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 FOR IMMEDIATE RELEASE
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More of the Same

Jim Noel of the National Weather Service is a frequent contributor to the C.O.R.N. newsletter conference call we have every Monday during the growing season. The following is a portion of the article he contributed this week. You can go to <http://corn.osu.edu> to access the links to the forecasts that he provided. Warning, it is not good.

Wet conditions into July will impact additional planting but also harvesting crops. This includes wheat and hay. There is not much change from last week's thinking. Overall, we expect above normal rainfall for the rest of June and likely into parts of July. Rainfall for the next two weeks will average 2-5 inches which are 100-250% of normal. Isolated totals will exceed 6 inches.

Temperatures will continue to average about normal but that will be a mix of below normal maximum temperatures and above normal minimum temperatures. This will be the result of high moisture levels and humidity. The outlook for July is near or slightly above normal temperatures and above normal rainfall and humidity.

SOACDF Meetings Scheduled

The informational meetings for the 2019-2020 projects through the Southern Ohio Agricultural and Community Development Foundation will be in July. Make plans to attend one of these meetings if you plan to apply for grants this coming year.

The local meetings will be on July 2 in the evening at the Cherry Fork Gym and on Friday, July 5 at the Southern Hills Career and Technical Center administration building at 10:30 a.m. If you have questions about the meetings, or the programs, you can call the Foundation at 937-393-2700 or check out the website. The web address is <http://soacdf.net>

Preventing Pinkeye

Last week I included the first part of an article on treating calves to prevent or combat pinkeye. The following is the second part of an article from Dr. Michelle Arnold, DMV from the University of Kentucky. I had the first part in this column in this paper last week. Pinkeye can be very frustrating for producers and livestock. One of the most difficult things to prevent from spreading and one of the hardest things to get cattle into a chute to treat. Prevention is the best bet if you can pull it off.

1. Maximize Herd Immune Status - An overall good level of nutrition, adequate vitamin and trace mineral intake, a comprehensive vaccination program including the respiratory viral diseases IBR, BVD, PI3 and BRSV, parasite control, and basic biosecurity practices are all exceptionally important in improving the cow's or calf's ability to fight off any disease process (not just pinkeye).



There is no scientific evidence to support feeding excessive levels of any vitamin or mineral, including Vitamin A, will prevent diseases of the eye. However, if trace mineral levels (especially selenium and copper) are very low in an animal, immune function is severely impaired. In these instances, an injectable mineral (Multimin®) may be necessary to bring these minerals back within a normal range so vaccines and antibiotics can work.

Biosecurity measures such as quarantine of new arrivals to the farm (including show animals) for at least 2 weeks before commingling with the herd are important in case any of these animals is carrying the disease.

2. Control Face Flies - Face flies can play an important role in the spread of pinkeye. Their abrasive blotting mouthparts irritate the animal's eyes, stimulating tears and mucus that feed the insects. Bacteria in the secretions of infected cattle can survive on or in face flies for 2 to 3 days and infect other animals when the flies feed again. Face flies may move as far as four miles during their life so they can easily transfer pinkeye from herd-to-herd and farm-to-farm.

Face fly control is challenging. The flies spend only a few minutes at a time on or around the head, which is a difficult area to protect. Application methods that regularly place insecticide around the face and eyes provide the best means of protecting cattle.

Insecticide impregnated ear tags or force used dust bags provide the most consistent reductions in fly numbers. Insecticide feed, such as IGRs (insect growth regulators), can reduce the number of fly maggots developing in manure of animals that receive a sufficient daily dose.

However, supplemental adult control is often needed to control flies moving in from nearby herds. Read feed through product labels carefully to see if it is labeled for face fly control since some are only formulated for horn fly control. See UK Extension Publication ENT-11: Insect Control on Beef Cattle for control recommendations.

3. Maintain an irritant free environment - Any irritation to the eye allows *Moraxella* organisms to invade and cause pinkeye. Prevent eye irritation with good face fly control, mow tall grass with seed heads, provide shade and ample clean, cool water, and reduce sources of stress (such as overcrowding) if possible.

Provide shade to protect from the harmful UV rays of the sun. Cool, clean drinking water (instead of stagnant pond water) is critical because intake is greater with clean water and this helps provide plenty of fluid to the corneal surface, this is especially important in dry, dusty, and/or windy conditions. Tears are essential in eye defense mechanisms as tears wash away pathogens and tear proteins are an important component of protection. Do not forget to regularly check and clean automatic waterers.

4. Minimize exposure to *M. bovis* and *M. bovoculi* - Early detection of animals with the first clinical signs (tearing, squinting, and blinking) and then prompt, effective treatment are essential to reducing spread to herd mates and limiting damage to the eye. Long-acting antibiotics such as long-acting tetracycline (LA200®) or the prescription antibiotic tulathromycin (Draxxin®) are labeled for treatment of pinkeye.

A veterinarian may prescribe the antibiotics florfenicol (Nuflor®), ceftiofur (Excede®), or others to be used in an off-label manner for treatment as well. Injectable antibiotics are generally the best option because of their long duration of activity and effectiveness in eliminating bacteria. Topical sprays only

remain in the eye a few minutes before tears wash them away so application is generally required 3-4 times daily to be effective.

When severe ulceration exists, the eyeball may need extra protection with either a patch or the eyelids may need to be sutured (stitched) together.

Remember, preventing spread by treating affected animals is the single most important factor in controlling a disease outbreak. Active cases of pinkeye with excessive tearing attract flies that widely spread the bacteria. Topical application of a fly repellent to the face will also help reduce spread.

5. Does vaccination work? Immune responses to pili have been shown to be protective in some studies where animals are vaccinated with pili of a certain type and then challenged with a similar strain. A high degree of diversity among pilin genes is likely responsible for why some herds might see a benefit from vaccination while other herds do not; if the vaccine strain stimulates immunity to a pilus type that is also present in the herd, there should be good protection.

In clinical trials, approximately half reported significant protection from commercial pinkeye vaccines. Vaccination is not the solution to all pinkeye problems although it may reduce the number of calves affected and lessen the severity of clinical signs.

Pinkeye is one of the most common diseases of cattle and is of major economic importance to Kentucky cattle producers. Although much research is ongoing to understand this complex disease, the keys to prevention and control of pinkeye still rely on the basics of maximizing the herd's immune status, minimizing exposure to *Moraxella* bacteria, face fly control and maintaining as irritant-free environment as possible.

Treatment decisions are influenced by numerous factors such as effectiveness and cost of the antibiotic, labor availability, withholding times, facilities, and availability of a veterinary prescription. Vaccines are not consistently effective in disease prevention and cannot be completely relied upon to prevent pinkeye. The best strategy of treatment, prevention and control of pinkeye for a particular herd is best accomplished with the help of the local veterinarian.

Dates to Remember

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| June 28 | FAMACHA© & Fecal Egg Count Workshops in Caldwell |
| July 12 | Ohio Forage and Grassland Council's annual Sheep and Forage Tour starting and ending in Jackson |
| July 13 | Ohio Sheep and Hay Day on July 13 th at the Jackson Agricultural Research Station |
| July 7-13 | Adams County Fair |