

Livestock Manager

June 2007 Volume 2 Issue 3



Value-Added Sheep Farm Tour, Northland Sheep Farm Saturday, June 2nd

On Saturday, June 2nd, 2007 at 10:00 a.m. Cornell Cooperative Extension of Broome County will sponsor a sheep farm tour to Northland Sheep Farm in Marathon, NY.

Northland Sheep Farm has been very successful in doing value-added products with their sheep for nearly twenty years. They specialize in making their own cheese from their flock of dairy sheep and more recently expanded in to making their own yarn and hides.

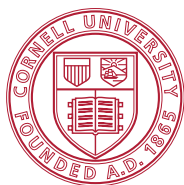
As a small business they emphasize doing with what they have or can obtain very inexpensively. The North's will discuss where they have been and how they started and how they are planning for the future of the operation.

Northland Sheep farm is a grass fed flock of sheep with no grain being fed. They start lambing in April and start milking the sheep in June and dry off in October. During the tour you will be able to see the housing facility, cheese making and aging facility and how they pasture their flock of sheep.

To register or you have any other questions please contact Susan at 584-9966 by May 30th. Space is limited!

Directions:

From Binghamton, Take 81 North to Exit 9 Marathon exit, go straight across 221 as if you were going back on 81, take a right onto Marathon/McGraw Rd, go about 5 miles and take a left onto Hoxie Gorge Rd (next to the Freetown Highway garage), go to the top of the Hill and the farm is on the right, with the yellow mailbox.



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Pasture Walk: Starting & Using a Rotational Grazing System
Saturday, June 16th, 2007 10:00 a.m. - 2:00 p.m.
at the DeYoung Farm
6244 NYS Rt. 79., Chenango Forks, NY



This pasture event will focus on some of the issues/challenges related to starting up a new rotational grazing system. We will look at all the aspects of this new grazing system, from fencing to stream crossings, to watering the livestock, to pasture improvements and more. We will also discuss how the DeYoung's utilized various cost share programs to assist with the process. Here are just some of the highlights:

- ROTATIONAL GRAZING SYSTEM PLANNING/DESIGN – general guidelines, layout, maps, etc.
- WATERING SYSTEM – nose pumps, stabilized access to stream, and more
- FENCING – both farmer constructed and contractor installed high-tensile
- FLOODING ISSUES – affects on grazing management, pasture quality, & fencing
- PASTURE IMPROVEMENTS & MANAGEMENT – improving fertility & introducing new species
- WILDLIFE ENHANCEMENTS – wetlands & potholes created for wildlife habitat improvement
- COST-SHARE PROGRAMS – CRP, AMA, State Grants, EQIP

Jeff and Carol have been expanding their herd and currently graze ~25 head of beef cows on 30 acres along the Chenango River. They began working with the District in 2005. Since then the farm has utilized the Conservation Reserve Buffer Program & Agricultural Management Assistance and will be participating in a State Grant in the near future. They will also be using EQIP funding to create a nutrient management plan.

We hope you are able to join us on what should be an interesting and informative day examining the many facets of starting a rotational grazing operation. If you are starting or thinking about starting a rotational grazing system, interested in fencing & watering systems, participating or interested in cost-share programs, or even if you are an experienced grazier, there will be something valuable to learn.

Contact Dan Vredenburg at 724-9268 for more information on the walk.

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Cornell Sheep Farm Field Days – June 16

The Cornell Sheep Program hosts informal, quarterly field days in conjunction with each of the five lambing seasons a year associated with the STAR© accelerated lambing system at the Cornell Teaching & Research Center Sheep Farm. The field days are from 9 am to 3 pm on about the second Saturday after the start of each of the five 30-day lambing seasons. The field days provide an opportunity for participants to see how a highly productive sheep system is managed and to ask questions of sheep specialists about management and marketing of sheep. Topics covered vary with the season. In general, they include lambing management, breeding, feeding, grazing management, and marketing. Registration is required by contacting the Sheep Farm Manager, Brian Magee, at bhm5@cornell.edu or 607-844-8367. For more information about the field days and other events and sheep farming information, visit the Cornell Sheep Program web site: <http://www.sheep.cornell.edu/>.

Wondering about the secret ingredients to making a farm-based dairy value-added venture work?

The Center for Agricultural Development and Entrepreneurship, known as CADE, is offering a series of farm tours for those interested in starting or expanding a value-added dairy business. The tours will allow would-be value-added producers to get a few questions answered firsthand. Learn how New York State farmers process small scale batches of cheese, yogurt and bottled milk. Ask what it took to get started.

The tours are sponsored in part by a grant from New York Farm Viability Institute, which recently awarded the non-profit CADE \$50,000 to assist eight Central New York farms with dairy value-added businesses through collaborative marketing and distribution.

Tours are:

- Evans Farmhouse Creamery, Norwich. 11 a.m.-2 p.m. Saturday, Aug. 18. Husband and wife team Dave and Sue Evans will walk visitors through their operation, where Jersey milk is made into organic bottled milk, cheese, yogurt and butter, which is sold throughout the state.

- Painted Goat Farm, Garrattsville. 11 a.m.-2 p.m. Saturday, Oct. 13. Ilyssa Berg will discuss starting a business from the ground up as she shows off her recently-built barn and processing facility for farmstead goat cheese.

Cost of each tour is \$25 and includes lunch. Registration is required. For more information, visit www.cadefarms.org or call (607) 433-2545.

Farm Visit's

Are you looking for a new perspective or just want to show off what you are doing so that when an opportunity arises it will be directed your way. CCE does offer free farm visits and is glad to work out a time to come out and visit your farm and see how things are going. Give Brian a call to set up a good time at 584-9967!



Check out this New Goat Website

Cornell University Department of Animal Science Extension Website for Goats is up and running and has some great information. To learn more go to <http://www.ansci.cornell.edu/goats/index.html>.

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New Cornell soil health test adds physical, biological properties to analysis

The difference between visiting a doctor to treat a cold and a trip to the doctor for an annual checkup that offers recommendations for avoiding future illness is one way to appreciate a new soil health testing program being developed by Cornell University's Department of Crop and Soil Science.

Soil health tests explore beyond the scope of traditional chemical tests, which measure soil nutrients and are used to determine the types and amount of fertilizer a given field may need to productively grow particular plants.

"Soil health is more than chemical aspects. Examining the physical and biological aspects may reveal a problem that doesn't show up in chemical analysis, said Robert Schindelbeck, a researcher with Cornell's Department of Crop and Soil Science. "The soil health test is a comprehensive screening procedure.

Armed with a two-year \$116,000 grant from the New York Farm Viability Institute, the Crop and Soil Science team is launching an outreach education effort to encourage growers to try the test.

More than 200 growers, Cooperative Extension educators and agricultural consultants received training in soil health testing this winter at events on campus, at producer-groups annual meetings, corn congresses and other venues.

Additionally, the Crop and Soil Science department began distributing in early spring penetrometers, soil health manuals, sampling instructions and coupons to county and regional Cooperative Extension offices to encourage use of the new tests.

The coupons help defray the cost of testing, which includes \$45 in materials alone. Growers will pay \$20 using the coupon system, available at county and regional Cornell Cooperative Extension offices.

Carol Mac Neil, an educator with Cornell Cooperative Extension of Ontario County, has worked on soil health assessments with approximately 15 vegetable growers in the Finger Lakes and western New York regions since 2002. Working with Cornell's Crop and Soil Science department and funding from the USDA's Northeast Sustainable Agriculture Research Education program, Mac Neil and growers in nine counties began trying different soil health tests as they were developed. The most recent version from Crop and Soil Health is a more user-friendly, streamlined test, she said. "We knew our soils were poor, and the tests confirmed what we were saying and what we could see by way of poor performance, Mac Neil said. "We found soils that had a compaction level or not enough organic matter or were too porous to retain water.

Soil health tests aim to reveal what a traditional nutrient analysis might miss. That is, a field may display appropriate levels of nitrogen, for example, but is not conducive to high crop yields because of its inability to support water percolation, root depth or other factors. Soil health factors can become particularly important in "bad weather years, such as flooding or draught, when the ability of the land to retain or shed water is crucial.

"Decades of intense production on farms has caused many of us to forget how things used to be, Mac Neil said, describing a benchmarking study in which she compared the quality of soils in production fields and adjacent hedgerows that had been out of production for years. "We found the potential in these soils is often really great, she said.

In addition to applying nutrients, soil health can be improved by adding organic matter, planting cover crops, crop rotation and reduced-till plowing, among other methods.

Schindelbeck offered an analogy: "You could think of traditional soil testing as your grade school report card that comes back with, 'you are failing math, and soil health testing as an assessment that says, 'not only are you failing math, but here is what you might do to make change. "Nutrient analysis will tell you that you have enough phosphorus. Soil health tests tell you your phosphorus levels are high and keep that on your radar because too much phosphorus can be detrimental to plants.

Soil samples will be taken from mid-April through June (contingent on the ground being warm and dry enough). The samples must be taken with a penetrometer, a device that measures compaction. The samples need to be refrigerated and mailed overnight to Cornell's lab. "We are used to the old soil sampling where you throw soil in a bag, throw it in your trunk and drop it in the mail when you think to do it," Schindelbeck said.

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Few growers own penetrometers and at \$225 apiece are not likely to rush out and purchase one. Cooperative Extension offices are beginning to acquire them.

“We want to promote cooperation between the grower and the extension agents, Schindelbeck said. “If we bring a bunch of people together, we might be able to figure out a few things that are working well. Growers can share positive results with others, and so on.”

Cornell’s Crop and Soil Science is encouraging Cooperative Extension educators to conduct field demonstration days this summer, when preliminary data on this year’s tests should be available. Mac Neil is planning to demonstrate soil health sampling techniques alongside educational programs such as no-and reduced-till plowing and other topics growers have requested information about.

Soil health tests include the information gleaned from traditional soil tests. Copies of the nutrient analysis will be mailed to both the grower and the local Cooperative Extension office within two-three weeks of when the sample is received at Cornell. The soil health results should arrive within four-five weeks.

For more information about soil health testing or to download a free copy of “Cornell Soil Health Manual, visit the website, <http://soilhealth.cals.cornell.edu/>.

Total Sheep and Lamb Inventory Down 1 Percent

All sheep and lamb inventory in the United States on January 1, 2007, totaled 6.19 million head, down 1 percent from 2006, but still 1 percent above 2005. After two consecutive year to year increases, inventory growth was hampered by extremely dry weather in the Southwestern part of the United States.

Breeding sheep inventory decreased to 4.62 million head on January 1, 2007, down slightly from 4.64 million head on January 1, 2006. Ewes one year old and older, at 3.71 million head, were 1 percent above last year.

Market sheep and lambs on January 1, 2007, totaled 1.57 million head, down 2 percent from January 1, 2006. Market lambs comprised 94 percent of the total marketing’s. Twenty-five percent were lambs under 65 pounds, 14 percent were 65 - 84 pounds, 25 percent were 85 - 105 pounds, and 36 percent were over 105 pounds. Market sheep comprised the remaining 6 percent of total marketing’s.

The 2006 lamb crop of 4.09 million head was down 1 percent from 2005. The 2006 lambing rate was 112 lambs per 100 ewes one year old and older on January 1, 2006, down 3 percent from 2005.

Shorn wool production in the United States during 2006 was 36.0 million pounds, down 3 percent from 2005. Sheep and lambs shorn totaled 4.85 million head, down 4 percent from 2005. The average price paid for wool sold in 2006 was \$0.68 per pound for a total value of 24.4 million dollars, down 7 percent from 26.3 million dollars in 2005.



Total Goat and Kid Inventory Up 3 Percent

All goat inventories in the United States on January 1, 2007, totaled 2.93 million head, up 3 percent from 2006. Breeding goat inventory totaled 2.44 million head up 3 percent from 2006. All market goats and kids totaled 494,000 head, up 4 percent from a year ago. On January 1, 2007 meat and all other goats totaled 2.40 million head, up 5 percent from 2006. Milk goat inventory increased 2 percent to 296,000 head while angora goats were down 8 percent totaling 238,000 head. The 2006 kid crop totaled 1.92 million head for all goats, up 4 percent from 2005.

Mohair production in the United States during 2006 was 1.35 million pounds. Goats and kids clipped totaled 216,000 head. Average weight per clip was 6.30 pounds. Mohair price was \$3.68 per pound with a value of 4.98 million dollars.

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Pasture Survey:

The Agricultural Research Service (USDA-ARS) in State College, PA is conducting an on-line survey about pasture seed mixtures being used throughout the Northeast. The survey takes just a few minutes to fill out, and they would also like input from those who have not re-seeded or renovated any pastures recently. The survey is anonymous. For more information and to complete the survey, click here: www.forages.psu.edu/survey/index.html.

Grass-fed Beef Resource

More ideas on grazing beef cattle - Here's another resource for those of you who may be considering a move to grass-fed beef production, or even those of you who are currently producers of grass-fed beef but looking for new ideas. Check out the Bakewell Reproductive Center's website at www.bakewellrepro.com or www.hardwickbeef.com, as these folks also do some marketing of grass-fed beef here in the Northeast.

FDA/USDA Joint News Release: Scientists Conclude Very Low Risk to Humans from Food Containing Melamine

USDA Releases Some Swine and Poultry for Processing

There is very low risk to human health from consuming meat from hogs and chickens known to have been fed animal feed supplemented with pet food scraps that contained melamine and melamine-related compounds, according to an assessment conducted by scientists from five federal agencies.

In the most extreme risk assessment scenario, when scientists assumed that all the solid food a person consumes in an entire day was contaminated with melamine at the levels observed in animals fed contaminated feed, the potential exposure was about 2,500 times lower than the dose considered safe. In other words, it was well below any level of public health concern.

The risk assessment is an important new science-based component of the continuing federal joint investigation into imported wheat gluten and rice protein concentrate from China that contained melamine and melamine-related compounds.

The risk assessment was conducted by scientists from the Food and Drug Administration (FDA) and the Centers for Disease Control and Prevention (CDC) of the Department of Health and Human Services (HHS), the Environmental Protection Agency (EPA), U.S. Customs and Border Protection (CBP) of the Department of Homeland Security (DHS) and the Food Safety and Inspection Service (FSIS) of the U.S. Department of Agriculture (USDA). This team is now compiling a scientific assessment of the risk to animal health associated with ingestion of animal feed containing melamine and its compounds.

FDA and USDA are in the process of identifying a group of experts to convene a scientific advisory board that would be charged with reviewing the risk assessment. This group would also be asked to contribute to future scientific analysis related to the risk of melamine and its compounds to humans and animals.

In the course of the investigation, it was discovered that pet food was contaminated by wheat gluten and rice protein concentrate that contained melamine and its compounds. Subsequently, scraps of contaminated pet food that contained only low levels of melamine were distributed to farms in a limited number of states and added to the feed consumed by swine and poultry. These scraps constituted only a small percentage of the farm animal rations. In addition, melamine is known to be excreted in animal urine. When exposure levels are much higher, as was the case with cats and dogs, the melamine and its compounds appear to cause the formation of crystals in the kidney systems, resulting in kidney damage. There was no indication of kidney damage in hogs. Both hogs and chickens known to have been fed contaminated feed appear to be healthy.

This dilution factor was an important piece of data considered in the multi-agency science-based human risk analysis and helps to support the conclusion that there is very low risk to human health from eating meat from animals that were fed the contaminated product. This conclusion supports the decision announced on April 28 not to recall meat from animals that were fed contaminated product.

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Currently, swine and poultry on farms suspected of receiving contaminated feed are being held under state quarantine or voluntarily by the owners. In several cases, feed samples have tested negative for melamine and related compounds. These tests were conducted by federal laboratories or state laboratories using approved methods. It is assumed that because only small amounts of the contaminated feed were mixed with other rations, the melamine and related compounds were no longer detectable. USDA has concluded that, based on the human risk assessment and the inability to detect melamine in the feed samples, these animals no longer need to be quarantined or withheld from processing.

In other cases, feed samples have tested positive for melamine and related compounds; feed samples were not available; or feed samples have not yet been submitted for testing. These animals continue to be withheld from processing, but are not yet being culled, pending the results of the animal risk assessment. This assessment is expected to be completed within one week. At that time, USDA will determine whether these animals can be released for inspection and further processing.

USDA and FDA continue to conduct a full and comprehensive investigation. As additional information is confirmed, updates will be provided and decisions will be made using the best available science to protect the public's health.

To ensure no further contaminated products enter the U.S., the federal government will continue to monitor imported wheat and corn gluten as well as rice protein concentrate and isolates arriving from all countries destined for human and animal consumption. The FDA import alert for these products sourced from China remains in effect and U.S. Customs and Border Protection will continue laboratory testing of the products as they enter the U.S. The inspections are a precautionary measure to ensure the safety of products entering at U.S. ports of entry. There is no evidence to suggest products bound for the human food supply are contaminated.

For additional information about the pet food and contaminated feed investigation, go to www.fda.gov or www.usda.gov. The human safety/risk assessment will be available online upon completion of an executive summary.

10 ways to safeguard your horse from developing this potentially fatal hoof condition Laminitis

By the Editors of EQUUS magazine

Here are guidelines for feeding, health and management to minimize the risk of laminitis.

Concentrated Rations:

1. Match your horse's diet to his individual energy needs. Feed only as much high-energy concentrate as necessary.
2. When extra energy is required or your horse is losing weight, feed oats or a low-starch commercial mix fortified with up to two cups of vegetable oil.
3. Make corrective changes to his diet gradually to reduce the likelihood of digestive distress.
4. To prevent him from bingeing, keep all high-energy feeds doubly secure. Place them in closed containers behind a horse-proof feed-room door.

Grazing:

5. Limit access to lush pasture, particularly when it is emerging in the spring or recovering after drought. Gradually introduce horses unaccustomed to turnout: Begin with 15 minutes of grazing a day, then build up to the desired turnout time over the next several weeks. If your horse is overweight, a cresty easy keeper, has had laminitis in the past, or is otherwise susceptible to the condition, consider muzzling him when you turn him out on lush pasture.
6. Offer quality grass hay tested for starch and sugar. Avoid clover and alfalfa as pasture and hay for susceptible horses.

Healthcare:

7. Prevent systemic illness that can lead to laminitis through regular deworming, vaccinations and other routine health maintenance.

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Hooves:

8. Have his hooves trimmed regularly.
9. If your horse is lame, support the opposite “good” foot as well as the one with the problem to reduce the risk of the sound limb developing mechanical laminitis.
10. Avoid long gallops over extremely hard ground, which can subject your horse’s hooves to excessive concussion.

April/May Beef Cattle Comments – Prepared by Mike Baker

UNDERSTANDING NEONATAL CALF DIARRHEA

Neonatal calf diarrhea or CALF SCOURS generally is caused by one or more of the following disease organisms: Rota virus, Corona virus, Cryptosporidium parvum, E. coli (K99 enterotoxigenic form), or Salmonella. Understanding the impact that these disease entities have on baby calves can help cow calf managers reduce the adverse effects of calf scours. Adequate colostrum intake by the calf is important for disease protection. A vigorous baby calf nursing a properly immunized, properly fed dam, will be a first line of protection against calf scours.

The first 3 organisms on the above list usually cause diarrhea at 7 to 21 days of age, while the common E. coli strains cause diarrhea within the first few days of life. The E Coli bacteria attaches to cells in the lining of the gut and turn on the fluid pump mechanism to cause excess water secretion into the gut. (Enterotoxigenic scours. Cow vaccination is helpful with this form.) The viral scours are caused by decreased absorption of water from the gut as the virus kills the cells of the gut papilla. (Cow vaccination is available but not always effective). Cryptosporidium and salmonella are zoonotic (transferable to humans) problems. The diarrhea is the result of a combination of factors including: (1) dose (number) of organisms the calf is exposed to, (2) amount or lack of calf immunity (colostrum), and (3) stress on the calf.

When should I treat the calf? Calves running around the pasture with their tails in the air, bucking and kicking with yellow or white diarrhea may not need treatment. The main indications for treatment are (1) general disposition, (2) appetite, (3) dehydration, and (4) body temperature. If the calf is weak, depressed, or reluctant to move these are all indications that something is wrong. If the calf is not eating, the cow’s udder will be distended and this is sign of trouble also. Dehydration can be evaluated easily by pulling up the skin on the side of the neck or shoulder. In a normal calf, the skin snaps back into position quickly. In a dehydrated calf, the skin remains “tented” for a period of time-the longer it remains “tented” the worse the dehydration. Also, as dehydration worsens, the eyeballs sink back away from the eyelids-this is a bad sign and fluids are indicated immediately. Normal body temperature (measured with a rectal thermometer) is 100.5° F to 102.5 ° F. Body temperatures less than 100 ° F and greater than 102.5 ° F is a sign of problems and treatment should be started.

What are the recommended treatments? The main treatment is fluid therapy. Secondary treatments are antibiotics and nursing care. Because the main problem in scouring calves is loss of body fluid and electrolytes, the primary treatment must be aimed at restoring the water balance. The calves are thirsty, but they are too sick to drink. Therefore, the first line of treatment is oral electrolyte solutions. There are a number of excellent commercial products on the market for treatment of calf scours. All of these products contain glucose or a similar material, sodium chloride (table salt), and other electrolytes. The glucose and sodium allow the animal to absorb the water they need from their digestive tract. Giving straight water does not work. Usually 2 liters (just over 2 quarts) of the oral fluid solution is given 1 to 3 times per day to the sick calf. Consult with your veterinarian regarding the appropriate oral electrolyte product for your operation.

Antibiotics are often given to scouring calves even though antibiotics do not kill most of the calf scours agents. Due to damage in the gut of scouring calves, bacteria will “leak” into the blood stream of these calves and cause further problems. Antibiotics are of value for this reason. Antibiotics may kill the normal flora bacteria in the gut and actually make the problem worse but they must be used in circulating infections. Again, consult with your veterinarian regarding the correct choice of antibiotics to give. Many of the antibiotics are not labeled for calf scours and thus require a prescription from your veterinarian and an extended withdrawal time.

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When treating sick calves, always treat them after you have attended to all the normal calves. This will decrease the spread of germs from the sick calves to the younger healthy calves. Also, keep all your treatment equipment clean—including your hands and clothes, as you can easily transmit these agents.

When do I need additional help? If your treatment methods are not working, contact your veterinarian immediately for additional help. If more than 5% of your calves are scouring and require treatment, you need help. If death loss is greater than 2% due to calf scours contact your veterinarian.

Source: (CattleNetwork_Today, 3/14/2007. Dave Sparks D.V.M., Oklahoma State University Area Extension Food-Animal Quality and Health Specialist). (*Source: Dr. Derrell S. Peel, OSU Extension Livestock Marketing Specialist*)

NEW YORK FEEDLOT AND CARCASS VALUE DISCOVERY PROGRAM

Sixteen from New York, Pennsylvania and Vermont consigned 158 cattle to the 10th running of the NY Feedlot and Carcass Value Discovery Program. The calves are pretty typical of the cow herd in the northeast; most being born in March and April, and a Frame Score around 5.0. The projected finish weight is computed from the frame score and reflects the strong English influence in the breeds that make up our local cow herd.

The performance of the remaining cattle is shown in the table below. The natural cattle continue to gain about 0.4 lb. less than the conventional cattle. The natural cattle carry premiums of \$0.16/lb or \$0.25/lb, but cost the producer an additional \$40- \$60 head from increased feed costs and days on feed.

New York Feedlot and Carcass Value Discovery Program, 2006/2007 – 116 day report.

Steers Heifers

Conventional Natural1 Conventional Natural1

n 76 36 17 28

Initial wt, lb 603 549 525 498

Period wt, lb. 1020 943 904 849

ADG, lb 3.6 3.4 3.4 3.0

Cattle in the natural program are not fed an ionophore nor treated with growth promoting implants.

Participating producers receive feedlot performance data such as initial and final weight, average daily gain, and feed efficiency as well information on cattle health. Carcass data is collected and returned to producers including hot carcass weight, depth of back fat, rib eye area, marbling score, quality grade and yield grade. This data is then used to guide decisions on heifer replacements and sire selection. For information on how you can gain this valuable information, contact Mike Baker, 607-255-5923, mjb28@cornell.edu.

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FEEDERS CORNER

New Feed Additive Improves Feedlot Performance

A relatively new feed additive approved by the Food and Drug Administration in 2003 for use in feedlot cattle provides beef producers with an opportunity to improve performance and profitability. Optaflexx is the brand name for ractopamine hydrochloride, a beta-agonist that directs nutrients toward muscle growth. Cattle fed Optaflexx show improved daily gain, heavier live weights, and improved feed efficiencies.

The improved feed utilization results from more efficient use of nutrients for lean growth rather than for fat, as feed intake is not affected. Carcasses are heavier, have larger rib eyes, and have a lower percent fat, with little change in yield and quality grades. Feeding Optaflexx, however, requires a higher level of management principally because it is approved to be fed 28 to 42 days immediately before harvest. Data from five steer and five heifer FDA registration studies are shown below. Although the studies examined 0, 100, 200 and 300 mg Optaflexx per head/day, only the 0 and 200 mg levels are shown here.

Performance results measured during the Optaflexx feeding period are shown in Table 1. During Optaflexx feeding average daily gain (ADG) and feed efficiency (FE) of the steers and heifers was improved with 200 mg Optaflexx. Steer and heifer hot carcass weights (CW) were heavier, while dressing percent (DP) and ribeye area (REA) of the steers increased. Feeding 100 mg Optaflexx improved steer ADG, FE, CW, and REA compared to no Optaflexx. Increasing the dose resulted in numerical, although not statistically significant, improvements of ADG, FE, HCW, and REA at each higher dose (100, 200, and 300 mg). Heifer live traits showed the same trend with each dosage increase, however, HCW and REA were not significantly improved until 200 mg Optaflexx was fed. Very few other differences were seen at any of the levels in the steer and heifer trials.

Evaluation of strip loin steaks obtained from the steers and heifers were conducted as part of the registration studies. No changes in cooking loss, muscle pH, tenderness, juiciness, or flavor were seen when 200 mg of Optaflexx was fed.

While Optaflexx is labeled to be fed at 70 to 430 mg/head/day, the data suggest that 200 mg of Optaflexx results in optimum performance. The daily cost of feeding 200 mg of Optaflexx is approximately \$0.28 per head. Cattle sold on a live basis at \$85/cwt would gross an additional \$14.45 for the extra 17 lbs of gain. The increase in net profit would be \$6.61 after a \$7.84 cost of feeding Optaflexx for 28 days. These calculations do not consider the value of other benefits such as improved feed efficiency. Research conducted to date shows that ration and feeding program changes are not needed to realize the benefits of Optaflexx. Recent K-State research with fed heifers indicates there is no need to change metabolizable protein. The product has been shown to be effective in cattle implanted with various products. Well managed implant programs should continue to be used until research indicates a change is needed. Cattle of different biological-types (British, Continental, and Brahman) have responded similarly to Optaflexx.

Whether selling cattle on a live or carcass basis, feeding Optaflexx can result in heavier weights and improved feed efficiency. Both can result in higher profits. USDA yield and quality grades, and meat quality are essentially unchanged. Although there are potential performance improvements when Optaflexx is fed at levels higher than 200 mg/head/day, the value of the improvements need to be weighed against the increase in product cost. Cattle sales and shipping need to be well planned to prevent feeding Optaflexx less than 28 days or more than 42 days.

(*Source:* Ron Hale, livestock specialist, Kansas State University)

b. Bovine Respiratory Disease In Feedlot Cattle: Environmental, Genetic, And Economic Factors

The objective of this study was to characterize genetic, environmental, and economic factors related to the incidence of bovine respiratory disease (BRD) in feedlot calves. Records from 18,112 calves representing 9 breeds (Angus, Braunvieh, Charolais, Gelbvieh, Hereford, Limousin, Pinzgauer, Red Poll, and Simmental) and 3 composite types (MARC I, MARC II, and MARC III) over a 15-yr period (1987 to 2001) were evaluated. Disease incidence was observed and recorded by station veterinary and technical staff. The incidence of BRD varied across years, with the annual observed incidence ranging from 5 to 44%. From 1987 to 1992, the annual average incidence generally exceeded 20%. However, in later years the annual incidence did not exceed 14%. The epidemiological pattern indicated that

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- BRD infection increased dramatically after 5 d on feed and remained high until approximately 80 d on feed.
- Previous BRD infection during the pre-weaning period did not influence subsequent BRD infection in the feedlot.
- Steers were more likely to become sick with BRD than heifers; castration before entry in the feedlot may be a predisposing cause.
- Few significant differences among breeds were detected for BRD incidence, except that Herefords were generally more susceptible to BRD infection than MARC I and III composite types.
- Composite breed types had similar susceptibility compared with other purebred breeds.
- Mortality associated with BRD was greatest in Red Poll calves (9%) compared with the average over all breeds (4%).
- Estimate for heritability for resistance to BRD was moderate (18%).

Conclusions. Selection for resistance to BRD could be effective if phenotypes for BRD resistance were known. Thus, development of an inexpensive and humane method of challenging animals with BRD to determine resistance would be an important step in reducing the incidence of BRD. This study also demonstrated that producer-collected field data could be used for selection against this disease. The economic loss associated with lower gains and treatment costs for BRD infection in a 1,000-cattle feedlot was estimated as \$13.90 per animal, not including labor and associated handling costs. (Source : Snowder, G.D. et al. 2006. J. Anim Sci.)

c. Combination of De-Wormers More Effective Than Single

Two studies utilizing 1,862 yearling heifers were conducted to determine the effects of a fenbendazole (Panacur®, Safe-Guard®) oral drench in addition to an ivermectin pour-on (SG+IVPO), compared with an ivermectin pour-on (IVPO) or a doramectin (DECTOMAX®) injectable (DMX) alone, on parasite burden, feedlot performance, and carcass merit of feedlot cattle.

- Heifers receiving the SG+IVPO had fewer cattle retreated for disease and 73% fewer worm eggs per fecal sample 98 d after treatment than heifers treated with IVPO.
- Heifers treated with SG+IVPO consumed more DM, had greater ADG, were heavier at slaughter, and had heavier carcasses than IVPO-treated heifers.
- Heifers treated with SG+IVPO also had more ($P = 0.07$) carcasses grading USDA Prime or Choice than IVPO-treated heifers.
- Heifers treated with SG+IVPO had fewer worm eggs per fecal sample 35 d after treatment and had fewer numbers of adult and larval *Cooperia* and *Trichostrongylus* spp. in the small intestine at slaughter compared with heifers treated with DMX.
- Heifers treated with SG+IVPO consumed more DM, were heavier at slaughter, and had heavier carcasses than DMX-treated heifers ($P < 0.01$).
- The SG+IVPO-treated heifers also had greater ADG. Conclusion: The broad-spectrum effectiveness of a combination of a fenbendazole oral drench and an ivermectin pour-on reduced parasite burden and increased feed intake, ADG, and carcass weight in feedlot heifers compared with treatment with an endectocide alone. (Source: Reinhardt, D.D. et al. 2006. J. Anim. Sci.)

Livestock Manager

FARM FINANCIAL RECORDS: WHY QUICKEN®?1

(Editors note: the author, Lori Shipman spoke at the 2007 Winter Management Meeting in January. She has offered to provide training in the use of Quicken for beef operations. If interested please contact Mike Baker, 607-255-5923, mjb28@cornell.edu).

Software created specifically for agriculture is often expensive or cumbersome. Quicken® is a popular commercial record-keeping package that is:

- User friendly. Quicken® is easy for people unfamiliar with accounting terms to use, making it a good place to start when changing from a hand-kept cash accounting system to computerized records.
- Inexpensive and readily available.
- Flexible, allowing financial record-keeping for agricultural and non-ag business enterprises.
- Widely used. Users can compare notes with neighbors on its application and use.

Quicken®'s checkbook register base makes for a familiar environment to begin computerized recordkeeping. Although Quicken® includes only home and general business income and expense categories, farm income and expense categories are easily added. Import options allow you to add a farm category list created at Oklahoma State University that matches the Schedule F, minimizing the effort required to develop a beginning chart of accounts.

Quicken®'s "class" feature can be used with categories to further identify and sort transactions to allow cash reports by enterprise, by partnership share, or by farm. QuickFill features recognize and complete repetitive transactions to reduce the typing required. Splits of transactions allow a specific transaction to be divided into as many as 30 components with different category and/or class assignments. For example, a check written to a farm supply store could be separated into expenses for fertilizer for wheat, feed for hogs, and fuel for checking cattle.

Reports—transactions, cash flow, account balances, balance sheet, comparison, tax summary—are easily generated, information filtered and layout modified. Although tax schedules are not generated, tax schedule reports summarize information recorded that pertains to a specific tax schedule and data can be exported to other software such as TurboTax®.

Built-in financial planning and monitoring features are also useful. Loans can be amortized with scheduled payments retained for future use. Whole farm budgets based on historic Quicken® data can be generated quickly and easily as can budgets developed from "scratch". Comparison reports highlight budget versus actual figures. Quicken® files can be imported easily into QuickBooks®, a popular small business accounting package, if the producer later requires a more sophisticated financial record keeping system.

For agricultural users a major shortcoming in Quicken® is the inability to easily summarize physical data associated with individual financial transactions, making it hard to integrate production and financial records in reports and analysis. Physical quantities and price per unit information can be stored in memo lines and exported to spreadsheets for further summary and analysis. Likewise it is difficult to maintain a depreciation schedule for individual assets. Since Quicken® was written for a broad personal finance market, the user must adjust to the software.

Several versions of Quicken® are available. Quicken® Deluxe has standard features to record transactions, run reports, print graphs, and reconcile your checkbook. In addition, there are time-saving entry features, account-tracking alerts, and online banking features. The Premier product includes the Quicken® Deluxe features plus it provides information and advice for investment decisions with its online features. This includes tax advice, alerts, and a capital gains estimator to evaluate stock purchases and sales for tax liability. The Premier Home and Business product adds features for small business use such as invoices, estimates, accounts payable and receivable tracking, and business reports. Access to the web within any of the versions is an optional feature with the necessary computer hardware.

Livestock Manager

Instruction Manuals

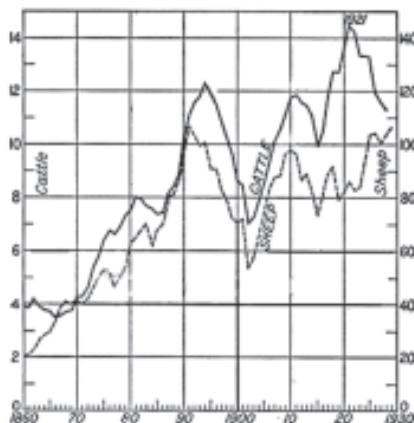
Step-by-step instruction manuals for adapting Quicken for farm and ranch use are available at <http://www.agecon.okstate.edu/quicken/> or from the OSU Agricultural Economics Department for \$25. The instructions include screen captures to demonstrate setting up a file, opening accounts, importing a farm income and expense category list, modifying the category list, using classes with categories, entering transaction data, creating reports and graphs, using the budget and reconciliation features, and backing up data. Educational materials are available on-line at no cost; they may also be purchased from the OSU Agricultural Economics Department, 529 Ag Hall, Stillwater, OK 74078.

QuickTips Newsletter

Workshop participants or notebook purchasers continue to get tips and financial information through the quarterly QuickTips newsletter. It contains reviews of commonly used Quicken® tasks and shares financial management tips. The newsletter and other Quicken® materials are available at <http://www.agecon.okstate.edu/quicken> go to Resources. (Author: Lori Shipman, NYS FarmNet and OSU Agricultural Economics Department)

TRACKING THE FINANCIAL TRENDS IN YOUR FARM OPERATION

It is important for farm managers to develop strategies to deal with not only expected circumstances but also possible disasters. Rather than pass off problems by hoping for a better year ahead, a proactive approach looks for strengths and weaknesses in the operation to find solutions. Waiting can only limit your options. One quick way to look at what is happening on the farm is to look at three years of your Schedule F tax forms side-by-side. If you want to summarize them on one worksheet, Oklahoma State University (OSU) has one on their website in both pdf and Excel spreadsheet format: <http://agecon.okstate.edu/faculty/files/prevyear.pdf> or <http://agecon.okstate.edu/faculty/files/prevyear.xls>. Look for items that have increased significantly. Obviously fuel and fertilizer are likely to have risen unless you cut back on use. What else do you see? And, is there a good reason for the change? Another good tool to monitor the trends on your farm is contained in an OSU Fact Sheet entitled “Farm and Ranch Financial Trends Worksheet”. You can find it at the OSU Extra website, <http://pods.dasnr.okstate.edu/docushare/dsweb/HomePage>. Search for F-238, “Farm and Ranch Financial Trends” (or contact Mike Baker, 607-255-5923, mjb28@cornell.edu for a copy). The trends worksheet reveals the changes in assets, debt, debt-to-asset ratio, family living expenses, and capital expenditures and maintenance for a three year period. What is happening to equity? Are debts rising due to a planned expansion or lack of revenue? Is your line of credit getting paid off during the year? Are you living on credit cards for family living expenses? Observing the financial trends of your operation can reveal ongoing problems versus acute issues caused by outside factors. Put your financial and tax records to good use in planning and analysis. (Source: Shipman and Doye, 2006. “Quick Tips”, Oklahoma State University. <http://www.agecon.okstate.edu/quicken/Using%20Quicken/QTV48final.pdf>)



Livestock Manager

TO/DO Early Summer

a) Vaccinating cows for IBR, BVD, BRSV, PI3, and Leptospirosis is an important part of an effective herd health program. Consult with your veterinarian about using modified live vaccines on open cows prior to breeding your cowherd.

b) Get ready for breeding season:

- If you use A.I. order semen and check your equipment.
Be sure breeding corral is in working order
- If breeding naturally, make sure you have enough bulls:
10-15 cows per yearling bull; 20-25 cows per 2-year old bull; 30-35 cows per mature bull.
- Have phosphorous source in form of free-choice mineral mix;
phosphorous is important for maximum fertility.
- Yearling British heifers should weigh a minimum of 700 lbs.
and continental heifers a minimum of 750 lbs. before being bred.
- If lactating cows are thin and not cycling, feed more energy.
- Vaccinate open cows for IBR, BVD, PI3, BRSV, Leptospirosis,
and Haemophilus using modified live vaccines.

Consult your veterinarian for additional health information.

c) Breed heifers one heat period before the cows. This provides extra time for heifers to recover to calve with the cowherd the following year

d) Take advantage of early summer grass. Turn cows in when grass is 4-6 inches tall, graze intensely for 7 days and then rotate to another field. Pasture should be rested 25-40 days before grazing again.

e) Is hay making equipment ready? For highest quality, first cutting should be started by end of May to early June, depending on species and location.

f) After first cutting or grazing, consider fertilizing with nitrogen to maximize aftermath growth.

g) If you vaccinate for pinkeye, do so six weeks prior to fly season. In other words, it's probably too late to get effective pinkeye control through vaccination.

h) Fly control methods include sprays, back rubbers, insecticidal ear tags, and dust bags. Feed through fly control is not recommended. Insecticides that kill fly larvae also kill beneficial insects such as dung beetles that are necessary for natural control and manure decomposition.

i) Continue to monitor body condition of first and second calf heifers. If they drop below 4.5, they should receive supplemental nutrition.

j) The breeding season should last no more than 60 days. Make plans for keeping bull separate before and after the 60 day breeding season.

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Calendar of Events

June 2007

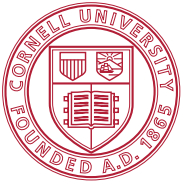
- June 2 – 9 a.m. – 12 p.m. Plant Sale
10 a.m. Northland Sheep Dairy Tour
- June 7 – 6:30 – 8 p.m. Successful Home Composting
- June 9 – Introduction to grown Tree Fruit – Ithaca
- June 13 – Ask A Master Gardener @ Vestal FM
- June 15 – Binghamton Farmer's Market Kick-Off
- June 16 – Pasture Walk – @ DeYoungs in Chenango Forks (SWCD)
Cornell Sheep Farm Field Days
- June 17 – Johnson City Farmers' Market Kick-Off
- June 19 – 6 – 7p.m. Rose Garden Walk, Binghamton
- June 23 – Whitney Point Point FM Kick-Off

July 2007

- July 4 – Office Closed
- July 6 – Ask A Master Gardener @ Binghamton FM
- July 10 – 6:30 a.m. Hershey Trip CCE-BC Ag @ Binghamton FM
- July 14 – Horse Field Days Nichols, NYSWCD
- July 22 – CCE-BC Ag @ JC FM
- July 23 - 29 – Broome County Fair
- July 24 – 6 – 7p.m. Herbs Garden Walk
- July 31 – 6 p.m. Cutting Edge Vegetable Gardening

August 2007

- August 1 – Broadway Show – Lion King Benefit 4-H
- August 7 – CCE-BC Ag @ Binghamton FM
6-7 p.m. All-America Selections Garden Walk
- August 15 – Bronx Zoo-Benefit 4-H
- August 18 – Evans Creamery CADE Value Added Farm Tour
- August 19 – Ask A Master Gardener @ Johnson City FM
- August 23 – Beginning of State Fair
- August 25 – Cornell Sheep Field Day



Cornell Cooperative Extension Broome County

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