



Penn State Cooperative Extension Capitol Region Dairy Team

PARASITE CONTROL IN HEIFERS Dr. Arlen Mills Extension Veterinarian Capitol Region

Research has shown that Holstein heifers should calve between 22.5-23.5 months of age to maximize lifetime performance. But it has also been shown that weight at calving has a greater impact on first lactation performance than did calving age.

This suggests that heifers be bred by weight and not just by age. This dictates that Holstein heifers weigh 750 to 850 pounds when bred to produce a fresh heifer that weighs in at 1,250 pounds.

One hindrance to raising heifers that meet these standards can be intestinal and stomach worms. We occasionally see the heifer that has been devastated by parasites, but much more common is the chronic parasitism that results in reduced growth.

Roundworms are the most devastating internal parasite of cattle. These include the brown stomach worm, *Ostertagia*. All of these worms share a common life cycle. In an infected animal, adult worms produce eggs that are expelled from the host in the feces, contaminating the pasture. A pasture can remain contaminated for up to a year.

Once the eggs are passed onto the pasture, they hatch and become immature worms called larvae. Infection of a new host occurs when these larvae are consumed with blades of grass. These swallowed larvae mature in the new host, starting the life cycle all over again.

The level of parasite infestation in livestock and pastures varies with season and management practices. Parasite activity peaks in the spring, varies during the summer depending on conditions, and declines during a normal winter. Therefore, steps to control worm problems should focus on the times of higher worm activity.

Age of livestock should also influence decisions concerning parasites. Younger cattle are more susceptible to worm infections. A mature cow under a good nutrition program will develop some acquired immunity to parasites, so is less bothered by their presence than young cattle. Thus parasite control should focus on the young livestock.

Therefore, focus parasite control on young stock during the time of high worm activity and combine management with proper use of deworming medications.

Deworming medications should be used in a timely manner so as to reduce infection before symptoms of disease occur. Treatment should be aimed at interrupting the life cycle of the parasite in an effort to minimize pasture contamination.



Dr. Arlen Mills

There are a number of dewormers on the market. Most of these products are either avermectins/milbemycins (ivermectin, doramectin, eprinomectin, and moxidectin) or benzimidazoles (oxfendazole, albendazole, and fenbendazole). Avermectins/milbemycins have the advantages of providing control of some external parasites and persistent protection for days to weeks after treatment.

Putting this all together, we need to concentrate our efforts on controlling parasites in the young, growing stock by timely use of dewormers to limit contamination of pastures or lots. This will limit parasite burdens in the most susceptible stock. To do this, all young stock should be treated with an appropriate dewormer prior to being turned out onto a lot or pasture. This should be done each spring in March or April to counter the spring rise in worm activity. If possible, place less susceptible, mature cattle on contaminated pastures and attempt to prevent overgrazing. Animals on overgrazed pastures graze closer to the ground and pick up more worm larvae.

Animals on pasture may need to be dewormed again in mid-summer as worm egg counts tend to rise in lots or pastures where livestock are maintained. A final treatment needs to be done in the fall to remove any remaining worms. At this time, be sure to use a product that removes external parasites as well before animals are grouped for winter housing.

Having your veterinarian do fecal egg counts can monitor levels of parasite infection and treatment success. Realistically, a herd should be sampled on multiple occasions to determine worm prevalence.

Most losses because of worm infestations go unnoticed because of the chronic nature of the problem. But this does not diminish the magnitude of the end result. Parasite control in young stock will provide a significant return on your investment.

100 Inducted Into 4-H Hall Of Fame

MILLIE BUNTING Market Staff

CHEVY CHASE, Md. — One hundred people who have made a significant impact on 4-H at the local, state, or national level were inducted into the National 4-H Hall of Fame on April 11 during the National 4-H Conference.

Existing exclusively in cyberspace, the National 4-H Hall of Fame is unique with the honorees featured on their own Webpages which can be accessed at www.nae4ha.org/hof.

The National Association of Extension 4-H Agents (NAE4-HA) created the National 4-H Hall of Fame as part of the 4-H Centennial celebration. Each person's Webpage features his or her photograph, a brief biography, and a quote. Some also have pictures of 4-H'ers and activities that go back to the early 20th century.

Many of those being honored in cyberspace died years ago, but they have not been forgotten for their service and contributions to 4-H.

This first class of 100 represents hundreds of thousands of dedicated volunteers and county, state, and national professional staff who have helped millions of young people learn valuable life skills through 4-H during the last 100 years.

The Centennial Class of 2002 includes 13 4-H pioneers, 29 state extension directors, state program leaders or state staff, six major donors, nine county 4-H agents, 10 of the founders of NAE4-HA, 11 long-term volunteers (many with 50 or more years of service), three state or national government officials, six national program leaders, a songwriter, an astronaut, and several very successful business persons.

Every state and Washington, D.C. had at least one nominee inducted, as well as individuals from the National 4-H Council, 4-H/USDA, and the National Association of Extension 4-H Agents.

From the Northeast/Mid-Atlantic states, the 4-H Hall of Fame includes Connecticut: Bernie Assard; Delaware: Sam Gwinn; Massachusetts: Sonny Almeida; Massachusetts: Fred Hutchinson; Maryland: Phyllis Cox, Norman Lawton; New Hampshire: Ruth Kimball; New Jersey: Ted Blum; Catherine Rupner; New York: Albert Hoefer, Don Stiles, and Harold Wilman; North Carolina: Leary

R. Hamil; Pennsylvania: Ursula Bell Linn, Charles McBride; Rhode Island: J. Whitney Bancroft; Vermont: Mary Cadson; Virginia: William Skelton; Washington, D.C.: Ann Harding; and West Virginia: William Kendrick, Mildred Fizer.

Honored for their work on behalf of the National 4-H Council were the late Norman C. Mindrum, Minnesota, a co-creator of the Council, who retired in 1982 as CEO; Grant A. Shrum, a major player in the creation of the council, who retired as president and CEO in 1986; Richard J. "Dick" Sauer, who was president and CEO from 1989 to 2000; and Kathleen Flom, Rockville, Md., 4-H member in Minnesota. Flom was the 1933 Minnesota State Leadership winner, and subsequently active as a 4-H youth development educator both in Minnesota and at the national level. That involvement included 20 years in administrative positions at National 4-H Center, USDA, and the Government of Uganda until retirement in 1979.

Jim Davis, president of Paws, Inc. and the creator of the Garfield comic strip, was honored for his support of 4-H. Garfield is the 4-H's Centennial mascot, thanks to Davis, who was a 4-H member in Indiana.

From the agribusiness community, those inducted into the National 4-H Hall of Fame were Roger C. Beach, Houston, Texas, vice president of Unocal Corporation; Robert B. Gill, Mount Vernon, N.J., retired vice chairman of the board of the J.C. Penny Company, Inc.; Ralph W. Ketner, Salisbury, N.C., co-founder and chairman emeritus of the board of Food Lion, Inc.; Lynn D.W. Luckow, president and CEO of the Northern California Grantmakers; and Gene Swackhamer, Ph.D., Sparks, Md., employed in the agrifinance field, a former 4-H'er and winner of a college scholarship at the National 4-H Congress and creator the 4-H Council's Salute to Excellence volunteer recognition program.

Organic Standards Board To Meet May 6-8 In Texas

WASHINGTON, D. C. — The USDA's National Organic Standards Board (NOSB) will meet May 6-8 at the Clarion Inn and Suites Conference Center, 2200 IH-35 South, Austin, Texas.

Meeting sessions will run from 8 a.m.-5 p.m. May 6, from 8 a.m.-5 p.m. May 7, and from 8 a.m.-11:30 a.m. May 8. All sessions are open to the public.

At this meeting, the NOSB will receive committee reports, an update from USDA's National Organic Program (NOP), and reports from the Board Policy Task Force and Composting Task Force. The NOSB will also review materials to determine if they should be recommended for inclusion on the National List of

Allowed and Prohibited Substances.

Time has been scheduled for public comment on May 6, 8:45 a.m.-10:45 a.m., and May 8, 10 a.m.-11 a.m.

Those wishing to provide comments to the NOSB on any organic issue should mail requests to Katherine Benham, USDA-AMS-TMP-NOP, 1400 Independence Avenue, SW., Room 4008-S, AG Stop 0268, Washington, DC 20250-0200 or send requests by fax to (202) 205-7808 or by e-mail to katherine.benham@usda.gov.

For more information, call (202) 205-7806 or visit the National Organic Program website at www.ams.usda.gov/nop.

Milk Premium Hearing Set

HARRISBURG (Dauphin Co.) — The Pennsylvania Milk Marketing Board will conduct a hearing May 1 for Milk Marketing Areas 1, 2, 3, 4, 5, and 6.

The purpose of this hearing is to receive testimony and exhibits concerning whether an adjustment should be made to the cur-

rent state-mandated over-order premiums of \$1.65 per hundred pounds of Class I milk due to expire June 30.

The hearing will commence at 9 a.m. in Room 202 of the Agriculture Building, 2301 North Cameron Street, Harrisburg.

Dairy Stakeholders Seek Pacesetter Nominations

MIDDLETOWN (Dauphin Co.) — Do you know a producer in the Pennsylvania dairy industry who is successful at adopting new, more efficient ways of producing milk? Are you a member of an organization that has developed a unique program beneficial to the industry? Is there a company that you feel provides the visionary and innovative products or services that are essential to the survival of the Pennsylvania dairy industry? Any or all of the above would be good nominees for the 2002 Pacesetter Award, sponsored by the Pennsylvania Dairy Stakeholders.

The Pacesetter Award recognizes those in the Pennsylvania dairy industry who bring positive recognition or advancement to the industry, create positive attitudes about the industry among producers and their families, or create a growing recognition by consumers that a healthy grow-

ing dairy industry is positive for everyone who lives and works in Pennsylvania. The award also recognizes dairy food processing and distribution businesses that maintain and invest in a long-term commitment to the Pennsylvania dairy food industry.

"We created the award to recognize individuals or organizations who have contributed significantly to a positive image for Pennsylvania's dairy industry," said Ralph Heffner, Pacesetter committee chair.

Up to three recipients are presented with the Pacesetter Award

each year. The Pacesetter Award may be presented at any function that provides winners with proper recognition. Past recipients include Land O'Lakes, Inc., Carlisle, Brubaker Farms, Mt. Joy, Tom Craig of Murmac Farms, Bellefonte, and John Hess of JoBo Holsteins, Gettysburg.

Nominations and self-nominations are accepted from anyone. Nominations should be submitted to the Pennsylvania Dairy Stakeholders Board of Directors. For an application, contact N. Alan Bair at (717) 948-6328 or nab4@psu.edu.

Lancaster Farming

Check out our Website!

www.lancasterfarming.com