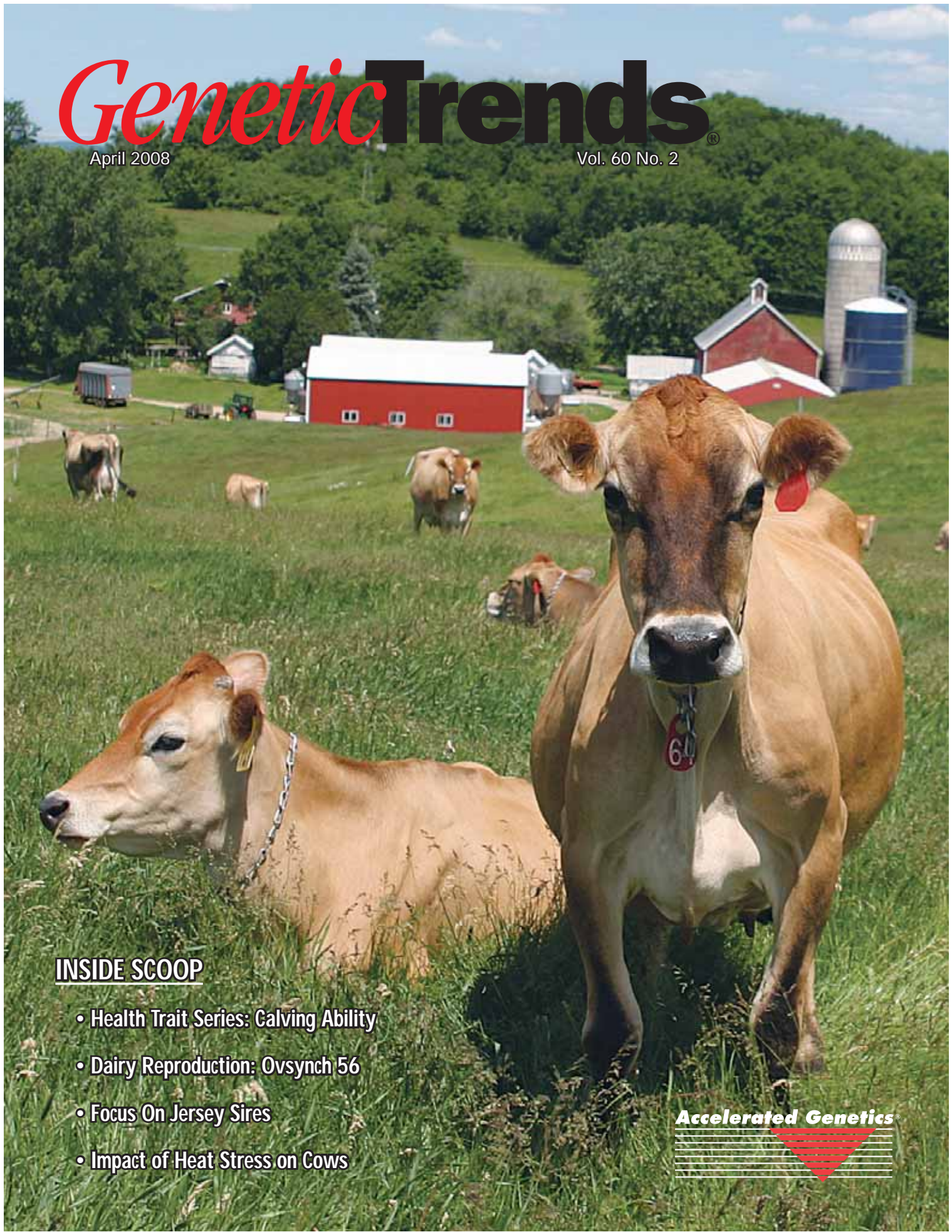


# Genetic Trends®

April 2008

Vol. 60 No. 2



## INSIDE SCOOP

- Health Trait Series: Calving Ability
- Dairy Reproduction: Ovsynch 56
- Focus On Jersey Sires
- Impact of Heat Stress on Cows

**Accelerated Genetics®**



# Calving Ability

## A NEW PLAN TO ADDRESS AN OLD PROBLEM



Kent Weigel  
University of Wisconsin

A system for gathering farmer-assigned scores for calving difficulty, also known as “dystocia”, was devised in the late 1970s, and sire rankings for calving ease have been available for more than two decades. The sire evaluations that have been provided refer to ‘direct calving ease’ (i.e., measured as a trait of the calf), which is essentially a proxy for calf size. This information has been extremely valuable for dairy producers, because it has allowed them to identify ‘calving ease bulls’ that can safely be used as mates for yearling heifers.

Despite the widespread use of calving ease information, little or no progress has been made in reducing the overall incidence of calving problems in the Holstein breed. The reason is two-fold. The first reason is educational – the advice given to farmers has been to use calving ease data to identify bulls that are safe as mates for yearling heifers. The implicit recommendation has been that the remaining bulls (i.e., those that are not safe because they sire large calves that cause dystocia) should be used as mates for lactating cows. As a result, the genes that cause large calf size and dystocia remain at high frequency in the population. The second reason is intentional – many Holstein breeders show cattle or sell

breeding stock, and large calves tend to win blue ribbons. We could learn a lot from our counterparts in the beef industry with regard this trait, as they learned early on how to identify bulls that could sire calves with low birth weights that can, in turn, grow very rapidly to achieve acceptable weaning or yearling weights.

Some major steps have been taken to address the issue of calving problems in the past three years, with the introduction of national sire evaluations for three new traits. The first is ‘maternal calving ease’ (i.e., measured as a trait of the cow), which reflects the cow’s ability to have a calf without assistance from the farmer or veterinarian. The second is ‘direct stillbirth rate’, which measures the calf’s ability to survive the birthing process and the neonatal period (up to 48 hours of age). The third is ‘maternal stillbirth rate’, which reflects the cow’s ability to produce a live, healthy calf.

In practice, these four measures of calving ability are referred to as service sire calving ease (SCE), daughter calving ease (DCE), service sire stillbirth rate (SSB), and daughter stillbirth rate (DSB). On average, about 8% of births involving first-

calf heifers are considered as ‘difficult’, corresponding to scores of 4 or 5 on a five-point scale, as compared with about 3% of births involving second and later lactation cows. Likewise, about 13% of calves from first-calf heifers will be born dead or will die by 48 hours of age, as compared with about 6.5% of calves from second and later lactation cows. As shown in the example bulls listed below, tremendous genetic variation exists for these four traits.

Calving ease evaluations are published in terms of the expected percentage of difficult births in heifers. For example, when 014HO04099 Billion is mated to yearling heifers, 5% of the calves will be born with difficulty, whereas 12% of the calves will be born with difficulty when 014HO03854 Disco is used as a mate for yearling heifers. Likewise, when 014HO02586 Sailor daughters grow up and calve for the first time, about 5% of their calves will be born with difficulty, whereas heifers sired by 014HO04280 Professor will have difficulty at first calving about 10% of the time.

Stillbirth evaluations are published in terms of the expected percentage of dead calves

**Article continued on page 5.**

**Table 1. Service Sire & Daughter Calving Ease and Stillbirth Examples**

	Direct (Service Sire) Calving Ease (SCE)	Maternal (Daughter) Calving Ease (DCE)	Direct (Service Sire) Stillbirth Rate (SSB)	Maternal (Daughter) Stillbirth Rate (DSB)
014HO04099 BILLION	5%	6%	8.4%	9.7%
014HO03854 DISCO	12%	11%	7.3%	5.9%
014HO02586 SAILOR	6%	5%	9.6%	8.1%
014HO04280 PROFESSOR	11%	10%	8.7%	10.8%
014HO03571 DUTCH SCORE	7%	6%	6.4%	6.0%
014HO03738 MATT	6%	6%	10.0%	6.2%
014HO03597 POTTER	6%	5%	7.7%	4.8%
014HO04131 WRANGLER	7%	9%	8.9%	13.4%

Source: January 2008 USDA/Holstein Association/NAAB

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#### Accelerated Genetics Vision Statement

We are a global provider of bovine genetics and research, reproductive services and solution-based animal health products. Our vision is to be the forerunner in developing innovative technologies and exceptional services that will aid our customers in achieving their ultimate herd goals.

## Features and News

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### On The Cover

Jerseys are some of the most profitable, adaptable and responsive dairy producers in the world. And Jerseys are changing the 'color' of dairying today – its not all black and white. In this issue of Genetic Trends we are focusing on Jerseys.

Photo by: Ken Falch, Fall Creek, Wis.

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# It's Never Too Soon to Focus on Heat Stress

One of the last issues on a producer's mind during spring field work may be the impact heat stress has on dairy cattle during the summer. Yet, heat and heat stress can have a major impact on production and herd health. Reproduction efficiency can be drastically lowered, with some research indicating that only 10 to 20 percent of inseminations result in pregnancies when cows are under stress during periods of high heat.

The effect of heat stress on cows is also a factor that can affect milk quality. The mechanism between exposure to heat stress is most likely attributed to the indirect effect of heat stress on the cow's immune system. Temperature levels that may be comfortable to people can be stressful on high producing cattle. Ideal temperatures for a dairy cow are between 41°F and 77°F and high humidity can drop the comfort zone down to 75°F.

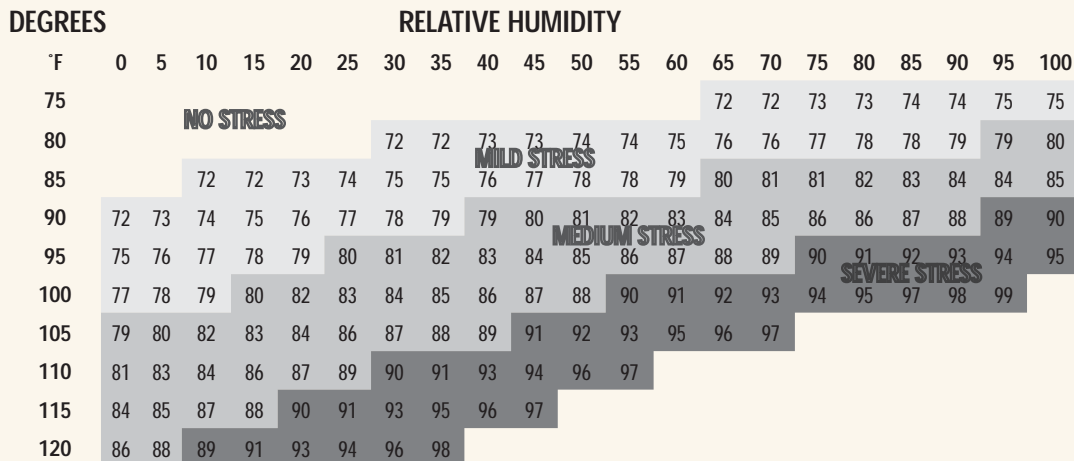
**Table 1. Temperature-Humidity Index (THI) Impact on Dairy Cattle.**

THI	Symptoms
72	Cattle start to feel heat stress. Reduced feed intake and increased respiration rate may occur.
77	Begin losing milk production. Symptoms become more apparent.
80	Rapid shallow breathing, profuse sweating and a 10% decrease in milk production.
90	Severe loss in milk yield (>25%), decreased feed intake, and panting. Risk of death if ill or calving.

One of the most commonly used methods to monitor heat stress is to use the temperature-humidity index (THI). THI is a calculation resulting from the temperature and relative humidity. Dairy cattle suffer heat stress when the THI reaches 72. Symptoms are further exaggerated when the THI remains high for long periods without a chance to cool down at night. Table 1 lists symptoms at different levels of THI.

There are ways to reduce the impact of heat stress on cattle throughout the summer months. Water intake is the first key to a successful heat abatement program. At least one water source is needed for every twenty cows at all times. Keeping the water clean and fresh is also important. Studies have shown that cattle will drink more water when a cool clean source of water is available. When walking past a waterer you should ask yourself: Would I take a drink from that? If the answer is no, it needs to be cleaned.

**Figure 1. Temperature Humidity Index (THI)<sup>1</sup> for Dairy Cows. Modified from Dr. Frank Wierama (1990), Department of Agricultural Engineering, The University of Arizona, Tucson, Arizona.**



<sup>1</sup>THI = (Dry-Bulb Temp. °C) + (0.36 dew point Temp., °C) + 41.2)

If more than two cows out of 10 have respiratory rates exceeding 100 breaths per minute, then immediate action should be taken to reduce heat stress.

Prepared by Vinton E. Smith, Penn State Dairy Management Agent. References for figure: Heat Stress and Feeding Management; Michael Westendorf & David Lee, Rutgers Cooperative Extension; <http://www.rcr.rutgers.edu/pubs/pdfs/fs884.pdf> and Coping with Summer Weather, Dairy Management Strategies to Control Heat Stress; John Smith, et al; Kansas State Univ. <http://www.oznet.ksu.edu/library/hstik2/mf2319.pdf>

Along with the need for additional water, nutritional needs still need to be met. Heat stress depresses feed intake, so it is important to adjust the ration to meet the same requirements as it would in cooler periods.

Increasing nutrient density, such as feeding higher quality forage, feeding more grain and adding supplemental fat can help the cow meet her needs on less feed. Direct-fed

microbial and yeast products can also aide in increasing feed intake, especially through periods of heat stress.

Mineral requirements will also change during periods of hot weather. Any time a cow increases perspiration and respiration, water is released from the body taking with it needed minerals. Lower intakes and a higher concentrated diet will also increase the need for buffer to be added to the diet to maintain rumen pH.

Barn design and management can reduce heat stress as well. Whether an operation has natural or mechanical ventilation it must be designed to exchange the warm air around the cows with cooler air from outside the barn.

A sprinkler system can also reduce heat stress if set up correctly. A properly working cooling system soaks the backs of the cows to allow evaporation to cool the cow. Having a fine mist that only covers the top of the coat will actually act as insulation and do more harm than good by trapping the heat on the cow. Misters need to be run intermittently to allow the water to actually evaporate before the cows are soaked again. The amount of time needed between misting periods needs to change depending on the temperature and humidity.

If cows are kept outside, there needs to be adequate shade to allow cows relief from the sun. Cows let off a tremendous amount of heat, so if shade is limited, cows will bunch together and cause additional heat stress on each other.

At the end of the day, the key goal is to help the cow maintain production and stay healthy throughout the year. The only way to do this is by keeping the cow as consistent as possible. Controlling body temperature with adequate facilities, maintaining dry matter intake, and meeting nutritional requirements (water, energy, protein and mineral) regardless of intake, will all help keep cows productive and healthy. Remember, the time to address these issues is before warm weather arrives and begins to impact your bottom line.



**Dan Schreiner**  
Product Specialist

## Calving Ability

*Continued from page 2*

in both first-calf heifers and older cows. For example, when 014HO03571 Dutch Score is mated to yearling heifers and lactating cows, about 6.4% of the calves will be dead at birth or by 48 hours of age, whereas about 10.0% of calves from cows and heifers mated to 014HO03738 Matt will be dead. Conversely, when 014HO03597 Potter daughters grow up and calve in first and later lactations, about 4.8% of the calves will be dead, whereas about 13.4% of calves from first and later lactation daughters of 014HO04131 Wrangler will be dead.

An interesting development in our understanding of the calving complex has been research on the impact of gestation length. In a recent study at the University of Wisconsin (E. Lopez de Maturana, unpublished), the interrelationships between calving ease, stillbirth rate, and gestation length were examined in first-calf Holstein heifers. Gestation length is largely dependent on a signal from the calf to initiate parturition, so it was not surprising the estimated heritability of direct gestation length (0.43) was much greater than that of maternal gestation length (0.09). Average gestation length was 277.6 days, and the incidence rates for calving difficulty and stillbirths were 8.3% and 13.1%, respectively.

Calving difficulty was lowest (6.0%) for gestation lengths of 268 to 273 days, whereas stillbirth rate was lowest (12.0%) for gestation lengths of 274 to 279 days. Short gestation lengths, ranging from 261 to 267 days, were associated with 8.6% difficult calvings and 23.0% stillborn calves. Conversely, long gestation lengths, ranging from 279 to 291 days, were associated with 10.9% difficult calvings and 14.0% stillborn calves. Thus, it appears that a slight reduction in the mean gestation length of Holstein heifers may lead to improved calving performance, but the trait clearly has an intermediate optimum.

In summary, the present rates of calving difficulty and stillbirths in Holsteins, particularly in first-calf Holstein heifers, are discouraging. However, it is very encouraging to see that new systems have been implemented that will allow farmers to identify bulls whose daughters are more likely to calve without assistance, bulls whose daughters are more likely to produce live calves, and bulls that are more likely to produce live calves when used as mating sires. These developments, coupled with research on the impact of variation between sire families in gestation length, have put us in a strong position to address the issue of calving problems in a comprehensive, proactive manner in the coming years.

### TRI-MIC 1:50

Improve feed intakes and feed utilization for maximum production and reproductive performance with Tri-Mic 1:50. Tri-Mic 1:50 uses patented methods of stabilization and packaging to insure live, viable and fast-acting microbes for maximum performance. It contains the highest concentration of ruminant-specific bacteria and is formulated for whole herd application as either a top dress or as part of your total mixed ration (TMR). Ideal for allowing a smooth transition from the dry diet to the higher-energy, concentrated diets required for high milk production. Also effective for countering the negative effects of heat stress, poor quality feed, calving stress, metabolic disorders or other negative environmental conditions.



### BOVINE ACCELLYTE

A unique electrolyte designed to combat the losses due to dehydration. Can be used for both pre-hydrating (prior to stress) and re-hydrating (post stress) cattle. Contains electrolytes to replace those lost during stress, energy to provide an added boost



when needed most, minerals needed to compensate for deficiencies from reduced feed intakes and vitamins necessary for life. Can be used as a drench, added to stock tanks or individual water feedings. It also can be dry-mixed into feeds for group or herd application.

# OVSYNCH 56

## A SUCCESSFUL MODIFICATION

A question that comes up very frequently when discussing reproduction issues with dairy producers is ‘What is the best synchronization program?’ Well, there is no magical synchronization protocol that guarantees reproduction success on every dairy, especially if we have loose wheels in the reproduction machine.

To me, this question has more answers than synchronization protocols available out there. It may depend on your individual needs (heat detection program, labor availability, responsible personnel, A.I. skills, management system, etc) and your cows’ needs (health status, nutritional status, stress, facilities, Voluntary Waiting Period (VWP), cyclicity, etc).

Researchers around the country continue to refine Timed A.I. (TAI) programs to

maximize fertility. We must realize these are controlled studies where most variables are kept virtually constant for all cows, and the only differences are the treatments (protocols) being tested. As a consequence, any resulting fertility difference is expected to be an effect of treatment exclusively. Unfortunately, we don’t have control on all these variables when we implement an on-farm protocol modification.

There are physiological reasons, however, that make some programs better than others. A good example is a recent Ovsynch modification developed by Brusveen and co-workers at Dr. Milo Wilbank’s lab (University of Wisconsin – Madison). As outlined in Figure 1, this program extends the time from prostaglandin to the second GnRH from 48 hours (original Ovsynch) to 56 hours, maintaining a 16 hours interval from the second GnRH to fixed time

AI. In this study, 1,507 A.I. services from 927 cows were recorded for 3 treatments (Cosynch 48, Cosynch 72 and the new Ovsynch 56.) Using Presynch for 1<sup>st</sup> A.I. and Resynch for greater inseminations.

All first inseminations were conducted with Presynch initiated between 30 and 36 Days in Milk (DIM) (the example in Table 1, starts on day 35), allowing 14 days between the 2 prostaglandins, but only 11 days between the second prostaglandin and the first GnRH of Ovsynch. Today, this modification of Presynch has been widely adopted, since more ovulations to the first GnRH are expected, and in turn, a higher synchronization rate with higher fertility is observed.

In general, Ovsynch 56 showed higher fertility (36.2%) compared to the Cosynch 48 (26.7%) and Cosynch 72 (27.2%). In

Figure 1. Treatments evaluated by Brusveen et al. (2006) following Presynchronization with a modified Presynch.

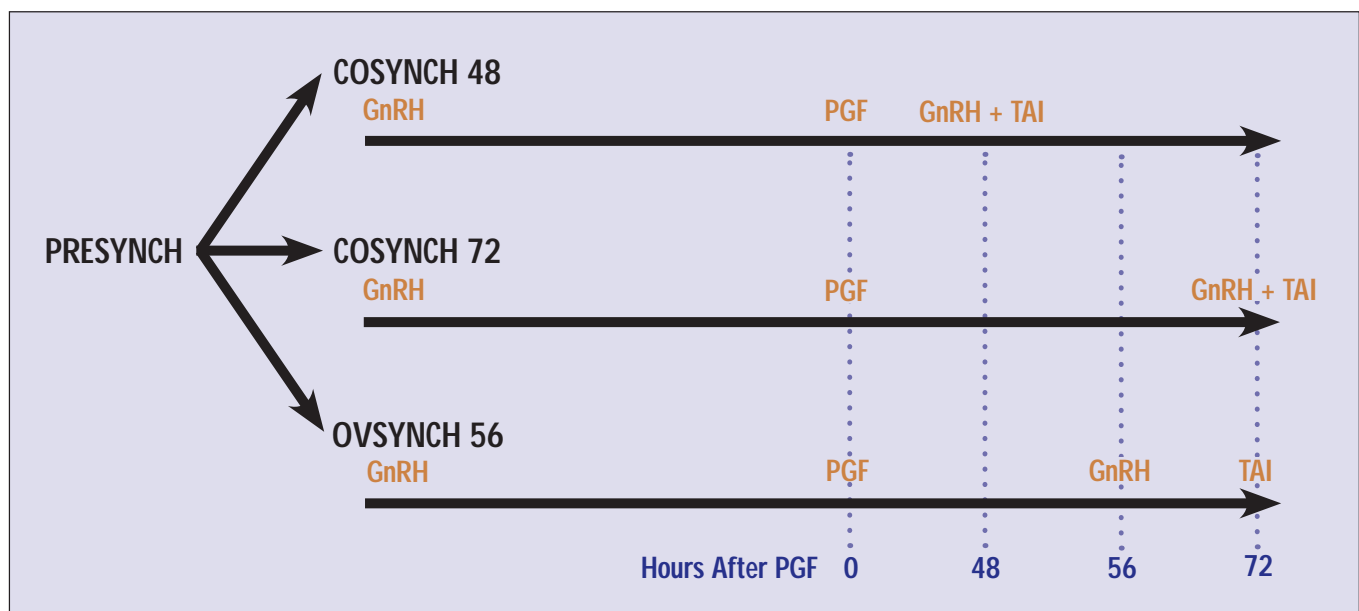
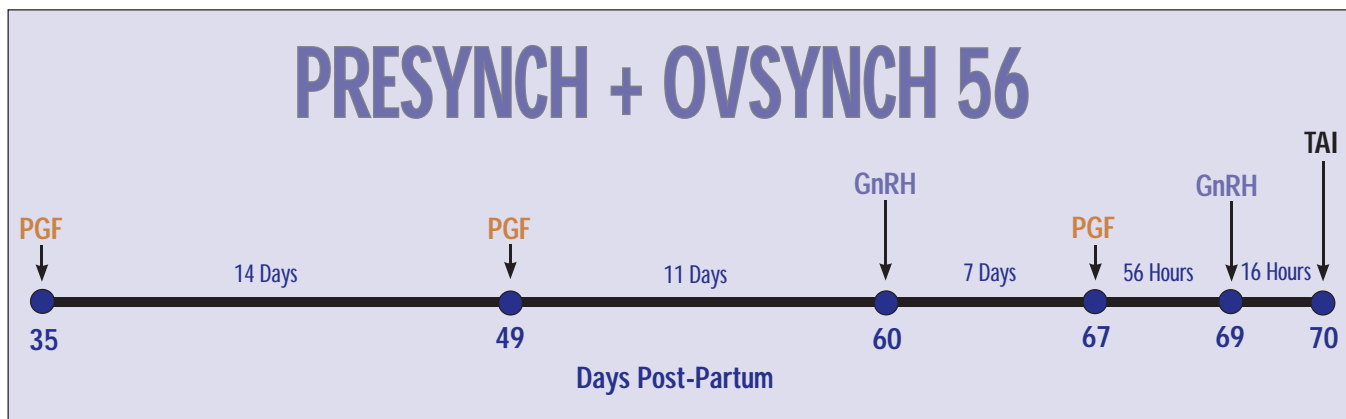


Figure 2. Ovsynch 56 in detail: Time intervals between injections and DIM.



addition, Cosynch 48 and Ovsynch 56 showed better fertility for first TAI than resynchronized TAI. This advantage was not observed for Cosynch 72.

The main disadvantage of this protocol is the need for one additional cow manipulation. Most people don't feel this is a big problem if it is going to deliver some points in Conception Rate (CR). In addition, it is

unlikely that the higher fertility of Ovsynch 56 had been an effect of the modified Presynch; otherwise, no difference between treatments would have been the logical result. Further, this is a good example of a variable kept constant for all treatments. Unlike other programs, Ovsynch 56 with tested in a large number of inseminations, and results have been replicated under different management conditions. These are

number one requirements before promoting a protocol for massive farm application.

In summary, there are two possible explanations to expect higher fertility with Ovsynch 56 compared to Cosynch programs. First, the 56 hours interval is important since it will allow more time for follicular maturation compared to the standard Ovsynch (48 hours), and secondly, the 16 hours interval between GnRH and TAI is extremely important, since it represents a more optimal interval between LH surge and AI. This goal is not accomplished by Cosynch programs.



**Humberto Rivera**  
Reproduction Specialist

Table 1. Conception Rates (CR) for 3 Synchronization Protocols.

Treatment	Presynch CR	Resynch CR	Overall CR
Cosynch 48	37.8	23.6	26.7 <sup>a</sup>
Cosynch 72	27.5	27.3	27.2 <sup>a</sup>
Ovsynch 56	45.2	33.1	36.2 <sup>b</sup>

<sup>a</sup> No significant difference. P value > 0.1  
<sup>b</sup> Significant difference. P value < 0.01

# REINVESTING in Accelerated Genetics



Pictured above is the construction of West View 4, an individual bull housing barn for EU qualified sires in-waiting. This building project along with the new EU Isolation Barn and new Feed Station are scheduled to be completed by mid-summer 2008.

“Two years ago Accelerated Genetics became debt free and last year we had \$42 million in sales. We’re still debt free and we’ve been reinvesting in the business,” says Roger Ripley, President & CEO. “In February, we began excavation on another phase of building projects and we’re doing it from operations, so as a cooperative this is something of which we are proud.”

Three new building projects are underway at the Production Facility located in Westby, Wis. First is a new EU Isolation Barn, which will house 24 bulls prior to their becoming EU qualified. The second building project is the addition of another individual housing barn for in-waiting sires. This barn will hold 60 EU qualified sires in-waiting. The last project will be a new feed station to help ensure top quality feed storage and improve efficiency in feeding of Accelerated Genetics sires.

# SPOTLIGHT ON JERSEYS



**Dave Erf**  
Dairy Sire  
Analyst

Accelerated Genetics has a strong commitment to the Jersey breed. Over the past few years a concentrated effort was put forth to obtain more first crop daughters on all of our Jersey PACE young sires. The results of the past years speak for themselves. Accelerated Genetics has a Jersey lineup that is well respected in the industry. Let's take a look at some of the more popular bulls of the program and review the unique qualities that each brings to our lineup.

When talking about putting the Accelerated Genetics Jersey lineup in the spotlight, we must start with 014JE00365 O.F. Mannix **Rebel**. Rebel charged onto the scene with

his first crop and ascended to the #1 JPI position. Now with over 1400 daughters in his proof, Rebel still sires the high production from the quality udders that we saw in his 1<sup>st</sup> crop. Rebel is a Mannix son from an Excellent-90% Berretta that has many successful offspring in the Owens Farm herd in Wisconsin. With many sons in different A.I. programs around the country, Rebel will continue to have much influence over the Jersey breed for years to come.

Another second crop sire that helped to establish Accelerated Genetics as a Jersey source is 014JE00366 Sil-Mist Montana **Blair**. His additional daughters have confirmed his ability to sire great type and

high components. He joins a short list of highly reliable sires that are siring extreme type. A Montana son from an Excellent 92% Berretta daughter, Blair has two full siblings that also returned to active service. With second crop information, Blair is a health trait improver, showing impressive figures for Productive Life, Daughter Pregnancy Rate and Somatic Cell Count. Blair also has many sons sampled in A.I. and will have the opportunity to pass his great type, udders, and components to the next generation.

The PACE program cannot rest on past success, we must continue to bring in

progressively better bulls to keep moving your genetics forward. This past January 014JE00431 Omsdale Jace Grate **Grieves** graduated into the active lineup. He ranked in the top 10 for JPI and is an early Jace son from the Excellent-90% Gratitude cow of Omsdale Farm in New York. This family had an astounding three bulls in the Top 10 JPI sires of the breed.

Grieves brings a source for high production, great size and strength. He ranks among the breed leaders for pounds of milk and protein. This combined with great

014JE00431 Grieves daughter:  
Dupat Grieves 3107  
Wickstrom Jersey Farms  
Hilmar, Calif.





014JE00366 Blair daughter: Sil-Mist Danae Carmel  
Silver Mist Farm, Tillamook, Oregon

information for strength and width makes him a rare source of improving production without sacrificing frames. Look for his maternal brother 014JE00509 **Liam**, by Lexington, that was recently released for sampling through the PACE program.

Jersey breeders are continually looking for outcross options when breeding their cows. The PACE program has not overlooked this need for different bloodlines. 014JE00406 Wilderness **Blueprint** provides a low inbreeding source to Jersey breeders without sacrificing total performance. At 5.1% EFI, Blueprint ranks among the best JPI bulls with low EFI that were bred in the U.S. He combines high components and great frames. Blueprint is the result of taking the high component, outcross Danish genetics found in his sire, Heino; and combining that with the modern style U.S. Jersey bloodline that backs Blueprint. His dam

is an impressive Very Good-88% Berretta backed by an Excellent-92% Barber while the third dam is also scored Excellent. He has received quite extensive use as a sire of sons, so look for Blueprint sons to join the PACE program in the future.

### JOIN THE PACE YOUNG SIRE SAMPLING SUCCESS

- Accelerate the Genetic Levels in Your Herd
- Get Paid to Use Future Genetics
- Gain Early Daughters on Newly Proven Sires

Are you interested in participating in one of the most successful Jersey young sire proving programs in the U.S. then contact Accelerated Genetics about PACE!

014JE00408 Forest Glen VD Jades **Jimmie** hails from the heart of the Havs Chief Berretta Jade family. When examining the



014JE00408 Jimmie daughter: Genesis Jimmie 1718 VG-80%  
Genesis Jerseys, Turlock, Calif.

strong points of Jimmie, he follows in his maternal lines ability to transmit flawless udders. He is a Jenks Barber Bill from an Excellent-90% Bold daughter that has had much success in returning bulls to active service. The next dam is the well known Excellent-95% Jade cow. The Jimmie daughters are moderate sized cows but have exceptional mammary systems. They are the trouble free kind of cows that dairymen are looking for today. Jimmie rates well for longevity, reproduction and cell count.

The staff at Accelerated Genetics is committed to continue to bring you the best Jersey genetics possible. It is our constant goal to keep sampling better and better bulls. However, we must extend our sincere appreciation to those herds that trust us the most, our PACE herds, for without their help we would not be able to identify bulls like those in this article.



014JE00365 Rebel daughter: JCJ Rebel 13192  
James Ahlem, Hilmar, Calif.



014JE00406 Blueprint daughter: Mieko Blueprint Dora  
Mieko Farms LLC, Montfort, Wis.

# INTERNATIONAL MARKETING ARM WORLD WIDE SIRES, LTD. DOMINATES THE MARKETPLACE

World Wide Sires, Ltd. (WWS), Accelerated Genetics' export arm to Europe, Africa, Asia, Australia, and New Zealand, finished a record breaking sales year in 2007. Thus, confirming that the demand for semen from Accelerated Genetics' bulls is strong in the international marketplace.

The #1 bull for total units sold for World Wide Sires, Ltd markets in 2007 was 014HO04026 Sildahl Airraid (both Affirm™ and Bovitel™ semen). Other top bulls that made a large impact in the WWS' markets include 014HO03152 Tasker, 014HO03594 Veto, 014HO03597 Potter, 014HO03889 Dynamite, 014HO03913 Harry, 014HO03940 Mert, 014HO04099 Billion and 014HO04131 Wrangler.

Last year, World Wide Sires, Ltd. exported more than 3.4 million doses of bovine semen. Some of the top WWS' markets in 2007 included Bulgaria, Germany, Hungary, Iran, Italy, Japan, Saudi Arabia, South Africa, Turkey and the United Kingdom. Although these markets share a common thread as major importers of WWS

semen, they represent a wide variety of selection goals. These markets range from the component emphasis of South Africa, to the high production and management focused Hungary, as well as the diverse needs of the United Kingdom and Iran, where several market segments including high type, high production and management traits exist. In total, WWS shipped bovine semen to 64 countries last year.

WWS, based in Visalia, California, employs 29 people who are responsible for the sales and marketing of semen available to WWS, sourced primarily from the owners of World Wide Sires, Ltd. – Accelerated Genetics and Select Sires.

In addition, World Wide Sires, Ltd. also has semen supply for some markets from Masterind/Germany and Semenzoo/Italy, who are also alliance partners of Accelerated Genetics. Further, WWS has marketing rights for semen from Aberekin/Spain, Xenetica Fontao/Spain, Genetics Australia/Australia, Select Star/Switzerland, SBS/Slovakia, Geno/Norway and Dansires/Denmark in various markets around the world.

World Wide Sires, Ltd. is very focused on not only promoting top quality genetics, but also providing excellent service. World Wide Sires' many activities, in cooperation with the owners Accelerated Genetics and Select Sires include providing greater education and experiences about the dairy industry and genetics. WWS offers a number of value added services for their customers. One of the most popular services is dairy management and daughter inspection tours. These tours allow visitors from all around the world to come to the United States to see today's most advanced dairy operations, as well as view the U.S. daughters of WWS' bulls in their 'working clothes' and discuss performance with their owners.



WWS educational services. Top photo Chris Kurth conducting A.I. training in Armenia. Bottom photo Humberto Rivera presenting reproduction programs in Czech Republic.



014BS00288 Payoff Daughters - 1<sup>st</sup> and 2<sup>nd</sup> Place Class 1  
2008 St. Gallens Show in Switzerland.

## WORLD WIDE SIRES EMPLOYEES IN ACTION



Brian Albertoni (on left) working in Australia.



In Malawi is Dean Franciskovich (on right).



At a show in France is Scott Ruby.

Another popular service is the WMS (World-Wide Mating Service). WMS was used in over 35 countries and mated over 3.5 million cows in 2006. WMS allows producers to develop a breeding program that can be customized to fit individual herd needs and provide corrective matings that allow for greater longevity and production.

World Wide Sires, Ltd. also has a strong alliance with Land-O-Lakes Cooperative as its bovine genetic partner for special USAID projects in the East African countries. Current projects are under way in Kenya and Ethiopia, with long-term comprehensive dairy development projects completed in Uganda, Zambia, Malawi, and Tanzania. These projects are focused to improve agriculture, especially the dairy industry.

Project work focuses on the introduction and support of A.I. and breeding technologies

and the development of private sector A.I. services. The ultimate goal is to create improved dairy animals and increase milk production and incomes, thereby improving the lives of African dairy farmers. In doing our part, we are helping to bring food stability to this part of the world while at the same time guaranteeing a place for ourselves in this future market.

World Wide Sires, Ltd. had a great year thanks to the many people involved in the process including the World Wide Sires, Ltd. distribution teams, the staff in California, and of course, the parent owners in Wisconsin and Ohio.

In May of 2008, WWS, will host a conference for its suppliers and distributors in Rome, Italy to discuss market situations and market plans to put World Wide Sires, Ltd. into an even stronger position in the future.

Courtesy of World Wide Sires, Ltd.

## Have You 'Caught' Them In Action?

The 2008 Photo contest theme is '**Caught In The Act**'. We want photos of producers, employees or their families caught in the act of farm work. Whether they are milking cows, feeding animals, pushing animals through a chute, rounding up the herd or any other farm labor activity is fair game for this year's contest. We want the photos to include both people and beef or dairy cattle conducting 'farm business' throughout the various months of the year.

Multiple photos can be entered in the contest, but we want you to send in your best, so before you send them think about these things:

- Is the photo clear and crisp, not foggy or cloudy.
- Do the animals look healthy and reasonably clean.
- Are the people in the photos clearly captured at work, not posed. And is their clothing suitable for farm work, yet relatively clean.

All photos entered should be color. **Digital Images** are preferred and need to be sent as a high resolution (300 dpi) JPEG image with photo size at 8" x 10" or larger. Digital images can be sent via email or on a CD. If you send a **Printed Photograph**, please make sure the image is printed from a photo center, as home printers do not print high enough quality photographs that can be utilized in print. Printed photographs will **ONLY** be accepted at the sizes of 5" x 7" or 8" x 10". Other photo sizes will not be considered for the contest.

The entry deadline is **SEPTEMBER 1, 2008!** For each photo entered, please write on the back of each photograph or include in the email : your name, address, phone number and the photo's title. Then send your entries to: Accelerated Genetics, Kari Stanek-Editor, E10890 Penny Lane, Baraboo, WI 53913 or email [kstanek@accelgen.com](mailto:kstanek@accelgen.com). If you have any questions, please call 800.451.9275 ext. 222. Photographs will **NOT** be returned, so remember to make a copy for yourself.

**CAPTURING THAT PERFECT MOMENT IS CHALLENGING, SO WE HAVE INCLUDED SOME QUICK PHOTOGRAPHY TIPS!**

- Natural outdoor lighting produces good images but watch out for shadows and the angle of the sun. Try using a flash outdoors, but know your flash's range.
- Move in close on your subject and get on its level or change your level to create a unique angle.
- Move the subject slightly off center and create more interest in your photo.
- Try taking vertical pictures, some subjects look better sideways.
- Capture your subjects in their element or in action. Candid shots typically produce better results than staged.
- Be aware of your surroundings and the background behind your main subject. (i.e. reflective objects or other distractions)
- Take lots of pictures to capture that perfect one!

# MERRILL REACHES ONE MILLION!



Photos by Charlene McCauley

Above left, John Merrill, District Sales Manager, visits with Gus Viss, herdsman for Brand Indian Ridge dairy in Comanche, Texas. Above right, Conquering the west takes special equipment and that is why John drives a special truck and trailer that he can fill with semen and products (including many calf hutches) to fully serve his customers. At right, Organization is key to John's success in the business. With his busy schedule and vast customer base, John is constantly staying up on his paper work, semen and product orders, and organizing his schedule.

District Sales Manager John Merrill of Sulphur Springs, Texas, has conquered the west...or at least Texas. Recently, John achieved a great milestone as sale representative by selling his **One millionth** unit of semen. In February, Charlene McCauley and I got the opportunity to see first hand how John, originally from Reedsburg, Wisconsin, has conquered Texas!

John's career with Accelerated Genetics began in 1982 in Clark County, Wisconsin as a summer intern. Then after graduating from the University of Wisconsin-River Falls, he became an A.I. Technician in the counties of Adams, Juneau, Columbia, Sauk and Marquette. You may ask how does someone from Wisconsin end up in Texas. Well John shared, "While growing up, I always had the dream to move out west to the big open country." And after five years of breeding cows, that dream became reality for John as Accelerated Genetics expanded sales in Texas. "I jumped at the tremendous

opportunity and moved to Texas as I was up for the challenge," John added.

While riding along with John you can really see that his customers are part of his family and he truly cares for their needs. "A lot of work goes into servicing customers to make sure they are happy with the semen and products we sell. And that is part of my job, because my customers needs and concerns are very important," commented John.

One of the farms we visited during the trip was Brand Indian Ridge, a 2,400-cow dairy in Comanche, Texas. I talked with their herdsman, Guy Viss, and he shared his views on Accelerated Genetics products and experiences working with John. "Conception is a big concern on our dairy and I am very happy using Accelerated

Genetics' Bovitel™ semen. Not only are we gaining more heifer calves, but the conception is really good," said Guy.

With a herd this size, Brand Indian Ridge use a large quantity of semen and John is there often, ensuring the semen supply is adequate. Guy added, "John makes sure that we have what we need, when we need it and is concerned about everything we do." Calving ease, productive life and milk are the traits that Guy looks at when selecting sires for the herd and has recently been using: Nifty, Potter, Dtoto and Britt.

After selling one million units of semen, I asked John what are his current favorite sires. He said, "Nifty, Potter, Billion, Grieves, and Rebel are my favorites, as they have worked well for my customers." In addition to selling semen, John also carries a variety of products that are beneficial or fit a need for his customers, because 'customer's needs are important'! Some of the main items he carries are Milk Replacer, Calf-tel calf hutches, Tri-Mic 1:50, and Tri-Start.

At the end of the visit, I asked John what keeps him going everyday. He happily responded, "The people keep me going. They are my family. And I enjoy visiting family every day!" In August, John will be honored by the National Association of Animal Breeders **Karl Stanek** Communications & Public Relations Coordinator for his achievement.

## New Winner's Circle Bulls

The Accelerated Genetics Winner's Circle program introduces five new Holstein sires this spring. The Winner's Circle program consists of an elite young sire offering that features offspring from breed leaders in the show ring and in production.

1H000477 Calori-D Gold Jewel Onyx-ET  
 H005417202251 Aka 214 2085 214-50  
 Sire: American Goldwyn (James & James)  
 Goldwyn's EX-92 EX-94 MS 8 EX-91-28 Dundean

Onyx

1H000625 Drogba-ET  
 H005417202251 Aka 214 2085 214-50  
 Sire: American Goldwyn (James & James)  
 Goldwyn's EX-92 EX-94 MS 8 EX-91-28 Dundean

1H000603 BKB Goldwyn Atlas-ET  
 H005417202251 Aka 214 2085 214-50  
 Sire: American Goldwyn (James & James)  
 Goldwyn's EX-92 EX-94 MS 8 EX-91-28 Dundean

1H000614 Whittier Farms S Apollo-ET  
 H005417202251 Aka 214 2085 214-50  
 Sire: American Goldwyn (James & James)  
 Goldwyn's EX-92 EX-94 MS 8 EX-91-28 Dundean

1H000626 Task\*RC (Talent)  
 H005417202251 Aka 214 2085 214-50  
 Sire: American Goldwyn (James & James)  
 Goldwyn's EX-92 EX-94 MS 8 EX-91-28 Dundean

Accelerated Genetics

The Accelerated Genetics Winner's Circle program introduces five new Holstein sires this spring. The Winner's Circle program consists of an elite young sire offering that features offspring from breed leaders in the show ring and in production.

Joining the program is 014H005477 Calori-D Gold Jewel Onyx-ET (Goldwyn), 202H000625 Drogba-ET (Dundee), 202H000603 BKB Goldwyn Atlas-ET (Goldwyn), 202H000614 Whittier Farms S Apollo-ET (Shottle), and 202H000626 Task\*RC (Talent).

# CONFINED SPACE

## FARM SAFETY

Today's dairy farming methods have brought more dangers that arise from farmers entering confined areas where oxygen levels may be inadequate or where toxic gases are present. When entering a confined area such as a manure pit, silo, grain bin, or an inadequately ventilated building a person may be at risk of being overcome by gases or dusts which can cause permanent lung damage or death.

Gases in manure pits and silos can quickly kill an unsuspecting farmer or an untrained employee or rescue worker who enters the area without adequate protective equipment. Farmers entering grain bins while the bin is being emptied may be taking an unnecessary risk of being crushed or suffocated by flowing grain. Working in grain bins without proper respiratory equipment to filter dusts and molds increases a farmer's chances of developing a respiratory disease. Farmers working in dust-laden buildings run the risk of developing Farmer's Lung, a disease that permanently damages lung functions.

While most farmers are aware of the dangers of poisonous gases and flowing grain hazards, it is always good to review and even more important to make sure the farm's employees and family members are familiar with and follow procedures established for safely working in a confined space. Here are some quick tips.

To reduce the risks associated with working in a confined space, you should:

- Never enter a confined space without ventilating the area.
- Test the atmosphere if possible.
- Wear a correctly fitted, approved, self-contained breathing apparatus if the area cannot be ventilated or properly checked. In addition, a safety harness and lifeline should be used.
- A self-contained breathing apparatus may fail or the worker could be trapped when working in a confined space with toxic gases. To reduce the risk to the person entering a confined space, two people should be available to assist in an emergency rescue.

At least one person should be equipped with appropriate breathing equipment to execute the rescue.

- Have ladders, ropes and lifts available to assist a person entering a confined space and for rescue efforts if entrapment is possible or if gas fumes may be present.
- Maintain communication with the individual(s) outside the confined space. Communication may be visual, vocal, and/or by signal line.
- All persons who enter or may enter hazardous confined spaces should be trained in the use of safety equipment. A self-contained breathing apparatus should be properly fitted. The smallest leak could be deadly.

Source: National Ag Safety Database

Figure 2.

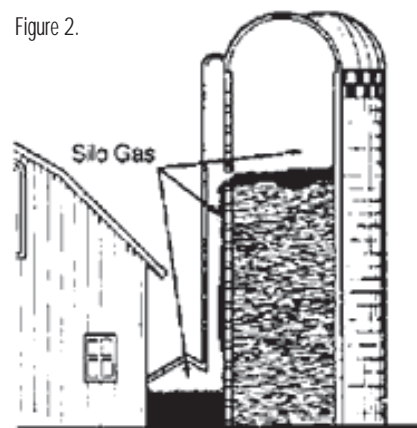
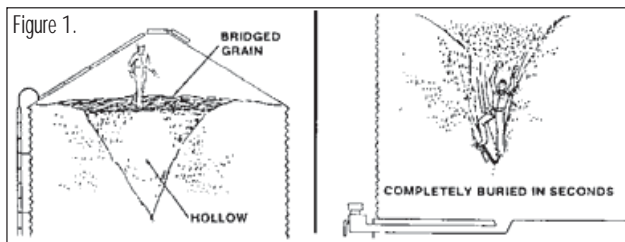


Figure 1. A bridge across the top of a grain bin can collapse under your weight and you can be completely submerged in grain in about 8 seconds. Never enter a bin without taking necessary precautions to protect yourself.

Figure 2. Silo gas is heavier than air and will displace oxygen. Wear a self-contained breathing apparatus.



## Genetic Visions, Inc. Moves To A New Location

Recently Genetic Visions, Inc., Accelerated Genetics' genetic marker research subsidiary, has relocated. Actually, it is next door to the old location, but their new facility is larger and more functionally designed. The new space is a self contained area with no common building space which makes Genetic Visions much more easily accessible.

The new laboratory space reduces the over-crowding problems and will enhance genetic marker testing, filing of test samples, performing research projects and overall operations. The lighting has been improved, the workbench area expanded and there is a new arrangement of the freezers all of which improves the working environment for employees. Also, the new space provides the opportunity to introduce new lab equipment as needed as genetic marker procedures are expanded.

In addition, the laboratory space is separate from office and conference areas and they are also larger. Therefore the conference

room provides additional meeting area for Accelerated Genetics staff and board to meet in the Madison area.

Our new contact information is:  
**Genetic Visions, Inc.**  
 3220 Deming Way, Suite 160  
 Middleton, WI 53562-1498  
 Phone: 608-662-9170  
 Fax: 608-662-9169

And don't forget about their website which posts their online testing applications available at [www.geneticvisions.net](http://www.geneticvisions.net)!



# April 2008 Genetic Evaluations Advance Genetic Offerings Upward with **ONWARD**



**Gregg Topp**  
Dairy Sire Analyst

## The Graduation Class

The first ever April Dairy Sire Summaries, ironically released on the first day of April, was a historic day for Accelerated Genetics with the release of 014HO04511 **Onward**. **Onward** is one of the most complete and balanced PACE graduates ever at +2017 TPI. He is a Morty son from an outstanding Outside daughter and then the Excellent Leadman dam of Andacres Orion, the high components, udder composite, and foot and leg composite high-ranking, highly proven Hunter son. Adding even more depth to the pedigree is the third dam, a Very Good-89 Belltone daughter with a string of fine records.

**Onward** graduates at the top of the class at +577 NM\$, +2378 PTAM, +98 PTAF at +.04%, +56 PTAP at -.06%, +3.23 PTAT, +2.47 UDC, +1.34 FLC, +1.6 PL, +2.97 SCS, and -0.8 DPR. His daughters are above average in stature, are angular and show a great amount of dairy strength. He will add width at both ends and slope to the rump. Udders are snug with correct teat size, shape and placement, but his specialty is rear udders (+4.74H and +4.38W).

However, **Onward**'s most appealing trait and strongest asset may be his unrelated

pedigree. He is an outcross which makes him a nice mating for popular bloodlines such as Manfred, Juror, Bellwood Marshall, Durham, Blitz, Storm, Boliver, Ramos, Rudolph, Lynch, Mtoto, Die-Hard, Zenith, Titanic and Boss Iron. He is a mating sire around the world for embryos and sons. Further, he already has sons on the way for the next generation of the PACE program.

The second highest Net Merit graduate at +411 NM\$ is 014HO04487 Rockalli Outside **Ivan**-ET. He has an impressive sire stack of Outside X Durham X Rudolph to go with his high components and type proof (+2.72 PTAT, +2.38 UDC and +1.98 FLC). He is a moderate milk sire at +312 PTAM, but has impressive fat (+47 PTAF with +.14%), excels in health traits (+4.6 PL, +2.82 SCS, and +1.2 DPR) and a high TPI sire (+1753 TPI). He is an ideal cross on daughters of Marion, Doug, Champion, Jakin, Sailor and Joker. His daughters are tall, well-balanced with adequate slope to the rump, a straighter rear leg with steep foot angle, and well attached shallow udders. At 10% service sire calving ease he is not recommended on virgin heifers.

Following closely behind at +410 NM\$ is a similar type of bull in 014HO04442 Springhill-OH WS **Idaho**-ET. He is a Stormatic son from an Excellent-93 Jolt

daughter. He specializes in components and health traits. Idaho is +67 PTAF with +.25% as well as +3.3 PL, +2.99 SCS, and +0.6 DPR. His daughters are very dairy with a straighter rear leg and a steep foot angle. He will work best on daughters of Marion, Joker, Sailor, Ito and Pyrex.

Hailing from the great state of Alabama is 014HO04624 Bama Sir **Deuce**. He brings a well-balance genetic profile from a solid sire lineup of Morty X Rudolph X Thor and graduates at +399 NM\$. He is +1304 PTAM, +54 PTAF, +42 PTAP and +1709 TPI. His type proof is well rounded (+1.85 PTAT, +1.69 UDC and +1.26 FLC) with his daughters being tall with a nice balance of dairy, strength, good depth of rib and adequate width in the rump. **Deuce** will straighten the rear leg and sire a super foot angle, but should be protected in rump angle. Udders are snug and extremely high and wide in the rear. Complimentary matings for **Deuce** will be Potter, Tredway, Dutch Boy, Doug, Champion, Ito and Joker.

Another well-balanced new PACE graduate is 014HO04274 Fustead Dutch Boy **Dusty**-ET who enters the active lineup at +393 NM\$. Improving milk (+1299 PTAM), with high protein (+53 PTAP with +.05%), solid type (+1.49 PTAT, +1.41 UDC and +1.63 FLC) and +1687 TPI, **Dusty** can be used

## 014HO04511 **Onward** Daughters

At left: DeJong **Onward** 1599, DeJong Dairy of Ballico, Calif. Below: Zandairy **Onward** Melody, Harold Zander of Barneveld, Wis.



with confidence to add slope to the rump, sire super foot angle and improve udder depth. Recommended mates for Dusty include Galleon, Glen, Scoop, Pyrex and Airraid.

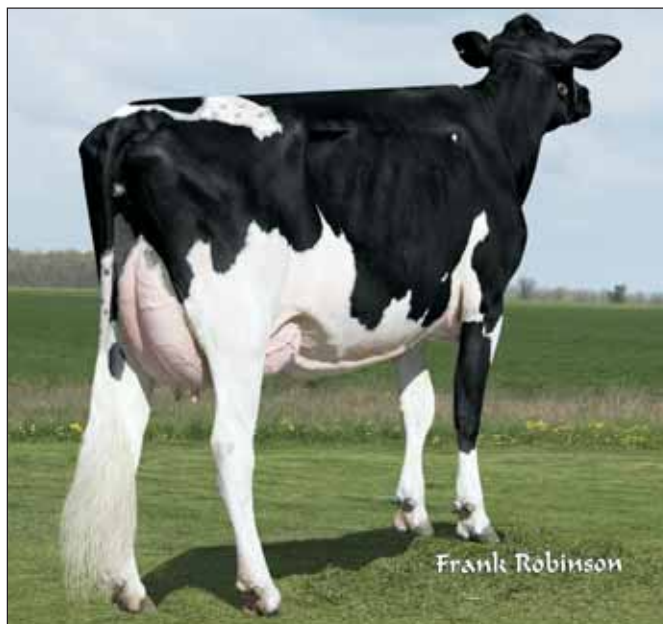
Combining the 'always in demand' traits of extremely high milk (+3071 PTAM), high type (+2.76 PTAT) and extreme calving ease (6% SSCE), 014HO04539 Mistvale **Mac-ET** is a specialist graduate. He is a Morty son from a Storm, then a Formation who sires offspring that are tall, deep and dairy with phenomenal rear udders. He should be used on cows with shallow udders that have some slope to the rump. Ideal mating suggestions for Mac include Boss Iron, Outside, Pyrex, Lon, Scoop, Sailor and Alfie.

The Red & White program graduates two unique and different type of bulls in 014HO4465 Jimtown Nadine **Norris-ET\*RC** and 014HO04635 Torsy **Tornado-RED-ET**. Norris brings extreme milk (+1848 PTAM), fat (+63 PTAf), protein (+47 PTAP) and calving ease (8% SSCE). Daughters are dairy with a deep rib, adequate width to the rump with a slight set to the leg and a steep foot angle. Rear udders are high and wide but he should be protected on udder depth and teat length. This combination will work best on daughters of Rubens, Advent, Talent, September Storm and Uncle Sam. Tornado-Red graduates as a calving ease and type specialist from a world-renowned cow family. He is 6% SSCE and +1.72 PTAT. His daughters are extremely dairy with high, wide rear udders making him a great cross on daughters of Talent, Redman, Marmax and Jordan.

### Second Crop Success Continues

Long-time customer satisfaction PACE superstar 14HO03597 Keystone **Potter** continues to add large numbers of daughters around the world and improve his ranking in all traits. He added over 1280 daughters for production and increased to +1284 PTAM, +5.2 PL, +1.3 DPR and jumped 45 TPI points while also jumping nearly .25 on Type and Udder Composite.

Another longtime favorite 014HO03722 Art-Acres Mtoto **Doug** 444-ET has begun to add second crop daughters and jumped 52 TPI points and increased 0.6 PL to +1.9 PL while adding 264 daughters for production. Noteworthy as well 014HO03716 Lutz-Brookview **Glen** L-ETS added 50 daughters for type and made major increases of +.44 PTAT, +0.50 UDC and +0.35 FLC. Reports from around the globe about the recently fresh 014HO03831 Veazland **Marion-ET** daughters have been great as have the comments of the impressive 014HO04026 Sildahl **Airraid** and 014HO04099 J-K-R BW-Marshall **Billion-ET** calves born in the past year.



### 014HO03597 Potter Daughter

At left: Sierra-Vista Potter 2509, Sierra Vista Dairy, Denair, Calif.

The strong genetic lineup at Accelerated Genetics added a genetic giant this spring to go with the balance and diversity that it has been noted for. The past yields from the PACE program have established a standard that is at an all time high and the future continues to look bright with the support and help from our tremendous sales force as well as our PACE herds. Let this strong genetic offering improve your herd as we share with you some of the finest genetics in the world. As we move past the long winter and enjoy spring be safe and mark your calendars for the next exciting Dairy Sire Summary from Accelerated Genetics to be released on August 19<sup>th</sup>.

## Upcoming Events:

### Ayrshire Breeders Association Convention

June 4-7, 2008

R.I.T. Inn & Conference Center – Rochester, New York

### American Milking Shorthorn Society Convention

June 18-21, 2008

Branson, Missouri

### Holstein Association USA Convention

June 23-26, 2008

Kalahari Resort – Wisconsin Dells, Wisconsin

### Wisconsin Nationals Sale

June 24, 2008

Hosted by Heatherstone Farms – Baraboo, Wisconsin

### American Jersey Cattle Association Convention

June 25-29, 2008

Holiday Inn Crowne Plaza – Asheville, North Carolina

### American Guernsey Association Convention

June 26-30, 2008

Marriott – Middleton, Wisconsin

### National Brown Swiss Association Convention

July 2-5, 2008

Holiday Inn – Lima, Ohio

### Wisconsin Farm Technology Days

July 15-17, 2008

Hosted by Country Aire Dairy - Brown County, Wisconsin

### Red & White Dairy Cattle Association Convention

August 6-9, 2008 – Hagerstown, Maryland

### Next Dairy Sire Summary

August 19, 2008

### 15<sup>th</sup> Annual Accelerated Genetics Intercollegiate Dairy Cattle Judging Contest

September 14, 2008

Vernon County Fairgrounds – Viroqua, Wisconsin

Dairy Judging Team Applications Due: September 4, 2008

### World Dairy Expo

September 30-October 4, 2008

Alliant Energy Center – Madison, Wisconsin

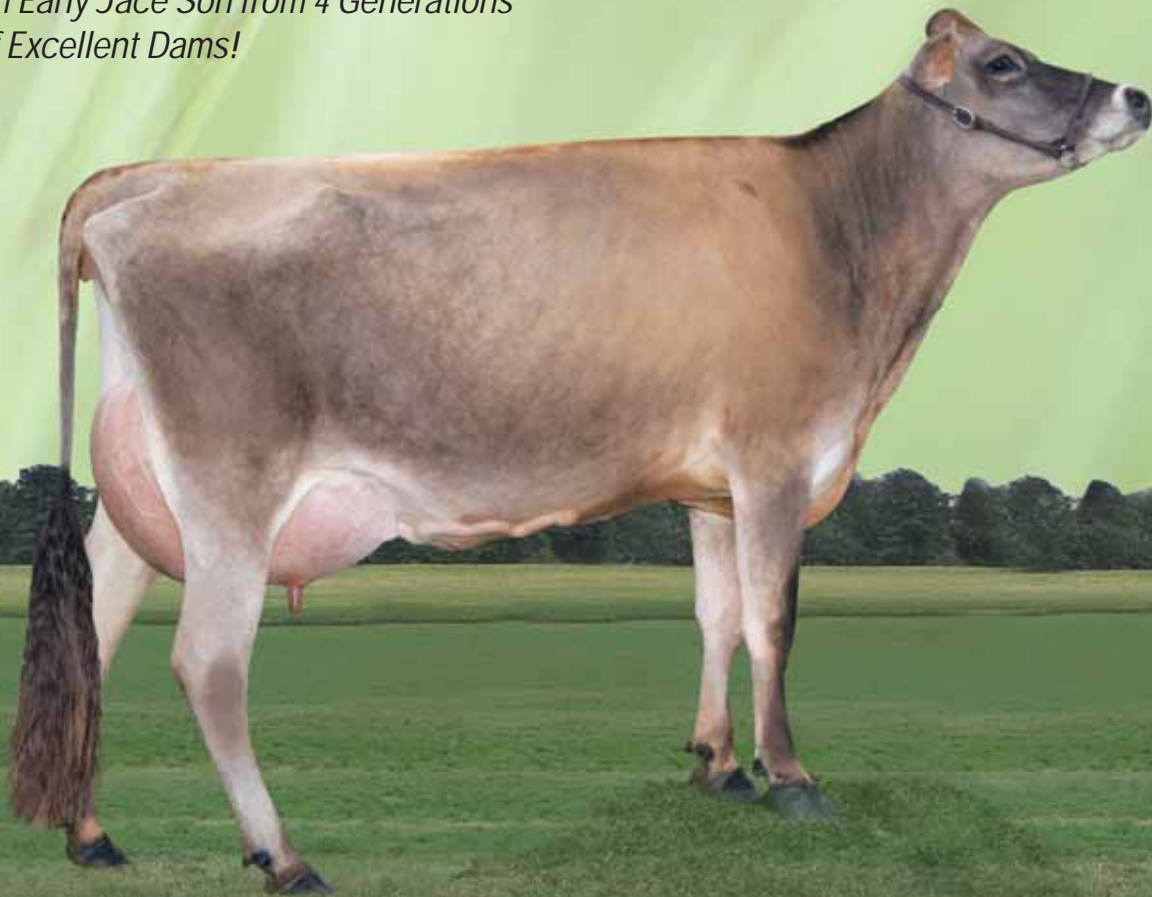
# GRIEVES

014JE00431 Oomsdale Jace Grat Grieves-ET  
Jace x EX-90% Gordo x EX-90% Alf x EX-92% Hermitage

Bovitel > AffIRM

## HIGH JPI SIRE WITH OUTSTANDING MILK YIELD!

- Breed-leading Milk & Protein
- Very High JPI Sire
- Strong and Wide
- An Early Jace Son from 4 Generations of Excellent Dams!



Above: Genesis Grieves 1836, Rassmussen Dairy, Turlock, CA ; Top: Dupat Grieves 3107, Wickstrom Jersey Farms, Hilmar, CA; Photos by Frank Robinson. ©2008 Accelerated Genetics.



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