

Calving Ease

February 2004

with **Sam Leadley** of Attica Veterinary Associates &
Pam Sodja of Offhaus Farms

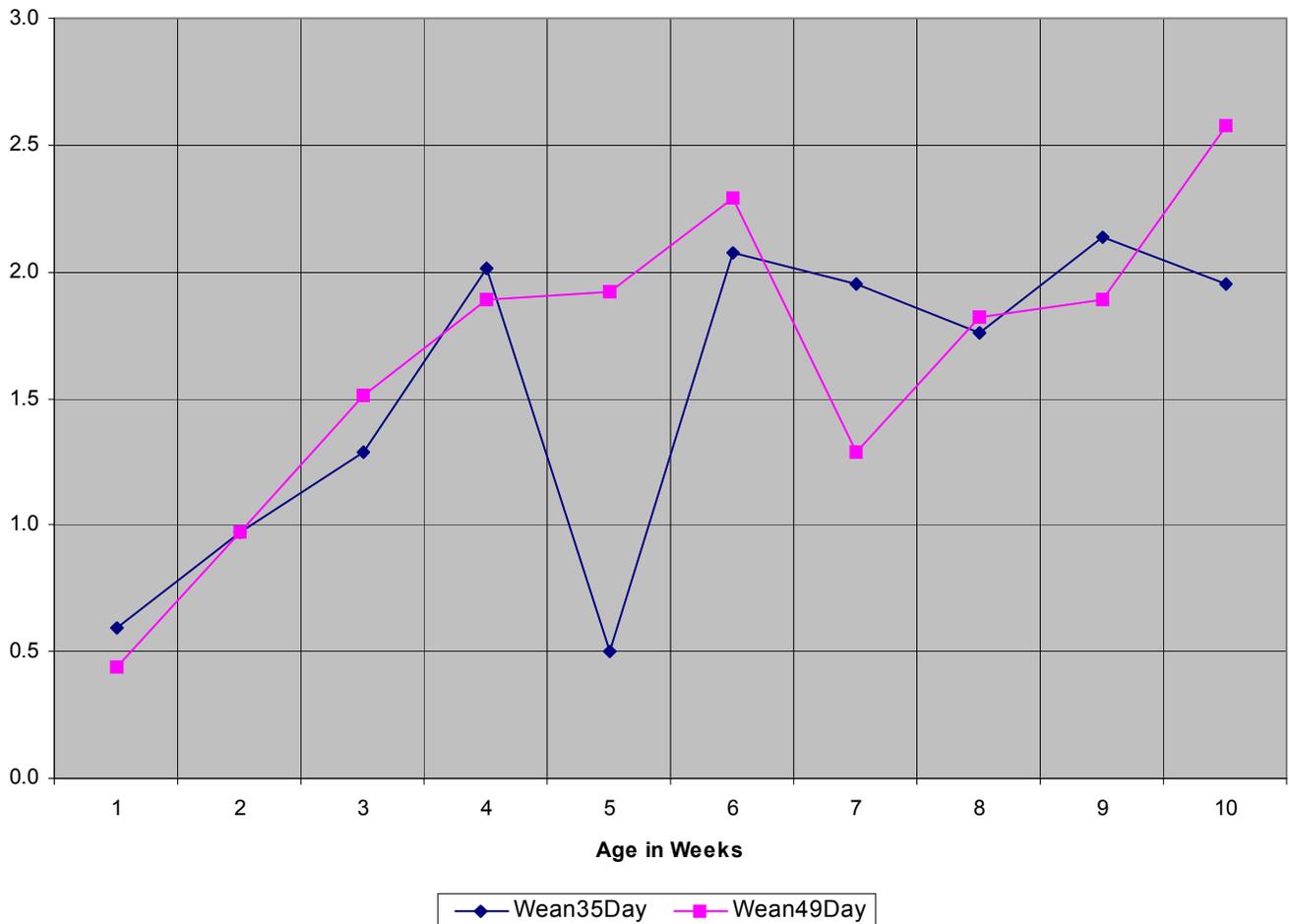


Revised from March '95

Weaning Calves

The great weaning debate? When to wean? How to wean? NO, NO, NO. This is about weaning stress. As part of research on a completely different subject, scientists at the University of Tennessee weighed their calves weekly for 10 weeks. Some of them were weaned at 5 weeks while others were not weaned until 7 weeks. These weights, therefore, reflected post-weaning stress. The results are below. Remember that these are pounds of gain per day.

Average Daily Gain in Calves Weaned @ 35 days & 49 days



At both times (35 days=5wks)(49 days=7wks) weaning resulted in observable decreases in rate of average daily gain (see above - 75% for 5 week weaning and 44 % for 7 week weaning). Because the research was not designed to measure effects of weaning stress and its small numbers, we can't rely too much on the exact values of 75% and 44%. Now for the rest of the story!

What's the Message for Me?

FIRST – no matter when the weaning took place there was a drop in rate of gain. The average daily gain for calves weaned at 5 weeks dropped from 2 to .5 pounds per day during the week following weaning. The later-weaned calves also decreased, from 2.3 to 1.3 pounds per day during the same period. That means we need to watch very carefully the calves we have just weaned. Those decreases of 75% and 44% suggest that the days immediately after weaning are very stressful for those calves. This is in spite of consuming at least two quarts of calf starter grain daily.

What do we know about stress levels and the immune system's effectiveness in fighting off disease? Stress levels go up and disease resistance goes down.

This is an ideal time for respiratory illness to strike - droopy ears, don't drink water, grain consumption down, and runny noses the first day, and an elevated temperature the next day frequently accompanied by coughing.

SECOND – the stress period seems to be quite short. Note on the graph how quickly the rate of gain bounces back. How long do we need to watch these calves closely? On the average, only about 5 to 7 days.

THIRD – earlier weaning (in this case 5 rather than 7 weeks) seems to result in higher stress levels as measured here by decrease in rate of gain. Notice in the graph that the 5 week-weaned calves dropped 1.5 pound gain per day in contrast to the 7 week-weaned calves dropping only 1 pound gain per day. This difference needs to be understood in the context that these researchers had a small number of Holstein bull calves. But, if anything close to this applies to our calves, **the earlier we wean, the more intensive our management needs to be for these calves. This seems to be especially true for the 5 to 7 days post-weaning.** If you have more than one primary calf-care person, special care arrangements may be necessary for these "high-risk" days for these calves. Or, you may wish to wean on Mondays if you will be there for the next five days to watch them rather than depend on weekend relief workers to make the diagnoses.

Source: J.D. Quigley, III, J.J. Rejman, and K.R. Martin "Response of Peripheral Blood Mononuclear Cells to Mitogenic Stimulation in Young Calves," *Journal of Dairy Science* 77:259-263.

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Jun, '02 Goals: Measuring & Recording (Pt.1)
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Feb, '03 Pooling Colostrum
Mar, '03 Calf Care and Husbandry
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May, '03 The "Only" Way to Raise Calves
Jun, '03 Little Slipups Add Up
Jul, '03 Summer, Calves and Water
Aug, '03 Learning a Skill
Sep, '03 What is Colostrum?
Oct, '03 To Wash or Not to Wash? Who Knows the Answer
Nov, '03 Why Water?
Dec, '03 Stress & Coccidiosis

Jan, '04 Cold Weather Calf Care Tips

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Heifer Discussion Group

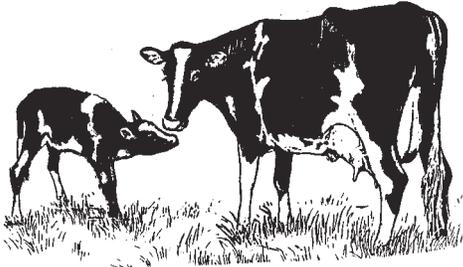
February Meeting Notice Thursday February 19, 2004

11:30 AM to 1:30 PM

Perry Veterinary Clinic

3180 Perry Center Rd. (Rt. 246)

Perry, NY



BVD & Lepto: Heifer Problems & Solutions

Once again we will welcome Dr. Belinda S. Thompson, DVM who is Senior Extension Veterinarian for the NYS Animal Health Diagnostic Laboratory at the College of Veterinary Medicine of Cornell University. Dr. Thompson will discuss Bovine Viral Diarrhea virus and Leptospira. These are two costly diseases that have a major impact on the health of a dairy herd. Because the animals immune system is compromised, often BVD infected animals are the first to be treated for extended periods for a wide variety other of illnesses. What sort of testing should be done for BVD? Is it necessary to test the entire herd? Looking at Leptospira, what sort of herd health problems will be evident when Lepto exists in the herd? How contagious is Leptospirosis? Does Leptospirosis affect calves? How effective is a vaccination program for controlling Lepto or BVD?

This meeting promises to be highly informative and should not be missed.

**Lunch is being provided by:
Pfizer Animal Health
(John Schmitt)**

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