

The intensity and excitement was of the meeting was catching and invigorating. We were among business people who are willing to change, and who see a future for the dairy industry in the Northeast. We had late night discussions on what needs to occur to ensure the Northeast's competitiveness in the future. We talked with others about new ideas on managing dairy operations and managing labor. The four of us came back stimulated and wondering why more of our fellow North Country dairy farmers were not there.

The NDP kept a relatively low profile, maybe by design. Members, who pay a base fee plus so much per cow, were identified by a star on their name tag. I WAS PROUD THAT MINER WAS A MEMBER. This organization is using membership fees to invest in the future of our industry. In the past, we depended on State and Federal governments to provide dollars for dairy research, but this is not happening anymore. If we are going to be a viable industry in the next century, Northeastern dairy farmers have to invest in the future. Let us know if you're interested in membership in the Northeast Dairy Producers Association.

Charlie Sniffen

Nutrient Management on the Farm

Last month we discussed the fate of the nitrogen we feed our dairy cows and we're sure many of you sat down and contemplated reformulating your rations, especially with 'spring' so close at hand. Nitrogen or protein is not the only nutrient we need to concern ourselves with, however. Phosphorus is as much of a concern as nitrogen as a major contributor to water pollution here in the North Country, even more so in other areas of the country.

Elevated phosphate levels in certain areas of Lake Champlain have resulted in algal blooms and eutrophication. Even in areas where phosphorus levels are relatively low periodic algal blooms occur.

So where does the phosphorus come from? According to both the Vermont and New York Departments of Environmental Conservation, 80% of the lake's phosphorus load is attributable to nonpoint sources including surface runoff and subsurface flow.

So what does this have to do with the cow? Runoff contains phosphorus from soil erosion and manure. Spring runoff from fields that have had manure spread on them during the winter can contribute significantly to the phosphorus levels in surrounding streams and lakes. It is the phosphorus in the manure that should concern us.

Just to refresh your memories, in 1993 we were feeding 137 head each month. We offered those cows a total of 2,200 tons of forage and farm produced grain. In addition, we offered 211 tons of purchased concentrates and minerals. Like nitrogen, phosphorus is shipped off the farm in either meat, milk, or crops. In 1993, we shipped 162 lbs of P in the form of calves and cull cows off the farm. The P in milk shipped was 1,363 lbs. Phosphorus shipped off the farm totaled 1,525 lbs or .75 tons.

A total of 6,768 lbs (3.4 tons) of phosphorus or 82% was excreted in the manure. Unlike nitrogen which can easily be lost, essentially all the excreted phosphorus ended up in the manure pit.

Are these numbers typical? In a 1992 article in the Journal of Dairy Science, Dr. Deanne Morse, now Livestock Waste Management Specialist, University of California at Davis, found that lactating Holsteins excreted 88% of the P consumed. In addition, as the intake on P increased so did the excretion of P in the manure.

How can we as managers change the P-balance of our dairy cows? How do we reduce the amount of P remaining on the farm? We have to look carefully at our rations. In most cases phosphorus is fed in excess, "insurance". That insurance not only costs dollars in terms of real cash but may also have a price in terms of pollution potential. Deanne suggests that we avoid feeding excess phosphorus by paying careful attention to balancing ration P to meet the animal's requirements. This will minimize the excretion of P and its environmental impact.

Bob Allshouse

MASSAGE THERAPY...FOR HORSES?

Robert Altman, a Certified Massage Therapist from New Salem, MA, spoke recently at EquiDay about his work in Sports Massage Therapy. Equine and human athletes are remarkably similar, as are their troubles. He switched from people to horses as patients because he wanted to get out of the office more (horses complain less too!). Early in his equine career, he apprenticed with Jack Meagher, founder of the discipline and author of Beating Muscle Injuries in Horses.

The object of muscle massage therapy is to help athletes reach full potential. There are two types of massage, therapeutic and preventative. Therapeutic massage takes place after major damage has been done to the muscles due to stress or injury. Preventative massage, as a regular treatment or in response to training difficulties, is where Sports Massage Therapy can really make a horse's performance shine.

Most injuries aren't the result of one major trauma however, but the end product of a

long buildup of small insults to the muscle. There is a myth that with rest, muscle injuries will heal themselves. With small problems, the muscle learns to compensate for a while, but the effect of many injuries is cumulative and will impede the horse's movement.

Muscles are made up of long bundles of fibers. With every injury or strain, the fibers that surround the damaged tissue contract to form a protective, living "splint". This results in restricted motion for that muscle bundle. The spasm may be so slight that it goes undetected until the knot is so large (the size of your thumb) as to change the horse's way of going. This can be exhibited as a "cold back", not wanting to pick up a certain lead at the canter, refusing a jump, or many other problems. The horse isn't necessarily being disobedient, but trying to tell you that he is in pain.

Unfortunately, muscles are unable to fully release a spasm after the initial injury has healed. Massage manipulates a muscle's stress points, where spasms usually occur, to separate the fibers from each other to free them. It uses direct pressure, cross-fiber friction, and deep muscle massage to locate all affected areas and restore the horse's range of motion. Many horses show improvement after the first treatment, but often the muscles require regular attention to remain free of spasms.

Sports Massage Therapy is a relatively new field, particularly in the equine industry. Cooperating with the advances in veterinary medicine and farriery, massage therapy is integral to equestrian teams around the world. We can use this knowledge every day to discern muscle problems from other training issues.

Karen Nevius