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Livestock and Natural Resources

Something Magical About Water

Gazing out at the ocean, pond or lake is something magical. I'm not sure if it's the hypnotic effect of the waves or what. I do know that people are passionate about their ponds. Last week was a real testament to that. I think it was the perfect storm, we had a large rain, followed by very hot weather. This all led up to fish kills, Blue/green algae blooms and lots of other bad stuff.

First off, it took some rethinking for me to think a rain is a bad thing for a pond. I guess it's the difference in thinking of quantity over quality. Certainly, it's good to get runoff to fill the ponds, but on the quality side, that runoff is loaded with a lot of nutrients to feed the moss and algae.

Next we suddenly had summer temperatures. When the air temperature goes above 78 degrees F, the oxygen exchange between pond and air decreases. When the oxygen level is at 5 ppm, fish growth can be slowed, when it dips to 3 to 4 ppm you will have a fish kill. With the largest fish dying first. These events are just heart breaking.

Plants in the pond, feed the pond with oxygen as they are photosynthesizing. But at night, they use the pond's oxygen. So the best time to check the pond is at daylight, this is when the oxygen level will be at the very lowest. If you see fish up at the surface, gasping for air, you can take action.

You can harvest the fish, to reduce the oxygen strain on the pond. The stocking rate should be 1000 pounds of fish per acre of surface water. To help with the oxygen level you can back a boat into the water and let the engine circulate the water, to add oxygen. Another way is to add a fountain or aerator, into the shallow water and spray it back onto the top of the water.

I've been trying to research options for pond aerators and/or fountains. There are many you tube videos of make your own fountains out of sump pumps. It would be a quick and cheaper option!

Treatment for the Blue/green algae is also mystical. In some places the barley straw bales seem to be helping and then in other places it's been a train wreck. We've built two of the slow sand filters for livestock water use. That's a solution for livestock, but it doesn't help the aesthetics of a pond. The KDHE watch and warning list of lakes and reservoirs is growing each day. We keep learning about blue/green algae, but the solutions are evading us. A reporter from a Kansas City network wanted an expert to talk about Blue/green algae blooms. It's pretty sad when you can't find one!

David G. Hallauer
District Extension Agent
Crops & Soils/Horticulture

Multi-stemmed Brush Species – Roughleaf Dogwood

While buckbrush is more commonly known to producers, another troublesome multi-stemmed species of concern in grazing lands is roughleaf dogwood. Reaching heights of up to 15 feet, it is often found in fence rows and along streams, first, spreading in to open areas as well.

Roughleaf dogwood comes on later than buckbrush, often not exhibiting its flat topped clusters of white flowers until late May or early June. In native grass pastures where regular burning occurs, fire may have prevented it from even getting started. In cool season forage stands, or unburned warm season prairies, however, roughleaf dogwood becomes very difficult to remove once it gets established.

Herbicide applications can be effective from the flower bud state through early seed production. Many common herbicide active ingredients have some activity – but seldom result in what we'd consider acceptable control. In fact, research with single active ingredient products like triclopyr or dicamba or picloram, even in combination with 2,4-D, seldom result in mortalities greater than 25 percent. Even 'good' control isn't great, with high volume treatments of multiple active ingredient products resulting in around 50 percent control. Single applications, even of multiple active ingredient products, likely won't eliminate roughleaf dogwood in a single year, instead requiring a multi-year effort, possibly in combination with prescribed fire.

Herbicides may damage desirable grasses under the right conditions and all of the herbicides above will do significant damage to desirable legumes and other broadleaf forbs in forage stands. *Always* read and follow label directions prior to application. For additional information on rates/timings/products, request a copy of (or link to...) the 2021 KSU Chemical Weed Control Guide available through any District Office.

Bagworm Scouting – Put it on the Calendar

I blame it on mowing. When we start mowing each week, we see the 'after effects' of the previous year – and it gets us to thinking about what's ahead.

One previous year's pests that is noticed each spring is bagworms. It's hard to miss them if your control program wasn't 100 percent effective last year (it never is) – inch and quarter long brown colored inverted cones hanging from branch ends. They aren't active right now, but it is time to start planning for the next hatch.

That hatch typically begins in mid-May in to early June. Larvae will emerge from bags over two to three weeks, starting as small foliage covered cones that blend in with their food source. During early stages of growth, they're easily controlled – and that means preparing now.

Mark your calendar to start scouting in mid-May. Monitor trees on a weekly basis for bags smaller than the end of a sharpened pencil. If pressure is already high or has been heavy in the past, consider initiation of control programs in fairly short order. If pressure is still low and past damage wasn't bad, you can delay a bit longer until more of the hatch has occurred. Don't let bags reach much more than a quarter of an inch long, or control may become difficult. Bagworms will hatch over three plus weeks – and feed for almost three months, so repeat applications may be necessary.

Now is *not* the time for application, but make a note on the calendar to start scouting. The feeding season will be here before we know it.

June 25, 2021

Cindy Williams
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Food, Nutrition, Health, and Safety

June 25, 2021

Nancy Nelson
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