"Taking into account the higher number of pregnancies, fewer days open, the gains in increased production due to lower days in milk, and improved overall herd health, our payback time has already happened."
Chris Crandall, Office Manager, Cannon Dairy

Cannon Dairy exceeds reproduction improvement goals, saves 80% of hormone costs, with Allflex Heatime Pro System

BACKGROUND

Cannon Dairy, founded in 1959, has around 8,000 cows on two farms near Idaho Falls, Idaho. About 5,500 cows are milked at Cannon's farm in Roberts; an additional 1,500 milking and 1,000 dry cows are kept 30 minutes' drive away at the dairy's Shelley farm.

CHALLENGES

Cannon Dairy's most pressing challenges center on its breeding program. The dairy's pregnancy rate used to be a fairly steady 20%, but in late 2011 it began to fall, dropping to 11% by early 2012. "We think there were a number of causes that combined, like a perfect storm," recalls in-house veterinarian Kevin Crandall. "We were expanding, fighting health issues, and temperatures were around 30° below zero for several weeks."

Chris Crandall, Office Manager (and Kevin's brother) explains: "We needed to find a way to improve our breeding. We tried every possible type of shot program, experimented with feed changes, and made many other management adjustments, yet nothing worked. We knew we had to find a better way to detect heat."

AT A GLANCE

Company: Cannon Dairy
Location: Shelley and Roberts, Idaho, USA
Herd size: 8,000 (7,000 milking) cows

Challenges

- Bring pregnancy rates back up following sharp decrease
- Reduce costs of synchronization hormones
- More effectively find, diagnose and treat sick cows

System

- Allflex Heatime® Pro System, 4,150 Heatime HR tags, heat detection, rumination monitoring and cow identification functionality

- 4 Allflex DataWand portable tag readers for efficient cow identification by breeders and health crew

Benefits

- 12% increase in number of pregnancies, resulting in a 5% increase in pregnancy rate, raising annual revenue by $130 per cow – achieved within 15 months of Allflex Heatime installation

- 80% decrease in hormone and tail paint costs and additional income generated from increased pregnancy rate enabled full return on investment in a year

- Earlier identification of cows with mastitis and DAs enables earlier treatment leading to reduced negative impact on milk production

Allflex
Livestock Intelligence®

SYSTEM

After an exhaustive review of electronic heat detection systems, Cannon Dairy chose the Allflex Heatime Pro System, presented to them by Allflex distributor Micro Dairy Logic. In May-June 2012, Cannon installed 3,750 Allflex H tags, featuring activity monitoring capabilities for heat detection, on cows in the breeding pens at the Roberts and Shelley farms. In early 2013, Cannon decided to switch to the new Allflex HR tags. Chris says: "The rumination monitoring was intriguing and we were hopeful it would help us improve the health of our cows, so we switched to the new HR tags, and added another 400."

Cannon's 4,150 Allflex Heatime HR tags are placed on cows within a day or two of calving and removed after the cow is confirmed pregnant, anytime up to 100 days pregnant. The tags are read three times a day, as the cows enter the milking shed. Every day, the breeders use the heat reports generated by the Allflex Heatime system to identify which cows to inseminate. The hospital crews use the health reports to help them identify which cows might need special attention or treatment. In the pens, the breeders and hospital crews work together using the Allflex DataWand portable tag readers to efficiently find the cows that the Allflex Heatime system has identified for breeding or health checks.

For added efficiency, the Heatime Pro System interfaces with the dairy's herd management software, so that all relevant information entered is automatically updated in the Allflex system.

BENEFITS

Cannon has seen benefits from both the health and reproduction aspects of the Heatime Pro System. The average number of cows

pregnant – which Chris notes is the most important number to the dairy – is now 12% higher. This equates to a 5% increase in pregnancy rate, raising per-cow annual revenues by about $130. Kevin further reports that the dairy's insemination success rate is now around 71%, up from 60% – exceeding their goals.

As Chris summarizes: "We are finding more cows in heat and getting more cows pregnant. And, with the rumination monitoring, the breeders are more confident they are breeding cows in heat. It has made training our in-house breeders much more efficient."

Kevin adds: "I'm more confident in our ability to detect heats, so instead of breeding cows in groups and enrolling cows in timed breeding protocols I can individualize our reproductive program per cow. This has been a big contributor to the increase in our reproductive efficiency."

Cannon has reduced its use of synchronization hormones and tail paint by around 80% since it began using the Allflex system to detect heats. "We expected that these savings alone would cover the cost of the system within three years, and we are right on track for that," says Chris. "The real full payback time is actually much faster. Taking into account the higher number of pregnancies, fewer days open, the gains in increased production due to lower days in milk, and improved overall herd health, our payback time has already happened. And from here on out we are only going to improve the quality of our herd at a lower cost of production."

The dairy is also improving its health management thanks to the Allflex system. Kevin explains: "We find mastitis cows before the milkers pick it up. And, with fresh cows, we're finding DAs a day or two sooner, which is a huge benefit. The sooner we see it, the sooner we can fix it. We have an excellent post-treatment recovery rate, so we lose less milk, and there's less chance of other problems developing."

"With the system, I can look for patterns and see the big picture. For example, many of the animals that are diagnosed with digestive issues show a drop in rumination before the clinical signs appear. This helps me gain trust in the system, and I can coach our herdsmen to look out for problems like this, and perhaps find them earlier."

Allflex
Livestock Intelligence ®