# The Mystery Colony

This month's mystery colony is south of Shelby, MT. If you can't figure it out, call your Standard Nutrition Consultant and have them give some hints. July's mystery colony was Springdale Colony.

| | |
|---|---|
| Richard Anderson | (406) 799-2783 |
| Lauren Wombold | (406) 262-4279 |
| Elwyn Beck | (605) 354-1323 |
| Warehouse—Cann | (406) 268-0485 |

**Standard Nutrition Services, LLC**
**114 Vaughan Road**
**Great Falls, MT 59403**


**August 2009**


**Standard Nutrition Services, LLC**
**114 Vaughan Road**
**Great Falls, MT 59403**


## Tobin' Talk

**Jason McNaughton**

I'd like to start of with congratulation to Dr. Brian Anderson on his recent appointment to Director of Colony Nutrition for our business in the Dakotas. Brian has provided tremendous consultation to his clients in that area since his arrival with Standard and has also been a great resource for many of us doing the same in other regions.

As we enter the late summer we must re-focus our attention on the incoming crops. In many areas, the yields look as good as they've been in years. Protecting these crops to produce quality feedstuffs starts in the field, but becomes of greater importance at harvest. Many have in the past treated crops with acidifiers that preserve the grains and prevent any further mold growth which can produce deadly Fusarium. Some have tried these methods in the past but have chosen not to continue with them year after year. I believe this to be a mistake. Although it may be easier to treat grains through the feed mill we making feed, this method is much more costly and in some cases less effective. Anything we can do to prevent contamination versus treating has to be the most effective methods. Spray type mold inhibitors are available in most regions. Your Standard consultant can assist you in obtaining the right products to use, and also the application rates needed to protect your feed grains as you fill your bins. 'An ounce of protection is worth a pound of cure'….

Traditionally in the late summer- around harvest can also be the best time to lock up inputs like grains and soybean meal. Now this is not always the case, but often it's been when future contracts see their annual lows. Many of us took advantage of this last year and saved a pile of dollars throughout the first 3 quarters of 2009. Be sure to consult with your risk management advisors to insure that you are positioning your production to turn a profit. We've seen a lot of relief in feed costs of late with reductions in soybean meal, corn, phosphorus, vitamins to name a few. This good news may not last long, as the economy will eventually turn, and increase demand for energy again. Enjoying these lower prices can be prolonged through a good risk management strategy.

## Don's Deal

**Don Deleurme**

Traveling into Saskatchewan and Alberta it is apparent to see that some farming communities have been more fortunate than others with favorable weather. There are areas with nice looking crops and others where moisture has obviously been absent for a significant part of the growing season. On a positive note for livestock producers some commodities have eased from where they once were. Monocal has dropped 45% from where it was and other big one is soybeans which decreased 25%. With the soy dropping we should see other commodities significantly drop as well. Make sure you keep listening because there could be a great deal to be had on some type of commodity.

Hog prices are still not where we thought they would be, nor where we would like to see them, but for most at this point there is still a profit to be showed. A lot of people are talking about feed conversion as of late and as we at Standard Nutrition have always said that is the largest profit saver of your production. In talking with various producers it has come to our attention that some producers do not fully know how their facilities and animal are performing. In this day and age that is something one needs to sit down and work out due to the fact that you may think things are going well but truly they may not be. Talk to your local Standard Nutrition representative and ask them how they can help you maximize your profit in your production facility.

## Craig's Corner

**Craig Anderson**

As of this writing, July 15th, I cannot remember a time when the crops looked as good as they do this year. The crops in Iowa, Minnesota, South Dakota, and Nebraska all appear to be in tremendous condition, thanks to rains that have come through the areas about every third day. The corn in Iowa has been tasseling in many areas for the past two weeks, and all of the corn is in the tasseling stage now! You cannot find any wet spots in the fields, in at least the Northwest three fourths of the state. This all adds up to what could be a bumper crop for at least the Western Cornbelt! I was told from a farmer friend who traveled to Chicago this past week-end that the Illinois crop has made great strides in the last two weeks as well.

What does this mean for the livestock industry? I feel it means we may have a good opportunity to buy or contract our feed needs at reasonable prices in the near future, and be able to lock in those prices for an extended period of time, something we have been unable to do for quite some time! That being said, we should be able to make a significant difference in the cost side of the production equation. The other essential that will be needed to return to profitability is for the meat demand to pick up substantially as we move forward. Year to date we are down 14% from last year in pork exports. Russia did lift the import bans on meat leaving U.S. ports last week in Illinois, Texas, New Jersey, and Pennsylvania. The word is that Russia will lift import bans shortly in other ports as well. The opportunity for product demand seems to be improving for these and other reasons!

# Turkey Talk

## Jim Plyler, MS

### Standard Nutrition Turkey Consultant

Histomoniasis (Blackhead) is caused by a protozoan parasite, Histomonas meleagridis. This parasite can cause great economic losses. We presently have no treatment for blackhead.

The parasite is transmitted by the cecal nematode, Heterakis gallinarum. It infects chickens, turkeys, peafowl, and pheasant. The disease effects turkeys more than the other species. Turkeys are most susceptible between 3 and 12 weeks of age.

Some key points to remember about Blackhead is that the lifecycle is complex, but the worm eggs are eaten by the definitive host and hatch in the intestine. The juvenile Heterakis migrates toward the cecum. Here Histomonas leaves Heterakis and resides in the host bird. Earthworms serve as a host also for both Heterakis and Histomonas. Heterakis eggs and infected earthworms survive long periods of time in the soil.

Lesions will be present in the cecum and liver. The cecum becomes enlarged and inflamed and sometimes will have cecal cores. Liver lesions will have white and green areas of dished necrosis. Symptoms of infected birds are droopiness (lethargy), ruffled feathers, yellowish diarrhea, eyes closed, weakness, emaciation, hanging wings and tails. The skin on the head turns black in some instances (caused by secondary bacterial infections). However, birds that survive this infection are immune for life.

It would be wise to keep this disease in mind, especially with higher than normal rainfall in some areas. This brings the earthworms out and I have seen some disease related issues with flocks lately.

# Nutritionally Speaking

## Michelle Tjardes, Ph.D.

### Time to Start thinking about Grain Quality

Molds can grow in a variety of places and as they grow they consume valuable nutrients, such as protein, fats, and vitamins, which your turkeys should be getting. Mycotoxins are produced during metabolism by molds. They are toxic to all species of livestock. As long ago as 1960, the toxicity of mycotoxins was realized as a disease known as Turkey X. This disease caused the deaths of 100,000 turkeys following their ingestion of peanut meal contaminated with aflatoxins produced by the mold *Aspergillus flavus*. There are over 250 known mycotoxins produced by many different strains of mold. Economic losses due to mycotoxins contamination have been estimated at more than $1 billion in Canada during the 1990s and over $2.5 billion in the United States. The economic impact of mycotoxins includes mortality, morbidity, and reduced production efficiency. When turkeys are exposed to mycotoxins in the feed gut irritation, digestive problems, skeletal or leg problems, impaired growth, feed efficiency and immunity can result. In a study conducted in Canada body weight gains in turkeys were reduced 10% by fumonisin, 39% by aflatoxin, and 47% by the combination of the 2 mycotoxins. Additionally, research has shown that consumption of grains naturally contaminated with Fusarium mycotoxins increased the susceptibility of turkeys to infectious agents and lowered immune system function.

Analyzing for mycotoxins can be a challenge because they are present in such low concentrations and are generally not uniformly distributed in a feed or feedstuff. Generally the mycotoxins seen frequently are aflatoxin, deoxynivalenol (DON or vomitoxin), and zearalenone. Mycotoxins are very stable compounds and there is no physical or chemical treatment that can be applied to destroy them. The most commonly used strategy to decrease the toxicity of mycotoxins is to decrease they bioavailability through binding agents. This decreases the uptake of mycotoxins into the blood stream and reduces their negative affects on the turkey. Aflatoxin can be strongly bound to compounds such as zeolites or clays. However, DON and zearalenone are harder to bind up and require the use of specialized yeast-based products.

The best idea is to prevent mycotoxin contamination of your feedstuffs. However, Mother Nature tends to control our fate here to some degree. Drought stress, hail or insect damage, or too much rain at the wrong time can result in damaged kernels susceptible to mold growth and mycotoxin contamination. However, you can reduce the amount of molds growing in your feedstuffs by making sure the moisture content remains below 15% and through the use of mold inhibitors. Most mold inhibitors are a blend of acids that reduce pH and make mold growth unfavorable.

If you are interested in treating your grains with mold inhibitors or using a mycotoxin binder in your feeds, please contact your Standard Nutrition Consultant for further information.

# From the Field

## Dr. Brian Anderson

### Director of Colony Nutrition

When the subject of reducing production costs arises, feed is always the first aspect looked at. Feed constitutes the largest portion of production costs with growing and finishing feed costs making up roughly 75% of feed usage. There are multiple things we can do to reduce feed costs such as phase feeding, split-sex feeding, proper feeder adjustment, and particle size all of which affect feed efficiency.

Since feed efficiency is the most important factor in feed cost per pig lets first look at the impact of a 0.1 unit reduction. If feed costs $190/ ton it results in savings of $1.50, if feed costs $160 it saves $1.28.

Phase feeding, the process of feeding multiple steps to more accurately feed animals requirements, can reduce feed costs another $1.50 in going from two steps to four steps in the finishing phase.

Split-sex feeding, feeding barrows and gilts differently, takes into account the differences in nutrient requirements and feed intakes between sexes and has the potential to save another $1.00.

Feeder adjustment is a management issue and thus is sometimes not associated with feed costs savings. Proper settings should have approximately half the bottom of the feeder visible, visible feed in front of the feeder can indicate wastage up to 10% which at $190/ton could cost you almost $5.00/pig.

Finally, particle size should be routinely monitored to insure optimum size (600-800) microns. Kansas State data indicates that every 100 microns outside the optimum range can add $.50/pig to production costs.

If you have any questions concerning any of the above factors and their impact please contact you Standard Nutrition consultant.

# Swine Health Update

## Colin Kirkegaard, DVM, MS

### Triple Negative Pigs

"Triple negative" is a term used in today's pig industry to readily communicate the health status of iso-wean pigs for sale on the spot market or for entering a long term contractual agreement with a finisher. More specifically the term has come to mean pigs that are free of three diseases that can have a huge impact on the performance and profitability of growing and finishing pigs. They are PRRS (Porcine Reproductive and Respiratory Syndrome), App (Actinobacillus pleuropnumonia), and Mycoplasma hyopneumoniae (M Hyo). We will devote this month's swine health discussion to mycoplasma pneumonia.

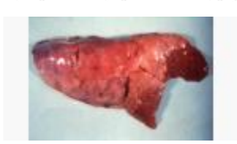
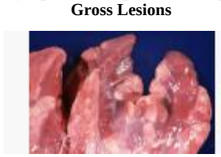
Mycoplasma pneumonia is also known as enzootic pneumonia which depicts the insidious nature of the disease once it is established in a pig population. The disease is widespread and endemic in pig herds through out the world. The disease has a mild effect in well managed herds that are free of other complicating diseases such as App, HPS (Hemophilus Parasuis), Pasturella, PRRS, or SIV (Swine Influenza Virus). Mycoplasma infection is considered to be a primary pathogen because it opens the lung to other infection. It does this by impairing the natural respiratory tract defense mechanisms that protect the lung from infection from more pathogenic bacteria and viruses.

Clinical symptoms only occur in sows and piglets when the infection is introduced into a susceptible population for the first time. Once established (endemic), maternal antibodies are passed via the colostrum to the piglets. These antibodies persist until the pigs are 7-12 weeks of age after which clinical signs can appear. The most prominent symptom is a prolonged, non-productive cough with 7 to 8 coughs per episode. Closer observation may reveal some pigs that are breathing more heavily ("thumping"). Slaughter checks can find anywhere from 30-70% of the pigs with lung lesions in unvaccinated herds.

The disease is introduced through carrier pigs with incoming pigs (breeding stock or iso-weans) representing the single largest bio-security risk factor. The disease can move up to 2 miles through the air with the right combination of temperature and humidity.

Vaccination and all in all out management are two important control measures. Antibiotics such as the tetracyclines and lincomycins are valuable in controlling the infection and secondary bacterial invaders.

Enzootic pneumonia, Mycoplasma hyopneumoniae, pig



Mycoplasma hyopneumoniae, pig Gross Lesions