



The Point



Genomics... The next great advancement

Genomics... it's the latest technology advancement in dairy cattle breeding and one that some say will have the same profound impact as the introduction of frozen semen. While it may seem that genomic selection is new on the scene, it has been a work in progress for many years. As a result of those years of research, genomic enhanced proofs and Parent Averages will become the official evaluation in January 2009.

Genomic predictions combine traditional Parent Averages with DNA test results to compute a genomic Parent Average. Through advances in DNA mapping and sequencing, USDA researchers have assembled 50,000 carefully selected DNA sequence variations useful in looking for inheritance differences in cattle. These markers have been studied through several generations of highly proven A.I. sires and key markers have been identified that can be used to more accurately predict the genetic merit of cattle. Combining information about what DNA a bull inherited from his parents with his pedigree information allows USDA to make a more accurate prediction of his transmitting ability, resulting in greater accuracy of a young bull's proof.

USDA research indicates these associations provide a significant boost in accuracy over traditional methods when predicting future PTAs for A.I. sires. Production PTA reliabilities on unproven sires improve from around 40 percent reliable to 70 percent; while typical type trait PTA reliabilities move from around 37 percent to 65 percent. Using bulls with genomic-enhanced PTA information will provide a more accurate estimate of a sire's true genetic value, long before he is proven.

Nearly every young bull joining an A.I. organization is being genome-tested. Genomic testing has been incorporated into the Select Sires sire program and enables sire analysts to see the genetic differences between full siblings. This provides a greater chance of selecting the right full sibling(s) above and beyond

Pre-pay and earn 5%

NorthStar Cooperative is offering a 5 percent year-end pre-payment opportunity, which is a 2 percent increase over the 2007 program. For every dollar you pre-pay on your A.I. Services, DHI Services or AntelBio account prior to December 31, 2008, NorthStar Cooperative will credit your account \$1.05.

By participating in this program, you earn an additional 5 percent in buying power with the Cooperative. There may also be tax advantages, but please consult your tax advisor to determine if there are any additional savings you can earn.

For more information or to make a pre-payment call 800.631.3510.



Stockowner notice

Stockowner meetings are fast approaching and all stockowners are encouraged to attend to cast a vote for the election of directors and resolutions and advisory committee members. **To be eligible to vote** at the 2009 stockowner meetings you must sign-up as a common stockowner by **December 31, 2008**.

For more information on how to become a NorthStar stockowner, talk to your area NorthStar representative. ★

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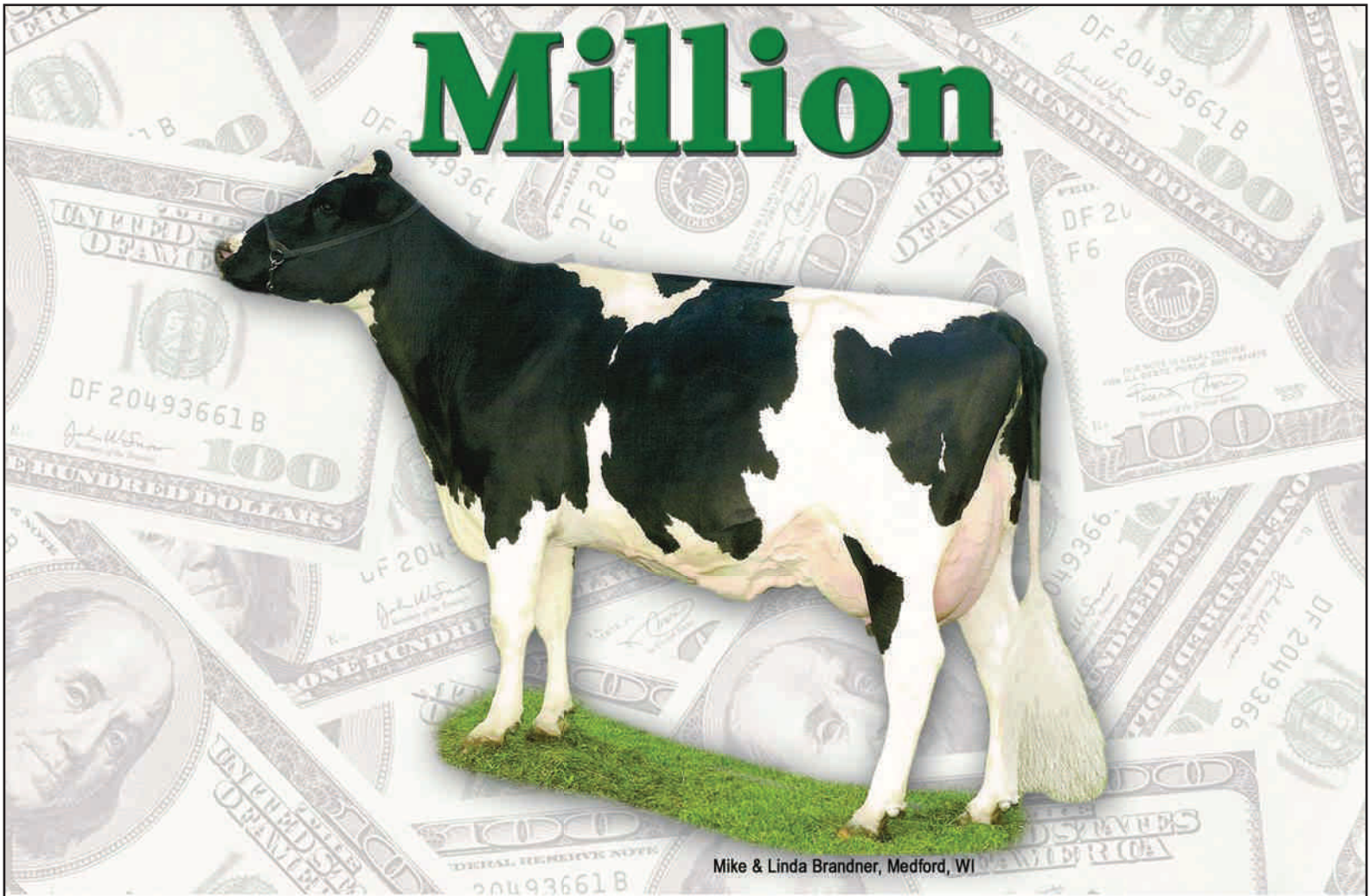
looking at the animals' physical characteristics. Ultimately incorporating this information into the decision process will lead to greater success with young sire sampling.

Always on the cutting edge of offering new technology, Select Sires is now making genome-tested sires available under the name *gene* MAX™. *gene* MAX sires are three-year-old bulls await-

ing milking daughter evaluations, and have been selected based on their superior, new USDA genomic predictions. These bulls have tremendous potential of becoming the breed's next group of elite proven sires. *gene* MAX sires also have actual calving ease data, allowing them to be used with confidence on virgin heifers. Both conventional and gender SELECTed™ semen will be available on *gene* MAX sires.

In the past all we knew about a young animal's genetic potential was its Parent Average, but not anymore. Genomic selection can greatly decrease the generation interval, and speed up the genetic progress of your herd.

For more information on genomics and *gene* MAX sires attend one of the upcoming informational meetings (See page 6) or talk with your area NorthStar Cooperative representative. ★



Mike & Linda Brandner, Medford, WI



He's New and He's Got it All!

7H08165 England-Ammon MILLION-ET (EX-90)
 Outside x (VG-85) BW MARSHALL x (VG-89-EX-MS-D0M)
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