THE OHIO STATE UNIVERSITY

Field Notes for The Week Of 7-5-2022

The Heat is On and the Algae Loves It!

July is off to a hot and dry start. After talking with many producers and scouting numerous fields, it is clear that the heavy rain the county received in the first half of June had little infiltration to benefit the crop today. Even with the drier weather the crops are still looking halfway decent. Pastures are still holding up well with much of the cool season grassed have gone dormant for the summertime. This past week I talked to a few producers about planting warm season annuals to provide additional forage during the summer season. Warm season annuals that I noticed being sowed were Sudan grass, forage sorghum, and Teff grass. Much of the first cutting hay has been wrapped up at this point and it sounds like yields have been extraordinary, now would be a good time to get the forage tested that way feeding plans can be made. Corn growth stages across the county range from V-8 to VT (tasseling) and some heat stress has been showing up on compacted areas of the field. Soybeans planting has finally finished up for the season and there is still much of the soybeans at the VE (emergence) growth stage. Wheat harvest has wrapped up and straw is being baled, wheat yield has been very good with yield reports ranging from 55-82 bushels/acres and test weights if 56-58lb/bushel.

Even though much of our crops are showing signs of heat and water stress there is one type of plant or organism that is loving the weather, and that is Algae. Algae is growing very strong in farm ponds, spring tanks, and open water troughs. Keeping algae out of the livestock drinking facilities can be a big challenge. Algae in livestock water tanks is not just a nuisance but it can also be toxic to livestock. There are different types of Algae that can grow and thrive in livestock water tanks, warm weather, livestock saliva, sunshine, and introduction of organic matter or manure can provide a perfect growing condition for algae. There are several different types of algae that can be found growing in livestock water tanks but one that get the most attention is the blue green algae or also called cyanobacteria, this type of algae can be toxic to livestock causing symptoms of blue green algae toxicosis. Symptoms of blue green algae toxicosis include muscle tremors, bloody diarrhea, seizures, excessive salivation, and liver failure. Steps should be taken to maintain a clean water supply for livestock no matter what time of year it is, but it is especially important during the hot summer months. Livestock will refuse to drink water with high population of algae, and this can lower overall animal performance and put their health in jeopardy. Some steps to take to maintain a clean water supply and reduce algae growth include.

- Routinely drain and clean water facilities with a scrub brush.
- Put up railing or barriers along water tanks, this will help eliminated feces and urine from entering the tank or watering area.
- Placing water tanks in shady areas can reduce algae growth. Watering facilities in shady areas also have cooler water temperatures reducing growth.
- Think about types of water tanks or troughs used, rubber tanks stay cooler than concrete or steel tanks.
- Monitor water PH.
- Disinfect often- using regular home grade unscented bleach at a rate of 2-3 oz per 50 gallons of water can be used and safe for livestock.
- Copper sulfate products can be mixed and used in larger facilities or ponds to reduce algae growth.