RESEARCH and TECHNOLOGY

✓ Improved sire evaluations
✓ Genex research program
✓ SynchSmart™ capabilities
✓ Field automation
✓ GENESIS MOET rewards

Horizons

Then & Now

May 2007

Genex Cooperative, Inc.
A subsidiary of Cooperative Resources International
888.333.1783  www.crine.com
Research and development have transformed the A.I. industry. In the early days, dairy producers relied on fresh semen. Today, frozen semen is the method of choice.

Sire evaluations also continue to be refined. The Lifetime Net Merit index was updated in August 2006. Genex added SynchSmart™ to the list of sire evaluations in February as researchers have found synchronization is a growing trend in U.S. herds (p.22). This May, USDA and several breed associations continued the evolution of sire evaluations (p.12-13).

As always, Genex is dedicated to developments that improve producer profitability. For that reason, Genex is releasing Reproductive Profit Manager™, a consultative benchmarking tool (p.20-21). Other advancements such as field automation (p.27) will allow for even better service on the farm, and the GENESIS MOET program, formed in 1989, provides producers with high genetic merit sires and embryos (p.24-26). Further research and development projects are in the works (p.18) with profit-packed results to be released soon.

Jenny Bjelland, Editor
jbjelland@crinet.com
2006 CRI Results Signal Growth

“We are a growth organization,” said Doug Wilson, CRI Chief Executive Officer, at the 2007 annual meetings. “CRI and our subsidiaries have merged or acquired 23 organizations in 14 years. It is through this growth, inspired by member input through the delegate system, that CRI has become a diverse cooperative presenting a consistent profit picture year after year.”

The strong 2006 financial results were reported to subsidiary delegates and guests at the cooperative’s annual meetings in March. The report indicated a 2006 consolidated pre-tax income of $5,935,303, a 4.9 percent return on total revenue of $120,112,549. The results included the consolidated earnings and assets of the three CRI subsidiaries — AgSource Cooperative Services, Central Livestock Association and Genex Cooperative, Inc. – and the International Division.

“CRI has grown from a $33 million cooperative in 1993 to a $120 million cooperative today,” stated David Hileman, Chairman of the CRI Board of Directors from Tyrone, Pa. “During this time CRI has grown not only in a business and dollar standpoint, but has matured because of delegate input and strong member control. The same will be true for the future as your cooperative is focused on being proactive, prospecting for new business opportunities and actually creating change. Through member and employee commitment CRI will continue to be a vibrant and dynamic cooperative.”

Genex Cooperative, Inc.
The year concluded with continued upward trends in semen sales, service income and total revenue for Genex. The record-setting gross revenue of $91,522,091, a 3.7 percent increase compared to 2005, resulted in pre-tax profits of $3,053,330. The year-end summary calls for $1,884,477 in net savings to be distributed in patronage to Genex members as member ownership of total assets increased to 68 percent.

2006 highlights include the introduction of national membership and election of directors to represent the newly arranged 13 member regions. A new service volume record was also attained with Genex field staff inseminating over 1.9 million cows. Dairy semen sales were a high point noting a 3.5 percent increase over last year’s performance.

Additionally, Genex acquired land in Melrose, Minn., and broke ground for a new Genex Farm Systems office, warehouse and showroom. The grand opening is planned for June.

AgSource Cooperative Services
In 2006, AgSource recorded its highest net savings in history. With a pre-tax net margin of $799,107 and a return of six percent on total revenue of $13,259,745, AgSource marked the seventh straight year of improved financial performance.

Each division contributed to the subsidiary’s record success. Increases in water and milk bacteria testing led the Food and Environmental Laboratory Division to generate close to $2 million in revenue for the first time. The AgSource Agronomy Division reported a record year with a 14 percent revenue increase over 2005. In early 2006, the Dairy Herd Improvement (DHI) Division introduced the Fresh Cow Summary and Transition Cow Index™, the ultimate tool for monitoring transition cow management and performance. At year’s end, DHI operations recorded increases in all aspects of service – field, lab and records processing. In total, over 6.4 million cow tests were processed during the year, making 2006 the second consecutive year with an increase of over 100,000 tests.

Adding to AgSource’s diverse package, the cooperative purchased Harris Laboratories in July 2006. With 2006 sales of over $1.4 million, this turf and soil testing business located in Lincoln, Neb., generated a high return while serving customers in the U.S. and around the globe.

Central Livestock Association
The most significant event for Central Livestock in 2006 was the sale of the South St. Paul, Minn., market at year end. The exit strategy for the South St. Paul facility includes a 16-month lease allowing the market to operate through April 2008. During this time, plans will be executed to transition livestock volumes to nearby Central Livestock markets.
Central Livestock expanded its services when it began selling cattle by auction on TEAM Internet auctions in October. The marketing method has become accepted by packers and volumes have improved monthly.

The market sale, combined with an increase to over 1.33 million head of cattle, calves, hogs, sheep, goats and horses marketed through the subsidiary, led to 2006 before-tax profits of $2,058,781.

**International Division**
The International division of CRI had an excellent year generating $11,803,032. At a 28 percent increase over 2005, this represents the highest income for the International Division since the inception of CRI.

CRI’s international presence grew stronger in 2006 with the purchase of a long-time Brazilian distributorship. Brazil is emerging as an important customer, especially in beef, and CRI now has a secure base of operations in South America.

“During CRI’s 14 years, we have grown revenues an average of $5.86 million per year,” stated Wilson. “As we enter our 15th year of existence, we again hope for substantial growth. If we achieve our goals, it will be because you, the member, will be utilizing the products and services, and we will all realize the results of the CRI Mission Statement.”

For a copy of the 2006 CRI Annual Report, contact customer service at 1-888-333-1783 or info@crinet.com.

**PRESIDENT’S MESSAGE**
*By John Ruedinger, President of the Genex Board of Directors*

“Genex will always be an early innovator of new product development.”

“We are always striving to become better managers of change. Change is never ending in this business as with all aspects of life. It is how we react to change that can make us successful or set us up for failure. We need to be constantly looking for opportunities that will set us apart from the competition. Setting goals, tracking performance and making the appropriate adjustments are of vital importance to being successful.

With all the changes taking place in our global world, Genex needs to remain focused. We need to continue to provide dairymen across the globe with quality genetic programs that will ensure every farm, regardless of size, the opportunity for success. When looking at statistics as to where herd size is heading, we need to be very careful that we continue to provide dairymen with the proper tools for success. Lifetime Net Merit, health traits, milk components and fertility are the primary drivers of a quality breeding program.

The recent introduction of SynchSmart™ and Reproductive Profit Manager™ as well as the success of our elite sire 1HO7235 TOYSTORY are prime examples of what Genex has to offer. Genex will always be an early innovator of new product development.

We continually need to challenge ourselves to keep the visionary approach to obtaining our goals. Successful cooperatives are strategically focused. They carefully define what they will look like in three to five years. They know what they are trying to accomplish for members. They have created value that differentiates them from other businesses they are competing with. If we do not add value as an organization, we will not continue to grow and prosper. I believe Genex does add value, which our members have grown to expect. If we all work together, we will remain number one and continue to be the industry’s leader.”
Kay Olson-Martz

Kay and her late husband owned and operated Olson’s Dairy Farm near Friendship, Wis., until her husband’s tragic death in 1999. Today, the 152-year-old family farm legacy continues as Kay and husband Earl Martz, wed in August 2005, continue to milk 90 head of registered Holstein cattle on the farmstead with the help of their children. They also raise 125 replacement heifers and steers a year, while utilizing the Genex MAP program, young sire genetics and artificial insemination training programs. Additionally, Kay and Earl farm approximately 680 acres growing mainly alfalfa, corn for silage, high moisture corn, soybeans and oats.

Olson’s Dairy Farm has been recognized numerous times for delivering a high quality product. Awards were earned from the Adams-Marquette Holstein Association for most improved combined fat and protein, most improved cheese yield and most improved milk on a three-year average. DFA (Dairy Farmers of America) also recognized the dairy in 2003-2006 for superior milk quality.

Personally, Kay has been recognized for her involvement in state and local organizations. She currently serves as president of the Adams County Farm Bureau and South Central DHIA. She is also on the board of directors for the Rural Electric Management Council, a committee appointed by the governor to promote safe, efficient and cost effective energy usage in rural Wisconsin communities. This past March, Kay was elected to represent the dairy and beef producers of Region 7 on the Genex board of directors.

Watkins Retires from Genex and CRI Board

Long-time board member Dave Watkins attended his last annual meeting as a Genex and CRI board member on March 21. Dave was first elected to the 21st Century Genetics (Genex predecessor) board in 1986. In 1997 his fellow board members elected him to represent Genex on the CRI board of directors.

Dave and his wife, Marylu, farm near Moscow, Iowa, milking 40 cows and farming 160 acres. In their area of east central Iowa, livestock production has declined sharply during his board tenure. With this perspective, he has brought great realism and insight to the service needs and unique aspects of producers where daily service is not feasible.

Dave’s industry and local work has been recognized in many ways. He received the Honorary FFA Degree, Muscatine County 4-H Alumni Award, Distinguished Service Award from Dairy Lab, the 1993 Iowa State University Dairy Science Club Honorary Member distinction and the 2004 NAAB Member Director Award.

Years of dedication and contribution to the A.I. industry have made Dave invaluable to this cooperative. Serving as a director has also had an impact on him. “It’s an important process,” says Dave. “Members should be involved. I’ve always enjoyed the activities of the board and the relationship the board has shared with delegates.”
Genex has purchased the property which has served as the Genex Alabama Custom Collection site since 2001. Previously, Genex had leased the facility. The purchase of this “state of the art” facility allows for flexibility to expand, as needed. Current plans include the addition of climate control to a portion of the barns allowing more effective semen collection during the summer heat.

Genex operates the largest custom collection service in the U.S. with facilities in Baton Rouge, La., Strafford, Mo., Billings, Mont., and Fort Payne, Ala.

Members and customers purchasing ESTROTECT heat detectors during the month of April received scratch-off game cards for a chance to win prizes. All game cards returned to the CRI office in Shawano, Wis., were entered into a grand prize drawing for a $400 credit on their account. The name of the lucky winner was randomly drawn, and the winner is Al Elsbernd of Calmar, Iowa. Congratulations!

Genex Farm Systems, a leading provider of farmstead and milking products in the upper Midwest, has installed the first and only non-provisional Grade A robotic milker in the U.S. The DeLaval VMS (Voluntary Milking System), the first robotic milker to be installed by Genex Farm Systems, has been operating in a 60-cow Minnesota dairy for the past three months with much success.

Genex Farm Systems is a leader in providing milking products and equipment throughout the upper Midwest. This division of Genex Cooperative, Inc. is dedicated to providing agricultural producers with the complete package of sales, service and installation.

This April, four individuals were inducted into the Wisconsin Business Hall of Fame. Thomas Lyon, who was instrumental in forming Cooperative Resources International the nation’s first direct link between a dairy herd improvement organization and a provider of artificial insemination services, was one of this year’s honorees. It was said of this year’s laureates: They serve as inspiring role models for young people and epitomize leaders we want children to respect and emulate. They have made a difference in their companies, communities, industries and the state of Wisconsin.
Genex has entered an agreement with Sexing Technologies to produce GenChoice, a gender specific line of semen marketed under study code 501.

Currently, several Genex sires from the active lineup have been transported to a facility in Texas to begin the collection and sorting process. Additional sires will enter the sexed product lineup this fall as sorting technologies are installed at Genex sire collection facilities.

The techniques used to isolate the female sperm cells result in 90 percent purity, meaning 90 percent of conceptions with this sexed semen should produce a female embryo. That compares to a 50 percent chance using conventional semen. GenChoice should only be used on virgin heifers.

GenChoice semen will be packaged in ¼-cc straws and should be thawed in a warm water bath. Straws should not be divided for multiple inseinations. Review proper semen handling and insemination techniques before using this product. Visit the Genex Learning Center at www.crinet.com, for a complete review of proper semen handling and insemination procedures.

Farming is full of choices. Whether you choose to use GenChoice or conventional semen, Genex encourages you to make the right choice for your operation.

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**DETAIL**

Did you know the average U.S. dairy producer only catches about 50 percent of heats in their herd? By using **DETAIL** tail paint and the **DETAIL** Management System, it is possible to greatly improve heat detection efficiency.

**DETAIL Application Procedures:**
1. Remove any loose hair and dirt from the tailhead
2. Shake bottle well before removing cap
3. Turn bottle upside down, squeeze very lightly
4. Apply a 2” x 6” strip of **DETAIL** to the tailhead going against the hair
5. Rinse out bottle brush with water before replacing cap to sure maximum paint flow for next use
6. Touch up as needed

**DETAIL Management System:**
Use a different color to easily track the breeding status of the whole herd.

- **RED** – Fresh cows immediately after calving
- **GREEN** – Cows to be bred
- **BLUE** – Cows bred but not confirmed pregnant
- **YELLOW** – Cows confirmed pregnant

For more information about **DETAIL**, contact your Genex representative.
April 23 marked a historic day for Genex as 1HO5045 Klassic Merrill LYNCH-ET *TV reached a production record of one million doses of frozen semen.

“Few bulls in the artificial insemination (A.I.) industry have reached this level,” stated Glen Gilbert, Vice President of Production. “In the history of this cooperative, only two sires have hit the one million mark. 21HO0738 REX produced his one millionth unit in 1995 and now LYNCH has accomplished this feat.”

Born in 1994, LYNCH received his first proof information in February 1999. In February 2000, he was released into the active lineup. Following the May 2007 sire summaries with over 33,859 daughters in 7,689 herds across 11 countries, LYNCH remains the sire that satisfies members and customers.

“It takes a special bull to reach the one million unit mark. It also takes a lot of effort and hard work by a dedicated group of people,” added Gilbert. “Additionally, the bull not only has to be a prolific semen producer, but he also has to have a high enough genetic ranking that producers continue to use him in their herds. It is remarkable LYNCH has produced one million units of semen, but it is even more remarkable that to date over 944,000 units have been sold.”

This Merrill x Target x Leadman son portrays that high genetic ranking as a profit specialist in the 96th percentile for Lifetime Net Merit. Extreme PTA Fat and PTA Protein percents, positive Productive Life and Daughter Pregnancy Rate evaluations, a +2 Estimated Relative Conception Rate and 6% Sire Calving Ease have made him a longtime producer favorite. Combined with his +1.0 SynchSmart rating, LYNCH offers producers a unique opportunity to boost conception rates and improve on-farm profitability.

While daughters are performing well in herds across the globe, LYNCH son 1HO7169 LOTTO is also earning the respect of dairy producers. Like father, like son – LOTTO, the first LYNCH son to be sampled and activated in the lineup, shares many similar qualities to his sire. In total, 20 LYNCH sons have been sampled or are in the process of being sampled at Genex. These outstanding genetics are sure to positively impact herd profitability for generations to come.
“There is no better feeling than driving away from a dairy having left units of LYNCH behind, because I have no doubt in my mind those members purchased a product they will be 100 percent happy with,” explains Wayne Meyers, Genex Area Sales Representative, Michigan. “Not only will they have good results in getting cows bred, but they will be even more satisfied as the resulting daughters enter the milking herd.”

That thought is echoed at Shi Lac Farms in Michigan, which has 26 milking LYNCH daughters. “Initially, we used LYNCH as a clean up bull, but after having this group in the milking string we are now using him aggressively again,” says Bob Shinn. “They are performing equal to our herd’s production average with components above average. I believe their strength will be to outperform herdmates in later lactations and last longer in the herd.”

At Green Meadow Farms Inc. in Elsie, Mich., Lynch daughters have demonstrated that ability to perform in later lactations. “Currently we have 63 Lynch daughters in the herd. Fifty-six are milking or dry. Our LYNCH daughters have great feet and legs with generally better than average udders. They grow to be quite good-sized cows between their first and second lactation. In their second and later lactations they really shine with high milk and high fat records. We now have several in their fourth and fifth lactations with over 100,000 pounds of milk,” states Ike Hunt. “Originally, we used LYNCH because he is an outcross bull and has high ERCR numbers, but after our LYNCH’s started milking we used him some more because of their eye-pleasing qualities and their high fertility. We have over 3,600 cows on test, and LYNCH is a bull we will continue to use as he fits our parameters of what a bull should do for today’s dairy herd.”

“They’re the kind of cows you don’t really notice because they are so trouble-free,” adds Bob Zwald of Bomaz Inc. in Hammond, Wis. “In general, LYNCH daughters just seem to breed back very well. Because of that, their calving interval is also very good. We had several that calved three times in less than three years. Bomaz LYNCH 2258, EX-90 has an exemplary calving record, having calved in at 1-9, 2-9, 3-9, 4-10 and 5-10. We’ve overall been very happy with the conception rate on LYNCH and his daughters have bred back real well.”

William and Zachary Bryant of Highland Farm, Honesdale, Pa., who are currently milking seven LYNCH daughters, are pleased with their production records and conformation. “Six of the seven are scored Very Good with Very Good or Excellent mammarys,” explained the Bryants. “The LYNCH daughters have milked well with individual records over 30,000 pounds. Components have been high with individual records as high as 5.0 percent butterfat and 3.6 percent protein. To top it off, during their first lactation, all the LYNCH daughters bred back on their first service.”

The “A.I. Top Guns” Genex service team shared results from New York. “Between four local farms there are 104 milking LYNCH daughters. One dairy, Butterville Farms LLC, Adams, N.Y., has 19 daughters with an average lactation of 2.6. The average days in milk is 184 and average days open is 98. They breed back easily with an average 2.1 services per conception and the LYNCH daughter production averages are above the herd average,” said John Lennox, Genex Breeding Program Specialist. “At Eastman Farm, Ellisburg, N.Y., their 27 LYNCH daughters are milking 91 pounds per day and have a 305 ME just under 30,000. Hi-Hope Dairy LLC in Adams, N.Y., and Doubledale Arrowdale Farm LLC in Mannsville, N.Y., are having similar great results from their LYNCH daughters.”
The dairy industry is committed to research which will refine, enhance and improve the accuracy of sire evaluations. This May, a number of changes have been made to the evaluation system. These changes have not significantly impacted the ranking of sires, but should make them more accurate and stable over time.

The Biggest Change

USDA-AIPL went from a within-breed evaluation system to an all-breed system. With an all-breed model, there are two major advantages over a within-breed system: 1) Cows of different breeds in the same herd can now be contemporaries (compared) to each other; and 2) Maybe the biggest major benefit of an all-breed system is crossbred animal information can be used and a heterosis factor accounted for. If you count all the crossbreds as a breed, they now contribute the third largest number of records each year to the evaluation system.

In the past, only crossbreds that were part of a breeds grading-up program were included in the evaluations. Further, the heterosis effect of these grading-up animals was not being accounted for, which contributed to an inflated rate of genetic progress mainly in the Jersey and Brown Swiss breeds. In addition to accounting for heterosis, a number of minor programming enhancements were also made at this time.

These changes resulted in most breeds having a decline in proof values on average (see Table 1). Although, on average, evaluations went down, the rank of bulls within the breeds changed very little. The all-breed system allows the U.S. to utilize all the data and, with time, will provide good information on how crossbreds and different combinations of crossbreds perform in the U.S. relative to the pure breeds. It also allows one to rank the bulls more accurately across breeds.

When a dam was missing from the evaluation, an average pedigree value for the dam’s year of birth was utilized. This logic works fine for an average cow with an average pedigree. However, this is not the case for many cows. It was found that the missing pedigree information on a cow with a good PTAT was much higher than the missing pedigree information of a cow with a low PTAT.

Impact of additional pedigrees: Including the additional 1.7 million pedigrees had a significant impact on genetic evaluations. Within any given year, the top cows tended to go up and the low cows went down. Across time, the amount of genetic improvement was calculated to be much larger than previously estimated. A gain of slightly more than five points has occurred in the last 20 years.

Bull rankings will be higher but familiar: The increased genetic trend causes genetic evaluations of the current population to be higher. One change easily noticed is the average A.I. bull went up by +0.4 and some second crop bulls went up by +0.6. Although the bull proofs will look higher the ranking of the bulls remains very similar. The correlation between the two evaluations is quite high (.985).

Greater stability in the proofs: The main advantage is much greater stability as a bull goes from his first to second crop evaluation. Bulls summarized were those receiving their first crop evaluation in 2004 and a second crop evaluation in 2007. Under the old genetic evaluation system, a bull’s PTAT would drop on average by -0.44, with the largest drop well exceeding the largest increase. Now, the changes in the proofs are normally distributed, i.e., the average change is close to zero (-0.05) and the largest increase is about the same size as the largest decrease.

The main visible difference is an increase in PTATs of the older second crop bulls. This means second crop bulls were being under-evaluated in the old system. These changes should be well received as breeders have been puzzled by the frequent drops in some of the more popular bulls.

Table 1

<table>
<thead>
<tr>
<th>Breed</th>
<th>Ayrshire</th>
<th>Brown Swiss</th>
<th>Guernsey</th>
<th>Holstein</th>
<th>Jersey</th>
<th>Milking Shorthorn</th>
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</thead>
<tbody>
<tr>
<td>LNM Change</td>
<td>-$27</td>
<td>-$89</td>
<td>-$44</td>
<td>-$10</td>
<td>-$60</td>
<td>-$1</td>
</tr>
<tr>
<td># Active Bulls</td>
<td>21</td>
<td>46</td>
<td>22</td>
<td>656</td>
<td>108</td>
<td>6</td>
</tr>
</tbody>
</table>

Improvements to PTAT Calculations

When are 6.5 million cows not enough? When you’re calculating the genetic evaluations for final score. Researchers at the University of Georgia have shown a major improvement in the predictive ability of PTA Type (PTAT) and its subsequent stability can be achieved by adding the pedigree information on 1.7 million ancestors.

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Proof Evaluations

**International Comparisons:** The new U.S. genetic evaluations for type have a better agreement with the type proofs from other countries. Most genetic correlations increased by +0.02 to +0.04. The only exception was France, who places 60 percent of their final score emphasis on udders.

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**Holstein Udder Composite**
The Udder Composite formula has been revised to include rear teat placement and added emphasis on udder depth. The new Holstein Udder Composite formula is shown at right.

**New Look to Holstein TPI™**
The Type-Production Index is now known as Total Performance Index (TPI). The name more adequately reflects the fitness trait weightings added to TPI since 2005. The formula weightings were also adjusted slightly to emphasize higher Daughter Pregnancy Rates, longer Productive Life, lower Somatic Cell Scores, less calving difficulties and fewer stillbirths. The emphasis on type remains the same and the emphasis on production has been lowered from 50 percent to 45 percent of the total formula.

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**Jersey Udder Index Released**
The American Jersey Cattle Association has released the Jersey Udder Index™ (JUI™) with the May sire summaries. The index includes the following traits on a percentage basis.

<table>
<thead>
<tr>
<th>Udder Composite Traits</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Udder Depth</td>
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</tr>
<tr>
<td>Fore Udder Attach.</td>
<td>16</td>
</tr>
<tr>
<td>Rear Udder Height</td>
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<tr>
<td>Rear Udder Width</td>
<td>12</td>
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<tr>
<td>Udder Cleft</td>
<td>9</td>
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<tr>
<td>Front Teat Placement</td>
<td>5</td>
</tr>
<tr>
<td>Rear Teat Placement</td>
<td>7</td>
</tr>
</tbody>
</table>

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**Brown Swiss Implements Updated Index**
The Brown Swiss Association has modified their Production Type Index formula and renamed the selection index Progressive Performance Ranking (PPR). In summary, the majority of the weight within PPR remains on fat and protein yield. The Productive Life weighting was increased to reflect the importance of longevity. Additionally, the value of Daughter Pregnancy Rate was increased slightly to aid in improved selection for reproductive efficiency. PTA Type was removed from the formula. Improvements in type traits and final score can be accomplished with the weightings on Udder Composite and Foot & Leg Composite.

PPR is similar in overall goal to the Lifetime Merit indexes published by USDA. The Lifetime Merit indexes published by USDA. The Lifetime Merit indexes have a higher weighting on the health and fitness traits and also include calving ease values recognizing their impact on lifetime profitability.

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**Author Bio:** Steve Schnell oversees the acquisition and sampling of over 275 bulls annually for Genex, as well as GENESIS, the only MOET program in the U.S. Schnell completed his bachelor’s degree and master’s coursework at the University of Wisconsin-Madison.
May Sire Summaries
The Old, the New and Those Between

The Backbone of the Lineup
Over 30 second-crop sires line the active Genex sire list. 1HO5045 LYNCH, 1HO6360 WIZARD, 1HO5583 DAWSON, 1HO6258 TRENT *MF, 1HO5433 COSMO, 1HO5491 NATION and 1HO6149 GARTER are second-crop sire names easily recognizable worldwide. These sires show the strength of the Genex sampling program. They did not merely come and go; they stood the test of time. Through the addition of thousands of daughters in thousands of herds, they increased reliability in their evaluations and maintained a high genetic level sought-after by dairy producers across the globe.

While those named above have proven their place in the industry, others just recently began adding second crop daughters and solidifying their spot in the lineup:
- 1HO6654 PHARISEE
- 1HO2406 BO
- 1HO6671 MURPHY
- 1HO5627 COMPLETE
- 97HO9514 A-A WIN 395
- 1HO5663 SOLO
- 1HO6670 RIO
- 1HO6578 TIGER
- 1HO5702 TYREL
- 1HO6654 PHARISEE
- 1HO6487 MACK
- 1HO2394 GIBSON
- 1HO6666 POP
- 1HO6667 SHARP
- 236JE0003 IMPULS
- 163JE0900 MANHATTEN
- 236JE0004 ARTIST
- 1JE0370 ROULETTE

One highlight of this group was MURPHY. He gained reliability with the addition of over 600 daughters. This Manfred x Luke son stands in the 94th percentile for Lifetime Net Merit (91% Rel.). A calving ease sire, he also transmits +1508 Milk and tops the lineup for Foot & Leg Composite (+2.35).

In the Jersey breed, IMPULS is now the #1 sire for Lifetime Cheese Merit and JPI™. His genetic credentials, along with those of fellow Danish Jersey sire ARTIST, have been positively impacted by U.S. daughters. Both have the diversity (low EFI), fertility (ERCR) and profitability to meet the needs of Jersey producers.

Excitement of New Releases
While second-crop sires form the backbone of the sire lineup, new sires create excitement. Debuting in the 91st percentile is 1HO7467 JUMBALIA, a Webster son from an outstanding family at Ladys-Manor. This total profit specialist is ideal for heifer pens (6% calving ease), and improves conformation (+1.35 PTA Type) and Fat percent.

Joining JUMBALIA in the 90th percentile is 1HO7690 KLEVE, a maternal brother to Genex sire 1HO7691 COBRA, and 1HO7767 DAY-O %-%, a Juror Ford x Zebo son with strong health traits.

Components specialist 1HO7624 DIRECTOR is the first TRENT son in the lineup. 1HO7542 DOMAIN (Saturn x Patron) improves udders at +2.11 Udder Comp. He has a unique sire stack on his maternal side in Saturn x Patron x Mandel.

At +$366 LNM and +2.02 Foot and Leg Comp., 1HO7763 AIRMAIL (Magna X Manfred) is a strong addition to the lineup. 1HO7498 MACARONI demonstrates solid type and excellent health traits, while 1HO7378 LEXUS, a BW Marshall son, shines in improving conformation.

Class of 2005
Who else stands out besides new releases and second crop sires? It’s those that graduated to the active lineup in 2005 - 1HO6833 TRES, 1HO6959 SATIRE, 1HO7127 SHARKY and 1HO7235 TOYSTORY. They are top stars in the lineup, and continue to have a dominant presence in the 90th percentile for LNMS and herds across the globe.
Research and development has always been a vital part of this cooperative. Through research and development Genex has pioneered more industry firsts than any other in the A.I. industry. Ingenuity and leadership allows Genex to stand apart from the rest and be the only cooperative to offer profitable developments such as Pocket Thaw™ and SynchSmart™ to our members and customers.

Research projects begin within the Genex research and development committee. This committee reports to the board of directors with an annual budget and outline of projects including internal projects and those completed in partnership with universities. In general, efforts are focused on two broad topics, fertility and genetics. Saying this, the committee also undertakes projects relating to employee safety, nutrition, beef management and many others. The committee considers projects which may have an outcome or application that meets the Genex mission to “provide products and services as effectively as possible to maximize the profitability of members and customers …”

This year’s semen quality/fertility projects include eight collaborations and several internal projects. Science has come a long way on this topic; however at Genex, we still believe there is more to learn. We know semen extenders play a significant role in sire fertility, and we believe continued research in this area is well spent. Current projects, most of which are well underway, deal with ejaculate “forensics,” extender solutions and additives for semen enhancement.

Another project that is not exclusive to Genex, but is very exciting for the cooperative, is the USDA-AIPL* SNP project. For several years, it has been thought that qualitative trait loci (QTL) may change sire selection abilities. QTL research to date has shown a lot of promise but has failed to deliver immediate impact. The research in general is very expensive due to the “high tech” processes involved in discovering major QTLs.

Given these limitations, AIPL has taken on the assignment. The National Association of Animal Breeders (NAAB) voted to financially support AIPL in this project. Therefore as a member of NAAB, Genex has committed dollars to the project indirectly allowing full access to the results. AIPL is planning to begin this project shortly with preliminary conclusions expected by yearend. Genex is excited to learn if qualitative genetics will hold a significant part in how new sires are chosen in the future.

One internal research project, now underway, tests the consistency of a bull’s fertility from one year of age to three. To do this, a group of two- to three-year-old sires, known for high fertility from their sampling period, have been selected. These sires also meet criteria of low calving ease and high parent average (PA) genetics. Each will be analyzed for fertility and market acceptance. The goal is to provide our members with new pedigree “in-waiting” sires that have high fertility, low calving ease and high PA genetics. The trial, named “Young Guns,” was initiated in January and continues until fall.

Research and development projects demand a lot of dedicated research time, but the board of directors realizes the importance and challenges staff to investigate new ideas. Research is sometimes an easy item to cut from a budget, but more than once research and development, such as SynchSmart, has paid large dividends for the co-op and its members. We look forward to continuing this longstanding tradition of industry-leading research and development.

*United States Department of Agriculture – Animal Improvement Production Laboratories

**Author Bio:** Roy Wilson has established experience in dairy genetics and reproduction. After undergraduate work at the University of Wisconsin-River Falls, Wilson completed dual master’s degree at the University of Wisconsin-Madison in animal breeding and reproductive physiology.
Put your herd management records to work for you with Reproductive Profit Manager™ (RPM). Created by Genex, RPM is one of the most successful “profit strategies” available to maximize member and customer profitability. RPM uses on-farm herd management records, including over 185 data points, to benchmark a herd against a peer group. Herd owners, dairy managers and extensively-trained Genex consultants across the U.S. are using this tool to diagnose and discuss problem areas within the herd to implement solutions.

The six main categories RPM investigates are milk production, somatic cell count, culling, herd health, genetics and reproduction. Of course, improving reproductive performance on the farm is one of the primary goals. But as all are aware, reproductive physiology is a complicated process and a number of issues can help or hinder reproductive performance. With that in mind, RPM investigates areas of potential improvement in each of the six categories.

**Benchmarks for Success**

Within each area, RPM digs into data otherwise left untouched. For example, the percent of a herd pregnant by 150 days in milk reflects how successful the reproductive program is on a dairy. One way to improve the percent pregnant is to monitor the average interval between services or how quickly semen is getting back into cows. Herds with a lower interval between services are missing less heats or are using resynch to have a more aggressive approach.

<table>
<thead>
<tr>
<th>Percent of herd pregnant by 150 DIM</th>
<th>57%</th>
<th>62%</th>
<th>54%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average interval between services (days)</td>
<td>42</td>
<td>39.5</td>
<td>43</td>
</tr>
</tbody>
</table>

Table 1 above is a cut-out from an RPM report. The teal-colored cells are the benchmark or average of the peer group. The peer group can include an average of herds across the U.S. or within a specific geographical region. In some locations, the benchmark can also be herd size specific. If striving for optimal herd reproduction, the selected benchmark can be the average of the top herds across the country based on pregnancy rate. The next two cells are the farm’s actual data. The column closest to the teal is the current data and, the column on the far right is data from the previous RPM analysis.

Somatic cell count has a definite impact on reproduction. The RPM report cut-out below, Table 2, compares the first service conception rates of cows less than 60 days in milk (DIM) with and without mastitis. This example includes cows that have visible mastitis cases and have received treatment. With a seven percent different in first service conception rate, the results solidify the theory that mastitis affects conception ability. For the farm receiving the RPM report, this data emphasizes the need to take precautions to avoid mastitis cases.

<table>
<thead>
<tr>
<th>First service conception rate of cows with mastitis (&lt;60 DIM)</th>
<th>31%</th>
<th>37%</th>
<th>36%</th>
</tr>
</thead>
<tbody>
<tr>
<td>First service conception rate of cows without mastitis (&lt;60 DIM)</td>
<td>38%</td>
<td>42%</td>
<td>40%</td>
</tr>
</tbody>
</table>
RPM also uses milk test data to compare conception rates of cows with subclinical mastitis. In Table 3, log 4.0 correlates to a somatic cell count of 200,000. A close look at the data shows conception rates decrease as somatic cell count increases.

Table 3

| Conception rate for log > 4.0 | 35% | 32% | 32% |
| Conception rate for log < 4.0 | 39% | 36% | 35% |

**Profit Measures**

The summary page is an important part of an RPM analysis. The summary page reports the estimated annual change of income for a herd if the benchmarks for all the “big four” profit-related measures – reproduction, milk production, somatic cell count and culling – are met.

Positive dollar values on the summary page mean if a herd were to reach the benchmark, that much extra income could be generated in a year. Negative dollar values (within brackets) mean if the current management level is not maintained the herd stands to lose that much money in a year.

Due to interrelationships between profit-related measures, all four measures can not be combined into one figure. For example, the reproduction calculation takes into consideration if reproduction improved it is likely milk production would also. Therefore, it would be inappropriate to add the reproduction and milk production values together.

The annual change of income on the summary page is based on several inputs. The income estimates include current inputs for milk price, somatic cell count premiums and production estimates, and cull cow costs on a per head basis. A value of one point of pregnancy rate ranges in value from $17 to $35. Again, the column total cannot be added together due to confounding relations.

RPM is another tool or “profit strategy” that puts powerful profit factors and trends – like the previous examples – in front of the dairy team (owners, managers, veterinarians, nutritionists, key employees and Genex consultants) so they may diagnose problems and implement solutions. Available only from Genex, this program drills into data otherwise left untouched. RPM is another way Genex lives its mission statement, helping members and customers maximize or rev up their dairy profits.

**Key Ideas to Consider:**

- There are two benefits of RPM: one is to monitor the performance of a herd over time and the other is to compare to a benchmark group. Currently, benchmarks are only available for Jerseys and Holsteins, but individual herd trends can be evaluated through future RPM analyses.

- When making dairy management decisions, it is important to use data that is statistically significant. Genex has found a herd size of 200 cows or greater usually produces reliable results on which to base management decisions.

- At this time, Dairy Comp 305 or PC Dart records are necessary to conduct an RPM analysis. All herds that test with AgSource Cooperative Services have records stored in DC 305 whether or not the dairy has the program. Other farm management software records are being tested and may be available for RPM analysis in the future. In addition to the normal reproductive measuring tools, recording somatic cell score, culling information, herd check results and herd health information is vital for a complete analysis.

For more information about RPM, contact your Genex representative or Jenny DeMunck at CRI headquarters (715-526-2141).
The term “synchronize” is defined by Merriam-Webster as a verb meaning to happen at the same time. However, since Parrish et al. published a Journal of Dairy Science paper in 1995, the dairy industry has now took the meaning to an entirely new level.

The dairy industry has redefined the word “synchronize” to mean to follow a protocol of administrating hormonal treatments to a group of animals in order to inseminate the group in the same approximate time.

Today, 12 years after the first article on synchronization was published, there are well over 100 peer-reviewed papers discussing the fine points of synchronization and the various methods to synchronize cattle. However, until recently no paper had attempted to quantify the usefulness of this new term to the dairy industry. In March of 2007, Miller et al. published an article in the Journal of Dairy Science that looked at how synchronized breeding may affect reproduction within the U.S. dairy population. The objectives of their research were to document variation in Days to First Service (DFS), consistency of Voluntary Waiting Period (VWP), and to identify the number of synchronized herds, how the number has changed over time and the effect on reproduction within these herds.

Rabiee et al. (2005) presented a meta-analysis of 53 reports discussing the impact of synchrony on herds. They concluded that conception and pregnancy rates between various synchronization protocols are not significantly different. Goodling et al. (2005) looked at progeny test herds that incorporated synchronization protocols and found herds with timed insemination programs had, on average, 17 fewer days open per cow – a significant economic benefit to those herds.

Miller used dairy herd improvement (DHI) herd data for their analysis, which included 33 million records. The data showed several interesting trends over a period of 10 years (1995 through 2005).

- Identified synchronized herds had increased from 1.9 to 19.9 percent.
- Frequency of cows in synchronized herds increased from two to 35 percent over the 10 years.
- The mean herd size for non-synchronized herds is 87 cows compared to a herd average of 199 for synchronized herds.

This concludes protocols are more likely to be adopted in large herds compared to small herds where detection of estrus may be less challenging. As herd size increases the likelihood of implementation of synchronization protocol increases exponentially.

More interesting than the rise in use of synchronization is how it impacts reproductive performance. Adoption of a synchronization protocol resulted in a substantial reduction in DFS. Within the study, authors observed 17 less DFS in synchronized herds. After analyzing the impact on days open they found a reduction of 9.1 within synchronized herds. This impact is substantial.

The United States Department of Agriculture’s Animal Improvements Production Laboratory uses $2.00 as the value of one day open. Simple math allows us to calculate a 200-cow dairy that lowered their days open by 9.1 would save approximately $3,640 annually. Interestingly enough, herds with synchronization did take additional semen (+0.16 services/conception) to have the entire herd conceive.

Overall VWP has increased over the last 10 years; however research has indicated conception rate may actually increase as the VWP is delayed (Moreira et al. 2000). Therefore given the reduction in days open, it may be concluded synchronization allows farms to achieve desired VWP rather than breeding “at first sight” in order to have cows pregnant in an efficient time period.

Synchronization has revolutionized reproductive management within the U.S. dairy industry. It can be compared to such advances as artificial insemination, frozen semen, total mixed rations and the list goes on. It appears farms are deciding to enroll more animals into such protocols not to fix problems, but to optimize performance and profitability. Though synchronization may not be the right choice for all farms, current trends indicate usage will continue to increase.
Real Breedings, Real Differences

- SynchSmart ranks sires for conception ability in synchronized females based on real breedings.
- A +1.0 SynchSmart sire is expected to have a one percent higher conception rate than a +0.0 SynchSmart sire.
- Using high SynchSmart sires in your synch program can boost conception rates and improve farm profits.

<table>
<thead>
<tr>
<th>Sire</th>
<th>Synch Smart</th>
<th>Rel.</th>
</tr>
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<tbody>
<tr>
<td>97HO9514</td>
<td>A-A WIN 395</td>
<td>2.5</td>
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<tr>
<td>1HO7232</td>
<td>ATWIND</td>
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</tr>
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<td>1HO2406</td>
<td>BO</td>
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</tr>
<tr>
<td>97HO3689</td>
<td>CANVAS *RC</td>
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<tr>
<td>1HO7154</td>
<td>ENCINO</td>
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<tr>
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<td>1HO6158</td>
<td>TRENT *MF</td>
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</tr>
<tr>
<td>1HO6833</td>
<td>TRES</td>
<td>1.5</td>
</tr>
<tr>
<td>1HO7235</td>
<td>TOYSTORY</td>
<td>2.5</td>
</tr>
</tbody>
</table>

Featuring daughters of leading SynchSmart sires in the 90th percentile for Lifetime Net Merit:

- Awru TRES Easy
- Schmut TOYSTORY +529
- Rohes Amy LYNCH EX-90, EX-MS

Genex Cooperative, Inc.
A subsidiary of Cooperative Resources International
888-333-1723 www.crinet.com
Technology for the Cows – GENESIS MOET

by Angie Kringle
Communications Specialist

Global Positioning Satellites direct tractors in the fields, radio frequency ear tags identify animals, and computer systems keep detailed records. Technology has definitely made its mark on agriculture. The Genex GENESIS MOET program takes advantage of today’s technology in Multiple Ovulation and Embryo Transfer (MOET) to utilize both heifer and bull calves for genetic advancement. The rewards of this program are offered to Genex members through embryos for purchase and a greater selection of bulls in the lineup.

Start of Something Big
In 1989, GENESIS MOET began with the purpose of providing pathogen-free bull calves to enter bull facilities. In the traditional contract method of procuring sires, 20 to 30 percent of bulls contracted from farms fail to meet the stringent health requirements to enter the bull facilities and begin sampling. By carefully selecting and testing embryo recipients and proactively managing calves for disease, a higher percentage of bulls meet the health requirements for Leukosis, Johnes, IBR, TB and BVD at sampling and after receiving a proof.

Through the GENESIS program, heifer calves are able to provide just as much benefit to Genex members as the bulls. Top heifer calves born through the program are housed and flushed at the Stony Hill facility near Shawano, Wis., and then sent to one of three cooperator herds where they calve and continue to be tested. These herds each consist of 400 to 600 cows, produce above average levels of milk, have a high genetic plane and low cull rates. These commonalities allow GENESIS females to compete against each other as well as high genetic herdmates. By testing them in large, neutral herds, environmental factors that impact production are minimized allowing the true genetic capabilities to be seen in the GENESIS females. By flushing these top performing females, we are able to take advantage of their high genetic capabilities in future daughters and bull calves. This elite group of flush cows gives us a high genetic base for future sires and bull mothers (see page 25).

Opportunities for Heifer Calves
GENESIS females provide valuable embryos for purchase. Embryos from cows are available worldwide, while embryos from heifers are offered domestically with a buy back option. This option creates a cooperator herd arrangement which allows for the repurchase of both male and female calves back into the program or the opportunity for the purchaser to keep the females, allowing Genex the genetic rights and the ability to make mating recommendations for subsequent flushing and breeding. So far this year, 22 heifers have been flushed and average:

- $498 Sire LNM
- $466 PA LNM
- $432 Dam LNM
- +43 lbs. protein
- +1.45 PTA Type
- +1742 PTPI

By purchasing and utilizing embryos at such a great genetic level, the cooperator herd can have a better level of uniformity and the genetic plane of the herd can sharply increase. This allows for a greater amount of genetic advancement to be made in one generation rather than waiting generations to see the effects of using solely high quality bulls. The use of embryos allows producers to tap into the high profile cow families as well as the high-end bulls being utilized across the industry. Many of the current flush heifers in the GENESIS program have full brothers completing the QUEST program to become proven bulls.

Continued on page 26
Besides providing embryos for purchase to members, the GENESIS MOET program is creating other advantages for the cooperative. Utilizing embryo transfer allows significant benefits to the sire procurement and sampling process to create superior sires. The GENESIS program also gives another avenue for international marketing. Currently, GENESIS embryos are marketed in many countries including Japan, Denmark, France, Poland and Argentina.

**More Benefit with Bulls**
The GENESIS MOET program takes advantage of the shortened generation interval and the precise control over dam and sire selection to create superior sires to enter the future lineup. Utilizing the GENESIS MOET program to procure sires in addition to the traditional contract mating commonly used allows many advantages in the process such as:

- The early management of pathogen-free bull calves
- Precise selection of elite bull mothers
- A shorter generation interval allowing greater control of the genetic program (see Figure 1).

By accurately evaluating and sampling sons from the highest cows, Genex is also able to increase the percent of bulls activated. From the first 75 bulls sampled, 13 were activated in the CRI lineup. This gives the GENESIS program a one in six ratio which exceeds the industry average of one in eleven resulting from the method of purchasing bulls. Graduates of the GENESIS MOET program include some of the following popular sires:

- 1HO5678 TIGER
- 1HO5627 COMPLETE
- 1HO5433 COSMO
- 1HO7075 VOLLY
- 1HO7014 KARET
- 1HO5903 F3

The GENESIS MOET program allows control over the precise selection of superior dams to serve as mothers for our future bulls. This allows for the careful selection of dams with high levels of Lifetime Net Merit, high production of milk and components, and good type. By hand-selecting bull mothers as well as the sires, Genex is able to ensure a high level bull is born with a strong potential to one day enter the lineup. Dams of the current flush heifers are producing an average of 32,917 pounds of milk, 3.7% fat, 1,208 pounds fat, 3.3% protein and 1,096 pounds protein at two years of age.

**Changes for Tomorrow**
The technology that drives the advances in agriculture is the same technology that provides the advances in the GENESIS MOET program. The availability of embryos from cows and heifers both domestically and internationally allows producers to make significant genetic advances in their herds. A shortened generation interval and greater control over sire selection gives Genex higher quality sires to enter the lineup. Utilizing genetic advancements in both heifers and bulls provides a bottom line of outstanding sires for all members to benefit from.

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**Author Bio:** Angie Kringle is a graduate of the University of Wisconsin-River Falls. She grew up on a dairy farm in northwestern Wisconsin and is a previous intern at the GENESIS MOET facility.
Throughout the years, the A.I. industry has been rapidly evolving and changing to embrace new technology. It seems hard to believe that only about 50 years ago fresh semen was being delivered to A.I. technicians via airplane and packages dropped from the sky. Then came frozen semen and our ability to preserve the genetics of top bulls long term. The ability to extend and freeze fresh semen has been considered the greatest technology in A.I. and has changed the face of the industry forever. CRI and Genex employees are now in the process of working on the next great technology – field automation.

In the near future, when a Genex employee pulls into your driveway, not only will he or she have a breeding kit and semen tank, they will also be carrying a handheld computer.

Development of CRIMoO, which stands for Cooperative Resources International Mobile Operation, began in the fall of 2004. In Phase I of the application development, the MAP program was updated and the programming was written so that it was compatible with new state of the art handheld computers. In Phase II the development of account information software was completed. This portion allows marketing field staff to have up-to-date account information on their members and customers at their fingertips.

Phase III includes breeding receipt and invoice processing. In April and early May, employees in area 212, located in north central Wisconsin, were testing and utilizing these features. On May 16 the application went live in this area.

Approximately 180 Genex marketing employees throughout the United States have been equipped with handhelds and are currently utilizing the CRIMoO applications. By the end of 2007 another 70-100 employees are expected to have the device.

The implementation of field automation will allow Genex staff to gain efficiency, especially in the area of inventory control. Right now, inventories are tracked on a monthly basis, making it difficult to move semen and product to an immediate point of sale. With handhelds, inventories can be tracked on a daily basis, or anytime an employee synchronizes their handheld with headquarters. Staff will easily be able to control field inventory of popular bulls and products, and move it to where it is most needed.

The possibilities for handhelds in the A.I. industry and for Genex are endless. New applications will continue to be developed that will keep Genex staff on the cutting edge of technology. Field automation is here, and we are very excited by all it has to offer.

Author Bio: Sarah Thorson conducts reproductive and educational programs. She also trains Genex employees as well as producers who breed their own cows.
Radio Frequency Identification (RFID) or Electronic Identification (EID) tags have been available in North America since 1993. However, they are now gaining in popularity as more producers are participating in the National Animal Identification System (NAIS) or just want to automate their management systems. These tags are designed not to replace visual tags, but to serve as a cross reference. They can help producers quickly, easily and accurately collect data eliminating the possibility of human error.

RFID tags are about the size of a quarter and should be placed in the middle of the left ear. Optimal placement is between the two cartilage ribs close to the head. This allows for ear growth as the animal matures. When inserting, place the female portion on the inside of the ear.

Though often referred to as electronic, the tag itself contains no battery or power source. It is “activated” when passed by a reader or transponder. At that time, the tag absorbs power from the reader. It will energize and return a signal back to the reader containing its unique number. The High Performance Half-Duplex tags, currently marketed by CRI, provide the greatest possible read distance – a range of three feet. This means the distance between the reader and the tag needs to be three feet or less for the tag to be activated. The signal can easily travel through tissue, wood, plastic, mud and manure.

Each RFID tag features a unique 15 digit number. Tags beginning with “840” signifies the animal has been tagged in the United States (840 is the U.S. country code). These tags are the official RFID tag for NAIS. Producers wishing to purchase these tags must provide a Premise Identification Number (PIN) at the time of ordering. 840 RFID tags are also the official tags for the Michigan Tuberculosis Eradication program and the Wisconsin Livestock Identification Consortium Animal ID Cost Share Program.

RFID tags beginning with “9” are manufacturer coded tags. They are marketed worldwide in countries that do not have an official country code. In the U.S., these tags comply with current requirements of NAIS, but are not automatically entered into an approved NAIS database as 840 tags are.

CRI is pleased to be able to offer the official RFID tags for the NAIS featuring the U.S. country code 840. The RFID button can be purchased by itself or with the matching large visual tags. For more information on RFID tags contact customer service at 1-888-333-1783 or ask your local Genex representative.

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**Author Bio:** CRI Product Manager Katie Wolf works with the cooperative's heat detection aids and other herd management products.

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**Genex is your source for Allflex® Tamperproof™ and RFID Eartags**

Ask your local Genex representative or call customer service at 1-888-333-1783.
Employees from across the United States and Canada were recognized for outstanding service to members, customers and the cooperative at the Genex annual meetings in March. Mission Awards are presented annually to marketing employees who exemplify the cooperative’s mission to: “Provide products and services as effectively as possible to maximize the profitability of members and customers worldwide while maintaining a strong cooperative.”

These Genex Mission Award winners made a significant impact on members, customers and the cooperative. As their supervisors nominated them for the award, they noted these commendable attributes.

**Breeding Program Specialists**

**Larry Amspacher**  Dover, Pa.

“Larry is a wealth of experience. Dairymen throughout the area enjoy speaking with him because of his experience and no-nonsense attitude.”

**Scott Gregory**  Horseheads, N.Y.

“Scott is passionate about what he does for members. He always puts the member first, constantly thinks of ways to make them more profitable and does it as efficiently as possible.”

**Ken Vidal**  Richford, Vt.

“Outside the box thinking, a positive attitude and promotion of his new teammates led Ken to success in 2006.”

**Lee Glaeser**  Newton, Wis.

“Lee is a leader. He demonstrates this not only through improved job performance, but by being involved in community and agricultural activities.”

**LaVae Thynes**  Storden, Minn.

“For over 40 years, LaVae has been a member of the Genex family. Throughout the years LaVae has been loyal to his customers, and they have been just as loyal to him. Simply put, LaVae is the A.I. icon in Cottonwood County.”

**Steve Lopes**  Delhi, Calif.

“Steve, one of the team leaders in California’s Merced County, promotes growth and strength, maintains consistent pregnancy rates and meets the dairymen’s high expectations.”

**Willem Schalk DuPlessis**  Hanford, Calif.

“Schalk communicates well with dairy producers throughout California’s Tulare and Kings counties. He works to meet each dairy’s reproductive goals by maintaining high pregnancy rates.”

**Brad Thompson**  Jerome, Idaho

“Brad has demonstrated good teamwork and excellent customer relations. He always has a positive attitude, and is always concerned about the level of performance given to his customers.”

**Area Sales Representatives**

**Mark Clark**  Sumerduck, Va.

“Besides his responsibilities as a sales rep, Mark was an influential member of the CRI Web and Extranet committee and spent considerable time assisting with the roll out of the new handhelds.”

**Robert Dragland**  Lewisburg, Tenn.

“Robert is dedicated to Genex and producers. He demonstrates high work ethics and personal standards, which earned him the highest respect of peers and customers.”

**Eric Whittaker**  Delhi, N.Y.

“Eric truly exemplifies the CRI Mission. He has served the area members well and brought in several new members and customers. He also works well within the area’s service teams.”

**Tom Kuball**  Waterville, Minn.

“Tom can be described as the ultimate team player. He is always willing to bend over backwards to assist his service teams. He tirelessly promotes the use of teams and helps position them for success.”

**Tim Lynch**  Eldorado, Wis.

“Tim possesses great professional skills and a strong knowledge of the dairy industry. He continues to help new employees develop their skills and has been very active in gaining new members.”
**Jeff Hollingsworth**  
Preston, Idaho  
“While providing semen and products to producers in Utah, western Wyoming and eastern Idaho, Jeff has exhibited excellent qualities in fulfilling all aspects of his responsibilities.”

**Service Teams**

**The Tug Hill Tuggers**  
Lewis County, N.Y.  
“In 2006, this team has bettered their service to members, professionally represented the cooperative and effectively used Genex programs (Farm Plan™, MAP and QUEST) to improve member profitability.”

**The Northwest Iowa Team**  
“A large herd focus and impeccable complete reproductive service have taken this northwest Iowa team to an elite level. They utilize each team member’s expertise, bring value to each account and have fun.”

**The Sunnyside, Wash., Team**  
“The team works cohesively with one another to go above and beyond for their customers. They setup synchronization programs, keep impeccable records, and are always keeping their customers abreast of products or services that can add to the profitability of their operation.”

**Area Program Consultants**

**Bob Saar**  
Perry, N.Y.  
“Bob continues to raise the bar on the level of service he provides. He always goes the extra mile, and has taken leadership in the region implementing Reproductive Profit Manager™ (RPM™).”

**Bill Krivanek**  
Alexandria, Minn.  
“Bill is the large herd specialist in central and northern Minnesota, making him invaluable to his managers and team. He uses RPM and the team approach to improve member’s profitability.”

**Pete Weber**  
Dorchester, Wis.  
“Pete’s mission is the CRI Mission. He continues to help refine and develop the RPM program now being used by dairy herds across the nation, and has helped train others to use the program.”

**Area Sales Managers**

**Joel Delzer**  
Shawano, Wis.  
“Joel works hard, has exceptional organizational skills and manages time wisely. Through his leadership, the area including eastern Wisconsin, completed a very successful 2006.”

**Jim Bayne**  
Twin Falls, Idaho  
“Jim Bayne provided excellent leadership as sales manager in northern New York. He led the area to a fourth consecutive year of growth, and is at the forefront in developing team leaders.”

**District Sales Managers**

**Judd Hanson**  
LaCrosse, Wis.  
“He and his staff were able to repeat their exceptional performance of 2005. Judd and staff serve producers in southern Wisconsin, Iowa, Minnesota, eastern South Dakota and eastern North Dakota.”

**Barry Putnam**  
Ithaca, N.Y.  
“Barry has led his district (northern and western New York, Michigan, Indiana and western Ohio) with dedication, professionalism and expertise. He keeps the district motivated and focused on reaching cooperative goals.”