium evenly to cow. Does not contain caustic calcium chloride.



AC11040 - 48ct \$326.40

Bovikalc®

Calcium supplement provides fast, extended support for blood calcium levels in freshening dairy cows. Bolus disintegrates quickly in the rumen. Calcium chloride is available immediately and calcium sulfate provides sustained release.



BV005 - 48ct \$364.73

Bovine Accellyte II

Contains specialized electrolytes to replace those lost during stress, minerals needed to compensate for deficiencies from reduced feed intake, and vitamins necessary for life. Use as a drench, add directly into stock tanks or individual water feedings, or mix dry into feeds for group or herd application.



A0009 - 10lb \$49.00 A0010 - 25lb \$82.00

Freshen Up

Administer immediately after calving to reduce the incidence of milk fever, retained placenta and ketosis. Contains a proactive combination of multiple sources of calcium, electrolytes and energy. Use as a drench or offer free choice. Contains four different sources of calcium to give cows the boost they need right away, as well as a timed-release of calcium.



A0012 - 10lb \$59.00 A0013 - 35lb \$185.00

Cow-Side Tests

BHB Check Plus Blood Ketone Strips

A simple on-farm test for monitoring sub-clinical ketosis in cattle. For dry cows and cows in transition periods. Check cows within the first two weeks of freshening. Test strips have a 2-year shelf life at room temperature.



PC2 - 50ct

\$95.08

BHB Check Plus Meter

Can read both BHB (Beta-hydroxybutyrate, most prevalent blood ketone body detected in sub-clinical and clinical ketosis) and blood glucose. Delivers results in under 10 seconds. Product contains meter only, test strips sold separately.



PC4 - Meter only

\$31.00

BHB Milk Ketone Test Strips

A semi-quantitative milk dipstick test for the detection of subclinical ketosis in dairy cows. Simply strip milk right onto the test strip or dunk it in a vial of fresh milk, shake off excess milk, and compare the test strip to the color chart. Results available in 1 minute. Test strips have a 2-year shelf life at room temperature.



PC3 - 100ct \$105.00



Teat Dips

UDDERgold® 5-Star

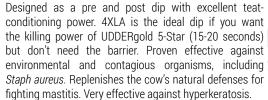
Barrier film, improves environmental mastitis protection. Controls a broad spectrum of bacteria including Mycoplasma species. Glycerin and emollient polymers help improve skin health.

UM3661/UM3662 - Base & Activator Set 5gal UM3724/UM3725 - Base & Activator Set 14.5gal UM3665/UM3666 - Base & Activator Set 55gal



\$228.36 \$631.78 \$1,932.38

4XLA®



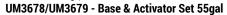
UM3617/UM3618 - Base & Activator Set 5gal UM3723/UM3722 - Base & Activator Set 14.5gal UM3621/UM3622 - Base & Activator Set 55gal



\$157.38 \$400.60 \$1,299.16

AZTEC GOLD™ ②

Increased mastitis protection. Offers long-lasting color marking, up to five hours. Thicker viscosity dip clings to teats longer, exposing them to the extended killing power.





\$1,298.02

EfferCept SG®

An alternative to lodine that is cost effective at any milk price. This tablet contains all the great properties of EfferCept and SoftGuard in one tablet. Proven effective as a pre/post dip or spray. Kills 99.99% of



E. Coli, Staph aureus and other mastitis-causing organisms on contact. Conditions, soothes and protects udder and teats. NPE free. Mix two tablets to one gallon of water.

| S291 - Makes 10 Gallons 20ct | \$54.30 |
|--------------------------------|----------|
| S289 - Makes 55 Gallons 110ct | \$207.66 |
| S288 - Makes 275 Gallons 550ct | \$843.00 |

EfferCept®

Economical pre/post dip. Maximizes killing power while eliminating corrosive effects found in iodine-based products. Pill form mixes with water to be a spray or pre-dip wash. Mix four tablets to one gallon of water.

S240 - Makes 12.5 Gallons 50ct \$66.80 S242 - Makes 55 Gallons 220ct \$234.00 S280 - Makes 385 Gallons 20lb \$1,127.00 S290 - Makes 667 Gallons 1,000ct \$1,229.10

EfferCept® Foam Additive

Creates a foaming solution when added to EfferCept and EfferCept SG pre-/post-teat-dip. Mix ½ ounce to 1 gallon. Can adjust mixing rate of foam for a consistency that is suitable for your farm. Can be used in a teat dip cup or automatic foamer.



S293 - 1gal \$28.00 S294 - 55gal \$975.00





Controlled, third-party research confirms 25 years of experience.

Feeding DTX to mycotoxin-challenged, lactating cows:

DAILY MILK PRODUCTION INCREASED 2.5 lb/cow for the first 150 DIM

29.3% IMPROVEMENT

Artificial insemination pregnancy rates from Control 36.5% to DTX 47.2%

15.6% IMPROVEMENT

Embryo transfer pregnancy rates from Control 27.6% to DTX 31.9%



Ask your CentralStar team about complimentary mycotoxin analysis and feed mill availability.



agrariansolutions.com/select-dtx Scan this QR code to see the DTX Research

(574) 825-1224 | www.agrariansolutions.com



How It Worked

The study was conducted as a randomized controlled trial from August 29, 2022, to May 28, 2023 at a 3,600-cow New York commercial dairy farm experienced in conducting commercial feed additive research. After entering the dry pen, cows were blocked by lactation group, expected calving date, and stratified by lactation, and then randomized to research groups with dietary treatments beginning at calving. Depending upon the research group assignment, upon freshening the cows entered either a control group (base ration without DTX; 463 cows) or a treatment group (base ration with DTX; 463 cows). Samples of each pen's TMR were obtained routinely throughout the study for mycotoxin analyses. The TMR contamination levels of DON and zearalenone (Zea) recorded throughout the study did not differ between the research groups.

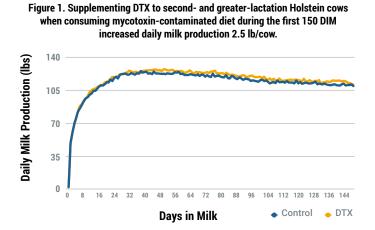


Figure 2. Supplementing DTX to lactating Holstein cows when consuming a mycotoxin-contaminated diet during the first 150 DIM increased the initial pregnancy rate at 28-34 days post-first service and tended to increase the final pregnancy rate at 61-67 days post-first service.

| | Service Technique | | | | | | | |
|-------------------------|-------------------|---------------------------------------|----------|-----------|--|--|--|--|
| | Artificial I | Artificial Insemination Embryo Transf | | | | | | |
| | Control | DTX | Control | DTX | | | | |
| Initial Pregnancy, % | 45 | 52.0 | 34.6 | 42.0 | | | | |
| (No. preg/No. serviced) | (54/120) | (65/125) | (99/286) | (124/295) | | | | |
| Pregnancy loss, % | 18.5 | 9.2 | 20.2 | 24.2 | | | | |
| (No. loss/No. preg) | (10/54) | (6/65) | (20/99) | (30/124) | | | | |
| Final pregnancy, % | 36.7 | 47.2 | 27.6 | 31.9 | | | | |
| (No. preg/No. serviced) | (44/120) | (59/125) | (79/286) | (94/295) | | | | |

The Results

Supplementing DTX to lactating Holstein cows when consuming a mycotoxin-contaminated diet during the first 150 days in milk (DIM) increased daily production, improved A.I. pregnany rates, and improved embryo transfer pregnancy rates.

Learn More

https://mycentralstar.com/product/select-dtx/







Udder Health

Milk Check Teat Wipes

One-step udder preparation wipes are durable, yet gentle. Contain lanolin and glycerin to keep skin soft, preventing teat chapping. Contains germicide to effectively kill acteria and reduce cross-contamination.



\$33.12

UM3708 - Refill bag

Uddermint® @

Approved Organic. Improves overall udder health by reducing udder edema. All-natural, antibiotic free, peppermint oil based liniment. Dairy producers report improvements in udder quality and pliability within 12 to 24 hours. For use after freshening, or apply to quarters on cows that show signs of mastitis.



UM3608 - White 500mL UM3673 - Green 500mL UM3670 - White 2.5L UM3680 - Green 2.5L UM3671 - Dispenser 2.5L \$32.59 \$32.70 \$150.47 \$160.90 \$33.58

T-Hexx[®] Dry[™]

Protects dry cows against mastitis at dry off and precalving. Antiseptic formula sanitizes, and seals teat ends with a single dip. Proven barrier against mastitis causing organisms. Bright blue color makes it easy to see.



\$78.12

HEXXB132 - 1qt

Lockout™

A non-antibiotic intramammary teat sealant for use through the dry period to aid in the prevention of infections. Visible blue, smooth paste composed of 60% bismuth sub-nitrate forms a malleable barrier in the teat canal. Creates a sterile barrier against harmful bacteria between the udder and environment. Single-dose syringes with short tip designed for hygienic insertion.



UM3694 - 144ct pail

VetOne® BoviBlock™

Non-antibiotic teat sealant aids in preventing new intramammary infections. Off-white, smooth paste composed of 65% bismuth sub-nitrate to create a malleable barrier in the teat canal. Creates sterile blockage against harmful bacteria. Unique two-stage tip, allowing full or partial insertion into the teat orifice.



\$354.78

UM3702 - 144ct pail \$325.36

Bovikalc® Drv

An oral mineral supplement that helps maintain cow comfort by reducing milk production at dry off. Contains calcium sulfate and ammonium chloride and reduces milk production by inducing a slight and temporary metabolic acidosis. **BV057 - 48ct box**



\$376.81

Sanitizer

EfferSan™ Sanitizer

An EPA registered, concentrated multi-purpose disinfectant and sanitizer that offers 100 times more killing power and effectiveness, while being safer than traditional bleach. Contains hydrochlorous acid, which penetrates cell walls and deactivates organisms primary energy-producing function. Dissolves in water.



Non-irritating. Use to wash down parlor and milking equipment, or as a biosecurity feature for washing in and out of the farm. COVID-19 is caused by SARS-CoV-2. EfferSan kills similar viruses and therefore can be used against SARS-CoV-2 when used in accordance with the directions for use against Norovirus (Feline Calicivirus as surrogate) (ATCC VR-782) on hard, non-porous surfaces. Refer to the CDC or OIE website for additional information

| S270 - 24ct | \$24.58 |
|---------------------|---------|
| S271 - 100ct | \$77.00 |
| S272 - spray bottle | \$6.67 |

Animal Assistance

Vink Cowlift

Helps save cows that can't stand. With proper use it will not cause bruising around the hipbone and is easily adjusted.



Vink Double Action Calf Puller

Makes difficult deliveries easy. Double action puller with unique rump frame encircles the rear of the cow making it impossible for the frame to slip away. Constructed of stainless steel to ensure long, trouble-free service.

| stainless steel to ensure long, trouble-free service. | |
|---|----------|
| S028 - Complete Calf Puller | \$465.50 |
| S026 - Rope replacement | \$15.04 |
| S029 - Mechanism replacement | \$190.73 |
| S030 - Bar replacement | \$150.00 |
| S031 - Yolk replacement | \$100.00 |

Cow Cuff Links

Fastens to a cows ankle with a positive lock buckle system - no velcro. Constructed of 6,000 pounds of tensile strength nylon webbing with stainless steel components. Therapeutic benefits, as well as anti-kicking protection.

| AC9026 - Non-Adjustable | \$30.00 |
|-------------------------|---------|
| AC9047 - Adjustable | \$32.00 |

Flagger Leg Band

Easy to apply and remove. Can be reused. Available in red, yellow, and orange.

AC2804 - 10pk





\$15.30



DIAGNOSTIC TESTS AND SUPPLIES

Test Options

A1/A2 (beta-casein)

Use to identify the A1 and A2 beta-casein status of individual animals, providing insight for strategic breeding to develop A2 herd status. Results in 10 days of sample receipt.

ABT36 - PCR (Milk, Whole Bood, or Tissue) \$13.75

Bovine Leukosis (BLV)

Test individual cows with ELISA to identify infection and establish herd prevalence. Use PCR to identify most infected animals, "Super Shedders" which cause most risk to uninfected herdmates and youngstock. Results in 5-10 days of sample receipt.

| ABT7 - Serum ELISA | \$6.50 |
|---|---------|
| ABT8 - Milk ELISA | \$6.50 |
| ABT35 - AntelBio™ STRATA-G™ BLV PCR (whole blood) | \$12.00 |

Bovine Neospora

Test individuals or groups of aborting and non-aborting cattle to associate Neospora caninum with abortions. Results in 5 days of sample receipt.

| ABT24 - Serum ELISA | , | • | \$6.50 |
|---------------------|---|---|--------|
| ABT25 - Milk ELISA | | | \$6.50 |

Bovine Viral Diarrhea (BVD)

Test ear notch or serum from calves to identify persistently infected (PI) animals. Test individual or pooled milk from cows to efficiently clear adult herd of PI suspicion. Pooling options to economically monitor infection and prevalence also available. Results in 5-10 days of sample receipt.

| ABT11 - Milk ELISA | \$6.50 |
|--|---------------|
| ABT12 - Serum ELISA | \$6.50 |
| ABT14 - Tissue ELISA | \$6.50 |
| ABT38 - Individual PCR (Milk, Tissue, or Whole Blood) | \$40.00 |
| ABT22 - Pooled Tissue / Whole Blood PCR (Min. 10) | \$3.70/sample |
| ABT44 - Pooled Milk PCR (Min. 20) | \$2.50/sample |

LOOKING TO BYD OR AZTEST AND NEED THIS?

Ear Notcher (for BVD testing)

ID3207 - V SM 5/16 7000

Small size V cut ear notcher is made of lightweight diecast aluminum construction. Heat treated cutting plate for long life and clean cuts. Individually hand-fitted and tested for precision tolerance. Can be used to collect ear notch for BVD or A2 testing.



\$31.00

Johne's Disease

Determine individual animal infection in cattle, goats and sheep by milk, blood or fecal samples. Identify and monitor herd prevalence with pooled sample analysis. Results in 5-10 days of sample receipt.

| ABT1 - Milk ELISA | \$6.50 |
|--|----------------|
| ABT2 - Blood ELISA | \$6.50 |
| ABT3 - Fecal PCR (Individual) | \$40.00 |
| ABT15 - Milk PCR (Individual or Bulk Tank) | \$50.00 |
| ABT43 - Pooled Fecal PCR (Min. 3) | \$12.00/sample |

Mastitis PCR

Use to identify mastitis pathogens in individual cows (high SCC, fresh cows, hospital pen, bulk tank, purchased cows) to determine management action. Test groups and bulk tank to monitor infection status. Effective on DHI or hand-stripped milk samples from treated, fresh or late lactation cows. No culturing required. Results in 2 days of sample receipt. Cost effective pooling strategies to monitor and manage herd status also available.

| ABT23 Contagious 4 Mastitis PCR | \$30.00 |
|---|---------|
| (M bovis, Strep ag., Staph aureus, Strep Uberis) | |
| ABT32 - Complete 16 Mastitis PCR - Detects 90% of infections! | \$40.00 |
| (Staph aureus, Strep ag., Prototheca, Staph species, Strep | |

dysgalactiae, Strep uberis, Klebsiella pneumoniae & oxytoca, E coli, M bovis, Corynebacterium bovis, Enterococcus faecalis & faecium, Serratia marcescens, Arcanobacterium pyogenes & Peptostreptococcus indolicus, Staph beta-lactamase gene, Mycoplasma species, and Yeast.)

ABT37 - Single Organism PCR (M bovis or Staph aureus) \$14.25 Pooling strategies available on all Mastitis PCR test types.

Pregnancy

Test milk or serum of cattle or goats as early as 28-days postbreeding to confirm pregnancy through pregnancy specific protein (PAG). Milk test can be ordered on routine DHI samples or submit samples direct. Results within 1 day of sample receipt.

| ABT26 - Serum Pregnancy ELISA | \$4.00 |
|-------------------------------|--------|
| ABT27 - Milk Pregnancy ELISA | \$4.75 |

Components

When not utilizing DHI test, submit individual milk samples to assist with management decisions. Results within 1 day of sample receipt.

| Milk Urea Nitrogen (MUN) | | \$ | 1.50 |
|--------------------------|--|-----|------|
| SCC/Components | | \$ | 1.50 |
| MUN/SCC/Components | | \$: | 3.00 |





Testing Supplies, Kits & Shippers

\$10 minimum order for collection supplies, kits, and shippers. Mix and match to reach the minimum order.

Blood Sampling Supplies

Supplies can be stored for use at a later date. Includes blood tubes and needles. Red-top tubes required for serum tests: Pregnancy, Johne's disease, Leukosis, BVD, and Neospora. Purple-top tubes required for whole blood tests: A1/A2, and STRATA-G BLV PCR.



ABK7 - Blood Supplies

\$1.25

Milk Collection Supplies

Preservative does not expire and can be stored for use at a later date. Includes vial with milk preservative.





\$1.00

Fecal Collection Supplies

Includes vial and glove.

ABK8 - Fecal Supplies



\$1.00

Tissue Collection Supplies

Includes vials.

ABK9 - Tissue Supplies



Complete Small Sample Kits (up to 10 samples)

Holds up to 10 samples. Kit includes sample submission form, collection supplies, and prepaid shipping box addressed to laboratory.



ABK5 - Complete Small Sample Milk Kit

ABK5 - Complete Small Sample Milk Kit *expedited shipping

ABK13 - Complete Small Sample Blood Kit

ABK13 - Complete Small Sample Blood Kit *expedited shipping



\$30.00 \$60.00

\$35.00

\$65.00

Complete Large Sample Kits

Includes sample submission form, collection supplies and UPS-paid shipping box addressed to laboratory.

ABK11 - Complete Large Blood/Ear Notch Kit (Holds up to 100 blood/tissue samples)

\$95.00

ABK12 - Complete Large Milk/Fecal Kit

\$95.00

(Holds up to 60 milk/fecal samples)

*For larger sample submissions call 800.631.3510.



HOW TO:

SUBMIT SAMPLES

Submit samples direct to CentralStar laboratories or milk samples through routine DHI testing.

CentralStar Michigan Lab 1163 Comet Lane Suite 100 Grand Ledge, MI 48837

CentralStar Wisconsin Lab Complex 200 East Kelso Road Kaukauna, WI 54130

\$10 submission fee for diagnostic tests.

SAMPLE SUBMISSION **FORM**



GET TEST RESULTS

- Diagnostic test results available online, email or mail. Text results available for some tests.
- Component, SCC and MUN results reported by email or mail.
- Johne's Analysis DHI report 420 organizes test results, production, SCC and reproduction data for quick analysis to take management actions. Download results into DART (formerly PCDART).
- Download pregnancy test results into DART.

BUNDLE & SAVE

- Pooling samples for Johne's, BVD or Mastitis reduces cost and effectively identifies herd or group status. Call 800.631.3510 to discuss pooling options.
- Two ELISA tests on one sample

\$11

Three ELISA tests on one sample

\$15

Four+ ELISA tests on one sample

\$5/test

Decoding Mastitis PCR Results

Mastitis PCR results provide a comprehensive picture of the cause of mastitis. While this allows you to treat and manage mastitis more effectively, the data can be confusing. **So what does it all mean?**



Control of each mastitis-causing organism is unique.

When your results indicate infection, understanding the source of the infection and how it's transmitted is essential to implementing an effective control plan. CentralStar's Mastitis PCR can report up to 16 mastitis-causing pathogens, depending on which test you use. Below is a quick reference of some of the organisms most often reported. Management of the various pathogens and their relative abundance is herd-specific and dependent on your goals.

| Target Organism | Source | Transmission | Control |
|---|--|---|---|
| Staphylococcus aureus | Infected udders, skin surfaces, mucous, and the environment | During milking by contaminated milk | Treatment often unsuccessful; Segregate and cull; test all incoming purchased animals |
| Mycoplasma bovis | Infected cows shed bacteria in milk, blood, and respiratory secretions | Cow-to-cow through infected milk, blood, nose-to-nose contact | Not susceptible to antibiotics, consider cows infected for life; Segregate and cull; test all incoming purchased animals |
| Mycoplasma species | Infected cows shed the bacteria in milk, blood, and respiratory secretions | Cow-to-cow through infected milk, blood, nose-to-nose contact | Not susceptible to antibiotics, consider cows infected for life; Segregate and cull; test all incoming purchased animals |
| Streptococcus uberis | Shed in feces, contaminates all bedding types | Environmental contact, possibly cow-to-cow through infected milk | Cure rate generally lower than other Strep species, but may increase with extended-duration therapy; cull chronic infections |
| Streptococcus dysgalactiae / Enterococcus faecalis & faecium | Shed in feces, contaminates all bedding types | Environmental contact, cows with negative-energy balance or compromised immunities most at risk | Responds to antibiotic treatment; Clean dry-cow environment, good pre- and post-milking teat-dip procedure |
| Staphylococcus species | Skin surfaces, occasionally environment | Infects teat canal from skin sources | High rate of spontaneous cure, responds to antibiotic treatment, pre- and post-milking teat disinfectant, dry-cow therapy |
| Staphylococcal beta-lactamase gene (A sub-group of Staphylococcus) | | | Resistant to treatment with beta-lactam products; discuss alternative antibiotic uses with veterinarian |
| Yeast | Soil, plants, water | Improperly cleaned teat ends prior to infusion, milking machine malfunction or poor milking technique | Does not respond to antibiotics and their use may worsen the signs of mastitis; Sterile, single-use udder prep for teat infusions, ensure properly working milking equipment and technique |



Don't go it alone.

Ask your CentralStar team for help with understanding your results and implementing testing on your farm.

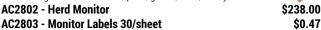




Reproduction Tools

D-Y Herd Monitor

Use for keeping accurate records of your herd's breeding and freshening. Available in red, pink, green, blue, and yellow.



A.I. Training

| SS100 - A.I. Training Manual | \$25.00 |
|---|---------|
| SS145 - Supplemental A.I. Training Manual Spanish | \$3.00 |
| SS170 - Basic A.I. Training DVD English | \$20.00 |
| SS171 - Basic A.I. Training DVD Spanish | \$20.00 |
| SS180 - Basic A.I. Training Video English | \$20.00 |
| SS183 - Basic A.I. Training Video Spanish | \$20.00 |
| SS184 - Heat Detection & Timed A.I. Video English | \$15.00 |
| SS185 - Heat Detection & Timed A.I. Video Spanish | \$15.00 |

IT'S CONVENIENT!

Milk Pregnancy Test



"Farms I work with use the Milk Pregnancy Test because of its convenience. They use it at a variety of times from the initial confirmation

to just before dry-off. Since I'm at the farm every month, I can easily create a report to identify which animals need to be checked, saving them time, and keeping their breeding program on track."

> Heather Noskowiak CentralStar DHI Specialist





REPRODUCTION TOOLS

Heat Detection

Estrotect™

No more messy glue. Scratches off exposing brilliant color when cows are mounted. The precision-designed Breeding Bullseye™ takes the guess work out of your breeding program. When the Bullseye, or equivalent amount, is rubbed off it's time to breed! Available in orange, lime green, fuchsia, and blue.

ID3229 - 50ct \$87.00 ID3232 - Rubber brush \$6.75

Kamar® HeatMount™ Detectors

Advanced heat detection aid that helps identify standing heat occurring between visual observations. Apply with adhesive over sacrum of cow. Detector turns red when activated by mounting.

ID3220 - 25ct w/adhesive \$33.00 ID3230 - 100ct w/adhesive \$132.00 ID3223 - Adhesive \$5.00

Eazi-Breed™ CIDR®

Produces tighter estrous synchronization, which means more animals in heat in an insemination window. The insert is easily administered into the vagina, continuously releasing progesterone, allowing breeding programs to start at any stage of the estrous cycle.



Twist-Stik

Slow-dry formula marks skin, hide, and pelts. Convenient plastic dispenser with cover prevents waste and mess. Faderesistant, weather-resistant, and nontoxic.

ID61029 - Regular 12ct box ID61030 - Fluorescent 12ct box

Paintstik™

Highly-visible, nontoxic identification. Applies easily wet or dry and resists fading. Available in orange, green, fluorescent orange, fluorescent green, and flourescent pink.

ID61024 - Regular 12ct box ID61012 - Fluorescent 12ct box

Detect-Her™ Tailpaint

Rubs off with several mounts. Has BITTERGUARD® to deter licking. Water soluble for easy clean-up, will not stain hands. Available in wipe-on or aerosol in blue, green, orange, yellow, pink, and red (wipe-on only).

DT202 - Wipe-on 6ct box DT208 - Aerosol 12ct box

CowManager®

24/7 monitoring of your herd's reproduction. Ear tag transmits data every 15-minutes. Fertility alerts accurately identify which cows are in heat, provides precise information on optimal time to breed and identifies anovular and cystic cows. Nutrition and health information also available.

See www.mycentralstar.com/cowmanager to learn more.





\$26.40

\$28.92











Breeding Supplies

A.I. Gun Warmer

Heated, temperature controlled carrying case keeps guns at correct temperature. Includes: 12V rechargeable battery, belt/shoulder strap, 100V AC wall adapter, 12V DC auto adapter, spare liner. One-year warranty.

| IN8011 - Gun Warmer Kit | \$394.16 |
|-------------------------------------|----------|
| IN8012 - 14.4V Rechargeable Battery | \$76.63 |
| IN8013 - 100V AC Wall Adapter | \$15.93 |
| IN8014 - Auto Adapter- Gun Warmer | \$12.04 |
| | |

Breeding Sheaths

| IN3004 - Individual Sheath - Split 50pk | \$8.87 |
|--|---------|
| IN3012 - Univ N/S Sheath-Blue (spiral/univ gun) 50pk | \$4.50 |
| IN3016 - Univ Split Indv Sheath - Green 50pk | \$11.17 |
| IN3017 - Univ N/S Indv Sheath - Blue 50pk | \$14.51 |
| IN3024 - San Sheath Covers 100 roll | \$15.90 |
| IN3025 - Univ N/S Sheath - Green (o-ring gun) 50pk | \$3.67 |
| IN3028 - HD Plastic Sheath Covers 25pk | \$8.65 |
| IN3054 - Metallic Tip Sheath-ET 5pk | \$13.88 |
| IN3056 - Alpha Sheath 50pk | \$10.27 |
| IN3013 - Infuzee w/ Connectors 25pk | \$8.25 |
| IN3031 - Infuzee Pipettes 25pk | \$7.57 |
| | |

Insemination Guns

| N3005 - French Straw Gun | - | \$30.00 |
|--------------------------------|-----|----------|
| N3006 - Spare Lock Ring | 1 | \$1.05 |
| N3011 - Spiral Straw Gun 1/2cc | 44 | \$30.00 |
| N3042 - Spiral Straw Gun 1/4cc | *** | \$37.00 |
| N3053 - ET Breeding Gun | | \$128.79 |
| N8010 - Deep Horn Breeding Gun | | \$48.00 |
| | | |

Kombicolor Insemination Guns

Use with 1/4 and 1/2cc straws.

| IN3044 - White | * ` ` |
|------------------|--|
| IN3045 - Yellow | The same of the sa |
| IN3046 - Green | |
| IN3047 - Blue | 88 8 |
| IN3048 - Red | |
| IN3057 - Plunger | |



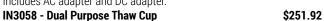
\$44.22 \$44.22 \$44.22 \$44.22 \$44.22 \$17.00

Breeding Gloves

| IN3040 - Buff Poly Sleeve 100 box | \$21.94 |
|-------------------------------------|---------|
| IN3049 - Red Breeder Sleeve 100 box | \$17.80 |

Cito Thaw Cup

A sensitive and accurate thermostatic control ensures a constant temperature range of 95°- 98° F. Indicator light shows when the unit is ready to use, and when it is maintaining the water bath at the proper temperature. Includes AC adapter and DC adapter.



Breeding Kit

Plastic breeding box to hold breeding supplies. Comes with thermos bottle (blue box includes Cito dual purpose thaw cup), Kombicolor gun, universal sheaths, gloves, bottle of Lubogel, tweezers, scissors, and thaw monitor.





| Dieculing Extras | |
|--|---------|
| IN3029 - Lubogel gallon | \$15.13 |
| IN3021 - Thermos Bottle | \$21.91 |
| IN3026 - Thaw Monitor | \$4.00 |
| IN3032 - Tank Measure Stick | \$5.25 |
| IN3041 - Digital Thermometer | \$21.14 |
| IN3020 - Dial Thermometer | \$14.65 |
| IN3007 - Scissors | \$12.59 |
| IN3009 - Forceps - stainless steel | \$11.22 |
| IN3008 - Fiberglass Tweezer 1/2cc | \$3.10 |
| IN3043 - Fiberglass Tweezer 1/4cc | \$4.40 |
| IN3037 - CITO Straw Cutter | \$6.20 |
| IN3061 - Tork Dairy Towel single pack (16 packs in a case) | \$2.10 |
| | |



| Description | No. of Canisters | Capacity 1/2cc Straws | Hold Time Neck Opening (weeks) (inches) | | 2 year Warranty | Weight Filled (pounds) |
|------------------|------------------|--------------------------|---|-------|-----------------|---------------------------|
| Millennium XC20 | 6 | 720 | 16 | 21/4 | Yes | 60 |
| MVE XC34/18 Tank | 6 | 2,100 | 16 | 3 1/2 | Yes | 96 |

Call for pricing







PEST CONTROL

Fly & Insect Control

ULTRABoss® Pour-On

Controls lice, flies, mosquitoes and ticks on cattle. Effective horn fly control up to eight weeks. No pre-slaughter withdrawal or milk withhold. 3 mL per 100 lbs. body weight.



\$40.21 \$153.32

AC2814 - 1qt AC2813 - 1gal

Intersect Gold Pour-On™

Synergized pour-on controls lice and flies on lactating and non-lactating dairy and beef cattle and calves. Controls keds on sheep and lambs when applied as a pour-on. Controls flies on horses when applied as a wipe-on, pour-on or a ready-touse spray. Apply as a pour-on, mist spray or in back rubbers.



AC2839 - Intersect Gold 2.5gal AC2840 - Intersect Gold 1gal

\$215.00 \$100.00

CyLence® Pour-On

Ready-to-use pour-on insecticide for the control of horn flies, face flies, biting and sucking lice on beef and dairy cattle. Use anytime of the year. No mixing and no withdrawal requirements.



AC2825 - 6pt \$127.82

Cattle Armor Pour-On

Ready to use pour-on to kill horn flies, face flies, house flies, stable flies, keds, lice, mosquitoes and many more. Works as a pour-on, mist or diluted in back rubbers. Use on beef cattle, lactating and non-lactating dairy cattle, calves and sheep.



UM3716 - 55gal \$1,158.43

CyLence® Ultra Premise Spray

Broad spectrum control of crawling, flying and wood-infesting insects, in and around animal housing, warehouses, and processing and packing plants. Provides effective knockdown and residual control of over 60 different pests.



AC2845 - 240ML

\$68.57

Cyzmic® CS Insecticide Premise

Encapsulated premise insecticide for use around livestock buildings. Kills flies, ants, spiders, crickets, moths, ticks, mosquitoes, fleas, beetles, bugs and more. Provides broadspectrum control, lasts up to 90 days on a surface, mixes with water.



AC2846 - 1qt \$103.79

ULD® BP-100 Premise

UM3703 - 1gal

UM3706 - 55gal

A versatile fly control that is safe for humans and livestock. Kills flies with extremely low risk of resistance. Application will leave a residue to control flies for up to seven days.



\$96.87 \$2,998.97

Dewormer

EpriGard®

Internal and external parasite control for beef and dairy cattle. Kills 39 species and stages of internal and external parasites. Controls adult worms and fourth-stage larvae, lice, mange mites, grubs and horn flies. Active ingredient: Eprinomectin at 5g/L. No milk or meat withholding. AC2848 - 5L



\$271.62

Ivomec® Eprinex®

Parasite control that kills 39 species and stages of internal and external parasites. Controls adult worms and fourth-stage larvae, lice, mange mites, grubs and horn flies. No milk withholding or meat withdrawal (when used according to label).



MR30252 - 2.5L \$270.92 MR30253 - 5L \$368.22 MR30254 - 10L \$692.12 MR19499 - 20L \$1,292.94

Ivomec[®]

Highly effective against roundworms, lungworms, grubs, lice and mange mites in cattle.

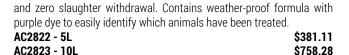




\$298.60

CYDECTIN® Pour-On

Pour-on formula approved for beef and dairy cattle, including lactating cows. Use for the treatment of infections and infestation of internal and external parasites. Proven to provide persistence against specific species including brown stomach worms, lungworms, barber pole worms and nodular worms. Zero milk withhold



\$318.00

AC2844 - 2.5L



SCAN TO ORDER DEWORMER



Evergreen® Pyrethrum Concentrate Premise

Water based, broad-spectrum insecticide that can be used in OMRI-certified organic facilities. Contains pyrethrum, a botanical insecticide. Use indoors in food and non-food areas, and in and around livestock facilities. Rapidly degrades in sunlight with no residual activity. Offers fast, effective control of insects including ants and cockroaches.

AC2819 - Organic 1gal AC2838 - 60-6 Fly Spray 1gal



\$497.91 \$342.65

Neporex[®]

Controls stable flies and mosquitoes. Granular formulation larvicide, suitable for scattering, or dissolving for pouring and spraying. Can be used as a spot treatment where larvae are found developing. NOT allowed for application directly to livestock, feed or water for consumption, as residues may occur. Apply to calf hutches, slatted floors, cattle pens and spillage areas.

AC2837 - 11lb



\$133.70

Tempo® SC Ultra Premise

Premise spray provides broad-spectrum control of more than 60 pests including flies, ants, spiders, darkling beetles, mosquitoes, fleas, ticks and more. Can be used as a general surface, spot, mist, or crack and crevice spray for use in and around animal facilities.

AC2820 - 240mL AC2821 - 420gm



\$59.75 \$85.00

QuickBayt® Fly Bait

Controls nuisance flies in as little as 60 seconds. Ready to use indoors or around livestock production facilities, poultry houses and horse stables as scatter bait or in bait stations. Contains Bitrex®, a bitter substance to help prevent accidental ingestion by children and animals.

AC2835 - 5lb

AC2836 - 35lb *limited supply



\$51.71 \$232.91

Dairy Fly Bomb 55Z

Kills and repels stable flies, horse flies, face flies, deer and house flies, mosquitoes and gnats. Use on beef cattle, dairy cattle, horses, hogs, chickens and other livestock; in animal barns and storage facilities. Quick killing pyrethrin.

AC2829 - 25oz



\$22.03

Sticky Roll®

Use in dairy barns, horse stables and animal premises of all kinds. USDA testing shows it captures 92% of available flies. No baits, toxins or pheromones are necessary.

AC2832 - Hardware AC2833 - 1,000ft Roll



\$69.29 \$44.05

Application quick reference

| Product | Parlor/ Milkhouse | Barns | Animals | Hutches | Use |
|-------------------------------|----------------------|-------|---------|---------|--|
| CyLence Pour-On | No | No | Yes | No | Apply to topline every 3 weeks; rotate with Ultra Boss |
| UltraBoss Pour-On | No | No | Yes | No | Apply to topline every 2 weeks; rotate with Cylence |
| Intersect Gold Pour-On | No | Yes | Yes | No | Apply as pour-on or in back rubbers, effective on dairy, beef, horses or sheep |
| Cattle Armor Pour-On | No | No | Yes | No | Apply to topline, oil-based, reapply every 2 weeks |
| CyLence Ultra Premise Spray | Yes | Yes | No | Yes | Broad spectrum for indoor or outdoor use |
| Cyzmic CS Insecticide Premise | Yes | Yes | No | Yes | General use, quick knockdown, up to 90-days residual |
| Tempo SC Ultra Premise | Yes | Yes | No | Yes | Indoor and outdoor; surface, spot, mist, or crack and crevice spray. |
| EverGreen | Yes | Yes | Yes | Yes | Pyrethrins degrade quickly in sunlight. Kills 140+ pests. |
| UDL BP-100 | Yes | Yes | Yes | Yes | To kill stable flies, apply 2 fl oz/adult animal |
| Neporex | No | Yes | No | Yes | For under bedding in hutches or around perimeter of manure piles and packs |
| QuickBayt Fly Bait | No | Yes | No | Yes | Fresh product attracts more flies; for house flies, not stable flies. |
| Sticky Roll Fly | No | Yes | No | No | Indoor and outdoor; over headlocks or tie stalls |
| Fly Bomb | Yes | Yes | Yes | Yes | Quick knockdown, no residue |





Visual Tags

Allflex

Patented laser-ink marking with matching laseretched number into tag surface guarantees permanent identification for the life of the animal. Special order with custom options available.



Available in blue, green, orange, pink, purple, red, white, and vellow

| Medium 1.75" x 1.5" numbered/blank | \$0.95/\$0.85 |
|---------------------------------------|---------------|
| Large 3" x 2.25" numbered/blank | \$1.53/\$1.43 |
| Maxi 4" x 3" numbered/blank | \$1.78/\$1.68 |
| Super Maxi 4.625" x 3" numbered/blank | \$1,88/\$1,78 |

RFID Tags

Allflex Official USDA '840' Ultra EID Tag

The USDA Premise ID number is required to purchase. The tag is ISO Compliant. Extended small male allows a deeper placement in the ear.

Single Tag -500+ \$2.63 \$2.50



Allflex USDA '840' Visual Tags

Tags are laser-ink printed and available with custom letters and numbers. The USDA Premise ID number is required. EID button only available in white. Visual tags are available in: yellow, 171 white, blue, green, orange, red, and pink. Also available with tissue sample units



| and pink. 7 100 available with tiodae dample anto. | |
|--|--------|
| Double matched 2 pair maxi female w/ large male | \$5.93 |
| Double matched combo set | \$4.07 |
| 840 only double matched 2 pair maxi female w/ large male | \$4.15 |
| Maxi matched pair visual set numbered | \$4.95 |
| Maxi matched pair visual set blank | \$4.85 |
| Large matched pair visual set numbered | \$4.48 |
| Large matched pair visual set blank | \$4.38 |
| | |

Allflex All-in-One

Available in Half Duplex (HDX) and Full Duplex (FDX). Combines Allflex Maxi or Large visual tag with EID component. Tamperproof Ultra Cap™ provides ultimate security and retention. Available in yellow and white.

Maxi - blank or numbered Maxi - numbered with text \$4.49



Z-Tags

With their unique flip-out applicator and no-snag design, Z-tags are a premium ear tag. Available in one and two piece tags. Available in yellow, purple, black pink blue red green orange and white

| biack, pilik, bide, red, green, orange, and white. | |
|--|---------------|
| One Piece Calf 2.5" x 3.25" numbered/blank | 1.05/\$0.82 |
| One Piece Cow 3" x 4.5" numbered/blank | \$1.45/\$1.30 |
| Two Piece Calf 2.5" x 3.25" numbered/blank | \$1.05/\$0.82 |
| Two Piece Cow 3" x 4.5" numbered/blank | \$1.36/\$1.12 |

A-Tags

One-piece tag, self-piercing, pinhole tip for faster healing and reduced animal stress. Highly versatile designed for long-term identification and cost



effective. Patented laser ink permanent marking, custom marking and numbering available by special order. Available in blue, green, orange, pink, purple, red, white, and yellow.

One Piece Cow 4.5" x 3" numbered/blank \$1.35/\$1.25

Y-Tex

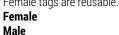
Two-piece tags are made of an advanced polyurethane formulation and are engineered to prevent cracking, remain flexible and provide excellent longevity. All-American ear tag design features a Snap-Lok® collar for superior retention, a long neck for greater visibility and ultraviolet inhibitors to resist fading. Available in orange, blue, green, pink, purple, yellow, red, black, white, and gray

Medium 3-Star 2.25" x 4.875" numbered/blank \$1.20/\$1.10 Large 4-Star 3.5" x 4.75" numbered/blank \$1.30/\$1.20

<u>CowManager®</u>

CowManager Blank RFID Tag

The dummy RFID tags are a perfect way to put in CowManager® ear tags, or use with regular RFID tags. Female tags are reusable.





\$2.00 \$0.58

ProfitSOURCE®

ProfitSOURCE

ProfitSOURCE is a complete program offering the expertise of CentralStar's reproductive and genetic specialists. ProfitSOURCE can significantly impact your herd's bottom line by increasing the revenue from your lower genetic value females. *Calves MUST meet all Select Sires requirements to qualify for the ProfitSOURCE™ program. Call for specifications.



Swine Tags

Official 840 Swine Tag

Required for all show gilts and barrows. USDA official 840 number. 840 tags are not used for production swine (see Swine Premise tags). Premise number required to order (available through your local Department of Agriculture). Tags offer a tamper-proof button and visual panel stud. Available blank, with management number or with premise number or text. Available in blue, magenta, orange, pink, red, white, and yellow.



Rectangle Button

\$1.25 \$1.25

Sheep & Goat Tags

FDX Lightweight Goat and Sheep Ultra 840 EID

Packaged with small global males, FDX technology utilizes the lightweight EID tag. The USDA Premise ID number (issued by the Department of Agriculture in your state) is required to purchase. Apply with the Allflex universal total tagger or Allflex Ultra Retract-O-Matic for EID tags. Packaged in sets of 20 buttons per package.

Goat and Sheep \$2.47

Tagging Accessories

Taggers and Accessories

| <i>33</i> | |
|---|----------|
| Allflex Ultra Retract-O-Matic for CowManager | \$105.00 |
| Allflex Ultra Retract-O-Matic for EID Tags | \$75.61 |
| Allflex UTT3S Tag Applicator for all 2-piece tags/electronic tags | \$34.00 |
| Allflex Retract-O-Matic for visual/global | \$56.00 |
| Z-Tag Applicator for one-piece Tags | \$25.00 |
| Destron Fearing Universal Tag Applicator | \$24.00 |
| Allflex A-Tag Applicator | \$24.50 |
| Allflex Total Tagger Applicator | \$25.26 |
| Allflex Total Tag Applicator Pin | \$2.60 |
| Destron Fearing Pin for ProGrip Universal Applicator | \$2.91 |
| Remover Knife | \$3.82 |
| Z-Marking Pen | \$7.25 |
| Allflex 2-in-1 Marking Pen | \$5.98 |
| Y-Tex Tagger Plus/Combination | \$25.00 |

EID Stick Readers

| Allflex AWR300 EID Stick Reader | \$1,370.85 |
|--|------------|
| Allflex AWR300 EID Stick Reader Kit | \$1,430.00 |
| Tru-Test XRS2 EID Stick Reader | \$1,899.00 |
| Tru-Test SRS2 EID Stick Reader | \$1,399.00 |
| I.D. Ology LCD Lightning Rod Reader w/ Bluetooth | \$1,250.00 |
| I.D. Ology Lightning Rod Reader w/ Bluetooth | \$765.00 |
| Allflex RS420 Replacement Battery | \$38.50 |
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