

## Special Interest Articles:

- Fly control for cow-calf managers
- Ticks and Flies, oh my!
- Pinkeye in cattle
- Toxoplasmosis from organic meat



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## Insect Updates

### The cow-calf manager: Fly control

A major fly pest for cow-calf operations is the horn fly. Adults are seen resting on the backs of the animals, where they spend all their time taking blood meals 20-40 times a day.

Another newly noticed pest of beef cattle is the stable fly. These flies are more commonly associated with cattle production and horse barns but have been found

breeding in pastures around hay bales. Both males and female take a single blood meal a day but have a very painful bite.

Controlling for flies can be daunting but is necessary to get the best economic return from cattle. It is important to be aware of how resistance can develop when insects are exposed to insecticides too early, at too low a dose, or for

too many years in a row.

The products on the market are either pyrethroids, organophosphates, oral larvicides and avermectins.

Products can be administered by ear tags, sprays, dust bags, back and side rubbers, pour-ons or orally. Chemical class rotation is a must from year to year and ear tags need to be removed in the fall (4-5 months after being put in).

### Early spring brings tick, horn fly problems for cattle

An early spring and now summer for the south, allowed for a shortened hay feeding (a relief for many suffering from the drought last year) but it also allowed insects to get an early jump (or giant leap) as well.

“The warmer-than normal temperatures have allowed insects to get an early start this year. They’re developing at a faster-than-normal rate,” says Gus Lorenz from the

University of Arkansas.

A big concern for cattlemen this year thus far, has been ticks. OSU extension entomologist Justin Talley says adequate rainfall and warm temperatures have been ideal conditions for ticks in Oklahoma and the same is true for much of Texas.

To control for ticks, prevent grazing pastures near wooded areas or water

sources, both which encourage tick development. Use an insecticide, such as ear tags or sprays, to prevent infestations.

When outdoors protect yourself by wearing long sleeves and tucking pants into boots. Using Deet products will repel insects. Also protect domestic animals that go to the pasture; they will be easy transportation for any tick species they come across.

### The new concern – How to control flies?

Every time I get ready to write this newsletter, I find an article or two that someone has written on control for flies but this time (3 months since the last newsletter) I have come across 7 articles written about flies. The mild winter and early spring has really impacted the cattle industry this year and the increased fly populations are not being received well.

Some of the articles I found were: “Fly control near livestock facilities”, “Management tip: Horn fly

control”, “Fly control with beef cattle”, and “Control fly hot spots” twice.

I am glad to see so many willing to get the information out there for cattlemen and dairy men. The key bit of information that should be taken away from all these articles is that all fly control comes down to proper manure and feed management.

Despite which products you decide to treat your animals with be it pour-ons, oral

larvicides, ear tags, sprays or self treating methods; if manure is not being managed properly flies will prevail.

Fresh manure is the site for horn fly and face fly (in northern states) larvae to develop. Stable flies like 2-4 week old manure mixed with straw or hay. House flies are able to develop in any decomposing organic matter such as manure, vegetation or garbage. The soil around water sources promotes horse fly development.



“As with most diseases in cattle, good prevention and early detection can minimize the losses pinkeye can have on your operation.”

## Cattle Care Dealing with pinkeye

Pinkeye has been recorded by USDA to be the second most common disease in calves greater than 3 weeks and the leading condition affecting breeding age beef heifers.

Calves with pinkeye typically sell for \$100 per head **LESS** than calves without pinkeye. That should make you concerned.

*Moraxella bovis* is the typical infectious agent of pinkeye and it can be transmitted by flies,

face flies in particular.

Face flies are currently listed as not found in Texas but that could change. Face flies have the ability to transmit the infectious agent of pinkeye up to 3 days following a feeding.

Vaccines are one way to assist in controlling pinkeye in calves and cattle but should not be the sole means of control. It is recommended that early treatment be done when

pinkeye is discovered.

Early treatment provides a better chance for clearing up the infection with less complications and scarring. It also serves to decrease the shedding of the bacteria and the risk of transmission to other cattle.

In addition, proper sanitation, manure management and good fly control are a must to lower the face fly population.

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## Pesticides Update/Outlook

### Orange oil shows promise for pathogen reduction

Scientists from U of Arkansas and Colorado State are investigating the use of orange oil as an *E. coli* inhibitor on the chilled carcasses of cattle.

Researchers say that a 1% solution of cold pressed terpeneless Valencia orange oil at the chilling stage of the

carcass could be an additional step to reduce pathogens.

Orange oil is not dangerous to humans, pets or livestock and is already being used in some livestock and household preparations for pest control.

An USDA-ARS study describes feeding orange pulp to cattle to reduce enteric

pathogens. It says initial lab results indicate that citrus products included in ruminant rations decreased pregastric gut and lower-gut populations of *E. coli* O157:H7 and *S. typhimurium*, without causing a significant change in fermentation end products.

### EPA changes pyrethroid insecticide labels

According to information I have received from Texas AgriLife Extension urban entomologist Mike Merchant, pyrethroid labels for application on non-agricultural areas have been changed by EPA.

These changes are related to weather conditions, such as wind speed and rain conditions during the time of application.

The article suggests that pest control companies

record this information on their invoices at the time of application and I think this is great advice for anyone with a private or commercial license to apply pesticides.

## Human & Animal Disease & Health

### Organic meat a greater Toxoplasmosis risk

A study published in the May 2012 issue of *Clinical Infectious Diseases* says that an increasing trend to produce free-range organically raised meat could increase the risk of *Toxoplasma gondii* contamination in meat.

The reason the risk is higher in livestock and poultry that are “free-range” or spend most of their lives on pasture, is

because during their production phase they have more exposure to soil that may contain *Toxoplasma gondii* oocysts.

An article in **MyHeathNewsDaily** says the oocysts have been found mostly in swine, poultry, sheep and wild game and less in dairy or beef cattle but it can be transmitted through raw or undercooked ground beef.

Many are aware of *Toxoplasma gondii* being spread to pregnant women through cat feces but many do not realize it can be spread via undercooked meat and unwashed fruits and vegetables contaminated from the soil.

Transmission is less likely to occur if food is washed properly and cooked thoroughly before consumption.

## Know the signs of a disease outbreak

When it comes to preparing for animal disease outbreaks, it is important that you and your employees know what to look for.

An easy way to identify the signs of a possible disease outbreak is to memorize the acronym

**BUDDIES**. Each letter stands for a symptom that if seen deserves a

call to your veterinarian.

**BUDDIES:**

**Blisters** or vesicles around the mouth, nose, teats or hooves.

**Unusual** ticks, maggots or other things on the skin of an animal that are normally not seen.

**Dead** or down animals – more than usual.

**Diarrhea**, more than usual, especially in older growing or more mature animals.

**Illness** or abortion – more than usual.

**Eating** abnormally, especially feed refusal.

**Staggering** or spasms, a sign of possible neurological disease.



“The faster an animal is identified, the better the situation will be,” says Dr. Julie Smith.

## Anaplasmosis may be more common, widespread this year

An abundance of insects borne by an early spring could mean an earlier-than-normal occurrence of a sometimes fatal cattle disease called *anaplasmosis*.

Anaplasmosis is transmitted from animal to animal by biting insects such as horse flies, stable flies and ticks. It can also be spread by contaminated needles or surgical instruments such as dehorning, castration instruments or tattoo instruments. The disease is typically age

related, with severe cases affecting mostly older animals.

With anaplasmosis, red blood cells become infected. At some point, the immune system of the infected animal will respond and attack the invader which in turn destroys red blood cells. Then signs of clinical anemia will appear.

Early clinical signs include a temperature of 104°F to 107°F, decreased appetite,

pale mucous membranes, lethargy, a decrease in milk production and weakness. As the disease progresses, other signs may be noted such as weight loss, yellowed mucous membranes, constipation, agitation, abortion and death.

Death is due to red blood cells being lost and no way for oxygen to be moved to tissues, the animal dies of anoxia.

## An update on “Pigeon Fever” in horses

No birds involved. “Pigeon fever” is an equine disease also called Dryland Distemper that causes abscesses and swelling in the horse’s pectoral region causing a “pigeon-like” appearance. It is caused by the bacteria

*Corynebacterium pseudotuberculosis* and is more common to occur in dry areas of the Western US but cases diagnosed in other parts of the country may increase.

Although “pigeon fever” is not being regulated by TAHC, they have seen an increase of calls and questions about the disease. In 2011, there were 350 positive cases which is 4 times as many as the number of cases in 2010. One factor for this increase could be due to the severe drought and fly activity.

Affected horses can show various signs including fever, weight loss, swelling of the breast muscles or belly, and other

areas. Abscesses can be external and internal (much harder to treat in a timely fashion). Prompt veterinary care is needed and encouraged for successful treatment.

Bacteria can live for extended periods of time in dry soil and be transmitted by flies. Fly control is a must, as is isolation, pus drainage disposal which contains infectious bacteria and wound treatment.

## Vesicular Stomatitis detected in two horses in New Mexico

APHIS confirmed the infection of two horses in Otero County that were tested after vesicular lesions were observed.

The premises of the horses’ remains under quarantine and no further cases have been identified. Inspectors looked at all livestock within a one mile radius.

Due to the finding of vesicular stomatitis, all livestock leaving Otero

Co. will be required to have an inspection by a veterinarian within 7 days of transport if they are travelling to a public event such as roping, racing, breeding or other forms of public exhibition or traveling interstate.

TAHC prohibits entry of animals from VS quarantined premises, and also requires livestock to be accompanied

by a valid certificate of veterinary inspection.

VS can cause blisters and sores in the mouth and on the tongue, muzzle, teats or hooves of horses, cattle, swine, sheep, goats, llamas and a number of other animals. Lesions usually heal in 2-3 weeks. VS mimics foot-and-mouth disease and should be reported.

## Diseased horses smuggled into West

Ten adult horses and four yearlings seized crossing over the Rio Grande River, were found to be diseased and tested positive for Equine Piroplasmiasis (EP).

EP is routinely found in Mexico and other countries around the world but is not considered to be endemic to the US.

EP is a blood borne protozoal disease that can be fatal to horses and could

create major constraints to interstate and international movements if left undetected. It does not affect humans.

TAHC recently passed EP rules requiring testing of race horses prior to entry into a Texas track, and numerous other states have done the same because of recent cases found in that population of horses.

“Racing Quarter horses with some connection to Mexico appear to be at

highest risk of testing positive to the emerging disease,” according to Dr. Dee Ellis, State Veterinarian and TAHC Executive Director. Dr. Ellis has stated, “This situation highlights the ongoing border security problems Texas is facing, which leads to an increased risk of disease introduction for the Texas livestock population when animals enter our state illegally.” Citizens should contact officials if they see unusual activity near the border.



## Special Topics of Interest

### Don't let your herd get bugged by internal parasites

When was the last time you looked over your parasite-control program? If it's been awhile, you may need to dust off your plans and give them a tweak or two, since recommendations have probably changed since you last thought about parasites. Here are some things to consider as you examine your plan.

#### Negative impacts

Strategic deworming for your herd and individual animals must be a foundation practice. "Worms suppress animal appetites and disturb immune function," Dr. Bliss says.

"The more efficient an animal is, the greater impact parasites can have on maintaining efficiency."

#### Early-lactation factor

Nowhere is that more obvious than for early-lactation cows. "If parasites are

present in the animal, or if she is being exposed to infective larvae during this period, another physiological stress is being added to an already-stressed animal."

#### Vulnerable herds

Most people associate parasite-control with grazing operations and those herds do carry the greatest risk of parasite contamination. Cows on pasture only while dry still maintain a moderate-to-high exposure, and cows with access to an exercise lot also carry a moderate risk. Cows with access to dirt dry lots and cows on concrete dry lots or cows completely confined face a low risk of parasite contamination.

But that does not mean NO contamination. That is because cows and heifers brought into the operation may have spent time on infested pastures or

facilities and brings the parasites along when they enter your herd.

#### Resist resistance

As with any management tool, you want to gain the most benefit from your deworming program. This means being aware of, and managing against, parasite resistance to products.

Dewormer resistance has been detected in all of the economically important gastrointestinal worms of cattle, says Dr. Shulaw. Not saying all worms are resistance in all countries to all classes of dewormer but it does indicate a need for concern in regards to current deworming practices.

Cattle should only be treated after a fecal egg count has been done to determine the presence of parasites, and then develop a plan for treatment.

### Use caution when thinking about restocking after drought

Experts at Texas AgriLife Extension advise beef cattle producers to use caution and strategic planning when thinking about restocking herds after the drought.

During the spring and early summer, rainfall has occurred in portion of the state and this promoted the growth of forages on pastures, but cattle

producers need to be careful when evaluating their operations.

"I think so far people are being really cautious," said Dr. Anderson, livestock economist. "I think producers are waiting to see if this rain is going to last. They should be asking 'How long is it going to take for your pasture to recover?' and 'What is going to happen once we get into the summer?'"

Dr. Redmon says producers should always consider the threat of drought.

"If you are completely destocked, stay out a year and let that pasture recover for a year before coming back in," he said. "Overall, I just think it's a little too soon to start restocking. I think producers need to be very cautious; remember more is not always better."

### La Nina is finished, National Weather Service says

The National Weather Service announced in May that the 2-year La Nina weather phenomenon is over. This is believed to be good news for drought areas of the south and hurricane areas along the coast.

La Nina is the cooling of the central Pacific Ocean and the greatest effects are seen during the winter months, usually triggering drought in the

southern US and increasing rainfall further north.

Eastern Texas received much-needed moisture early this year but West Texas still remains locked in an intensive drought.

Drought conditions continue to occur throughout western and south-central Texas as well in Georgia and South

Carolina.

During the early spring, drought areas expanded while ongoing drought intensified across the interior Southeast due to a lack of adequate precipitation, above normal temperatures and increased evapotranspiration rates.

In contrast, drought improvement was noted across southern New England and southeast Florida.

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Welcome Makayla &  
Makenzie  
Born March 23,  
2012

## Where does your state stand?

A new set of state fact sheets are now available from USDA which provide national and state-by-state information on population, income, education, employment, federal funds, organic agriculture, farm characteristics, farm financial indicators, top commodities,

and exports.

Among the top-five agricultural commodities in 2010, cattle and calves is listed number one, accounting for 16.4% of the total value of US ag products. Corn is second, at 14.2%, followed by

soybeans, dairy products and broilers, at 10.6%, 10% and 7.5% respectively.

If you want to know more about where your state stands and compare other aspects of the fact sheets you can read the [full report online](#) from USDA.

## What cattle producers should be thinking about in June

June is the month to let Mother Nature take her course. I know I am late with this but figured I would still include it so you can check to be sure you are ready for the summer months ahead of us.

### **Cow-herd nutrition**

- Provide plenty of clean, fresh water.
- Provide free-choice minerals to correct any mineral deficiencies or imbalances.
- Monitor grazing conditions

and rotate pastures if possible and practical

- Consider creep-feeding if it's cost effective.

### **Herd health**

- Monitor and treat pinkeye
- Provide fly control
- Monitor & treat for foot rot
- Reduce heat stress, avoid excess handling and transporting

### **Forage and pasture management**

- Check and maintain summer water supplies.
- Place mineral feeders

strategically to enhance grazing distribution.

- Check water gaps after possible washouts.
- Harvest hay in a timely manner; think quality and quantity.

### **Genetic management**

- Monitor herd performance. Then identify candidates to cull because of poor performance.

### **General management**

- Check equipment and repair or replace as needed.

## Journal Reviews

Due to my tardiness, there are no journal articles this time but there will be new articles in the next newsletter.

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Search: 'Stink bug crisis' spreads across United States

The brown marmorated stink bug is a small, invasive species of insect from China that has migrated to the US and is threatening fruit crops in numerous states, researchers warn, (how many states has the bug spread to?). The insect has already caused huge amounts of damage to apple crops (how much damage did it cause in 2010?) and, if left unchecked, the potential losses could reportedly be even more staggering (which bill may help the fight against stink bugs?).

Bing News Update