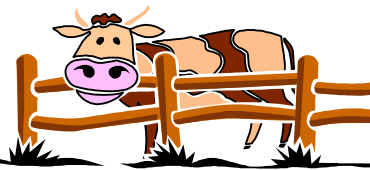


DAIRY *Update*



Autumn 2007

United Dairymen of Idaho Awards Summary

Hall of Fame Award

Gale Moser, Preston dairy producer, received the 2007 “Dairy Hall of Fame Award.”

Gale was recognized at the United Dairymen Annual Meeting held recently in Boise. Gale has served fellow dairy producers with distinction as a board member for over 21 years.

Idaho Milk Quality Award

Jay Hurren, Weston dairy producer, received the 2007 “Idaho Milk Quality Award.”

Each year producers are nominated by their milk processor. The winner is determined by ranking milk quality reports from nominated producers. In the last several years, the top 10 nominees have all had annual SCC averages below 150,000 and SPC averages below 10,000.

Edward A. Fiez Distinguished DHIA Service Award

Art Lee, New Plymouth dairy producer, received the 2007 “Edward A. Fiez Distinguished DHIA Service Award.”

Art served on the Payette Valley DHIA Board from 1978 to 2000, and was President for 5 years. Art was elected to the Idaho State DHIA Board in 2000, and currently serves as treasurer. Art has also represented Idaho as a delegate to National DHIA. In addition to Art’s work with DHIA, he has served Idaho dairy producers as an Idaho Dairy Products Commission board member, where he is currently serving as Chair. Art is an alumnus of the University of Idaho (1962 - Ag. Engineering) and is currently a member of the UI Animal and Veterinary Science Department Advisory Board.

For employees ...

Physiology of Calving

Why learn about the physiology of calving? Because understanding the duration and signs of labor is important to identifying calving problems and intervening in a timely manner.

Calving is a continuous process. Nevertheless, there are three stages of calving:

1. Initiation of uterine contractions and cervical dilation
2. Expulsion of the calf
3. Expulsion of the placenta

Stage 1. Initiation of uterine contractions and cervical dilation. During this stage, cows and heifers will often appear nervous and isolate themselves from the rest of the herd. The calf actually initiates calving. Near the end of gestation, the calf is so large that there is little space left in the uterus. Consequently, it is believed that the calf becomes stressed – causing the calf to release a hormone that ultimately causes enzymes to convert progesterone to estrogen, and the placenta to produce prostaglandin. As estrogen and prostaglandin increase, the uterus begins to contract. Uterine contractions push the calf towards the cervix. Continued pressure on the cervix causes oxytocin release, which helps to increase the contraction of the uterus. Complete cervical dilation occurs when the calf enters the cervix. Stage 1 is complete when the calf enters the cervical canal. Stage 1 usually lasts 2 to 6 hours.

Stage 2. Expulsion of the calf. During this stage, cows and heifers will often lie on their side. As calving continues, mucus is secreted which reduces friction between the calf and the reproductive tract. As contractions increase, the calf's feet and head put pressure on the fetal membranes – and when the pressure reaches a certain level, the membranes rupture. The fluid lubricates the birth canal. As the calf enters the birth canal, it struggles to breathe, which causes further uterine contractions. It is not unusual for the feet to appear and disappear several times during the early part of delivery. However, progress towards delivery should be made within 1/2 hour from appearance of the feet. The uterine contractions are accompanied by abdominal muscle contractions of the dam, which help to expel the calf. The second stage ends with the delivery of the calf. Stage 2 usually lasts less than 1 hour.

Stage 3. Expulsion of the placenta. In normal cows, expulsion of the placenta occurs shortly after expulsion of the calf. Stage 3 usually lasts between 6 to 12 hours after calving. Cows not cleaning within 12 hours of birth of the calf are considered to have retained placenta.

Para los empleados ...

La Fisiología del Parto

¿Por qué aprender acerca de la fisiología del parto? Porque la comprensión de la duración y los signos del parto son importantes para identificar los problemas de parir e intervenir en una manera oportuna.

El parto es un proceso continuo. No obstante, hay tres etapas:

- 1.El inicio de las contracciones uterinas y dilatación de la cerviz
- 2.La expulsión del becerro
- 3.La expulsión de la placenta

Etapa 1. El inicio de las contracciones uterinas y dilatación de la cerviz. Durante esta etapa, las vacas y las vaquillas se muestran nerviosas y se separan del grupo. El becerro inicia realmente el parto. Cerca del fin de la gestación, el becerro es tan grande que hay poco espacio en el útero. Consecuentemente, se cree que el becerro comienza a estresarse – y libera una hormona que provoca que las enzimas conviertan la progesterona al estrógeno, y que la placenta produzca prostaglandina. Con el aumento de estrógeno y prostaglandina, el útero comienza a contraerse. Las contracciones uterinas empujan el becerro hacia el cuello del útero. La presión continua en el cuello del útero causa la liberación de oxytocina, que ayuda a aumentar las contracciones del útero. La dilatación completa del cuello del útero ocurre cuando el becerro llega hasta él. La primera etapa está completa cuando el becerro entra el cuello del útero. Esta etapa dura 2 a 6 horas.

Etapa 2. La expulsión del becerro. Durante esta etapa, las vacas y vaquillas a menudo se acuestan a su lado. Cuando el parto continúa, se secreta una mucosa que reduce la fricción entre el becerro y el tracto reproductivo. Cuando aumentan las contracciones, las patas y la cabeza del becerro ejercen presión sobre las membranas fetales – y cuando la presión alcanza un cierto nivel, las membranas fetales se rompen. Este líquido lubrica el canal del nacimiento. Cuando el becerro entra en el canal de nacimiento, lucha para respirar. Esto causa unas contracciones uterinas adicionales. A veces las patas aparecen y desaparecen varias veces durante la parte inicial del parto. Sin embargo, este proceso no debe durar más de media hora. Las contracciones uterinas están acompañadas de contracciones abdominales, que ayudan a expulsar el becerro. Las dificultades del parto generalmente ocurren en esta etapa. La segunda etapa está completa con el nacimiento del becerro. Esta etapa dura menos que una hora.

Etapa 3. La expulsión de la placenta. En vacas normales, la expulsión de la placenta ocurre poco después de la expulsión del becerro. La tercera etapa dura de 6 a 12 horas. Después del parto, las vacas que no se “limpian” antes de 12 horas, se considera que tienen la placenta retenida.

Dairy Update is compiled by Joseph C. Dalton, Associate Professor and Extension Dairy Specialist for the University of Idaho Department of Animal and Veterinary Science. For more information, contact Dr. Dalton at the Caldwell Research and Extension Center, 1904 E. Chicago Street, Suite AB, Caldwell, ID 83605, (208) 459-6365, dalton@uidaho.edu.



Extension Dairy Specialist

**Cooperative Extension System
U.S. Department of Agriculture
University of Idaho
1904 E. Chicago Street, Suite AB
Caldwell, ID 83605**

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Coming Events

- ◆ **International Embryo Transfer Society Annual Conference**, Denver, CO, January 5-9, 2008. For more information: <http://www.iets.org/2008/index.asp>
- ◆ **National Mastitis Council Annual Meeting**, New Orleans, LA, January 20-23, 2008. For more information: <http://nmconline.org/annualmeet/NMC2008.pdf>
- ◆ **Tri-State Northwest Dairy Shortcourse**, Boise, ID, January 30-31, 2008. For more information: <http://capps.wsu.edu/conferences/tsdairy/>
- ◆ **World Ag Expo**, Tulare, CA, February 12-14, 2008. For more information: <http://www.worldagexpo.com/index.html>
- ◆ **High Plains Dairy Conference**, Albuquerque, NM, March 6-7, 2008. For more information: http://www.highplainsdairy.org/HPDC%20Brochure_2008.pdf
- ◆ **Dairy Calf and Heifer Association Annual Conference**, Rochester, MN, April 1-3, 2008. For more information: <http://www.pdhga.org/2008conference.htm>