

**August 29, 2014**

**AGRIVIEW**

**By: Rick Hirsch**  
**County Extension Agent**

**Winter annual weeds stand out like a sore thumb, especially when your warm season lawn grass is dormant. They can invade many areas within your landscape, especially those sites where the turf density has been reduced and bare soil exists. Therefore, making sure you go into the winter months with a healthy, dense turfgrass is your best defense against these winter pests. Another approach is to use a pre-emergent herbicide to control them.**

**Winter annual weeds germinate in the late summer/early fall season. They will live during the winter and mature in the springs, then die. These are plants that come back each year from seed. Examples of winter annual weeds include: annual ryegrass, annual bluegrass, rescue grass, bur-clover, chickweed, henbit and mustard weeds. Control of these weeds can be accomplished, but applications of the correct pre-emergent herbicide have to be made at the proper time. The proper time for Henderson County is early September. Remember, you are controlling germinating seeds - so this pre-emergent herbicide needs to be applied prior to germination. If you are working with a lawn care company, visit with them about their approach to these pests - sometimes they use products that will control the weeds prior to or just after germination. It is always good to have communications between you and the company you are working with. Finally, please make sure you read the labels**

on all pesticides and calibrate your spreader/sprayer.

Once again, we are approaching the fall season. Have you decided what type of fertilizer you are going to use on your lawn? Have you taken a soil sample to determine what nutrients are deficient in your soil?

Fall fertilization is a very important part of a good nutrient management program for your lawn. You certainly want to have your turfgrass in great condition as we move into the winter period. Avoid applications of excessive nitrogen during this period, especially with a quick-release nitrogen fertilizer source. It could lead to disease problems. On the other hand, you don't want to use a fertilizer with an extremely slow-release nitrogen component - this could lead to excessive nitrate nitrogen left over into the winter months that may be susceptible to leaching into our groundwater. Do your homework and find resource material (like the one listed below) to obtain a better understanding of fall fertilization. It will pay dividends on your lawn and our environment. A good time to fertilize Henderson County lawns is now to mid September.

To learn more about "Fall Fertilization", go to the Aggie-Turf web site at <http://aggie-turf.tamu.edu> and click on "Turf Tips" for the supporting document.

**PRIVATE APPLICATOR LICENSE I. D. CARD:**

Texas A&M AgriLife Extension Service has implemented a more efficient method for registering at programs offering Continuing Education Units. A producer with a Pesticide Applicators License will be issued an I. D. Card that can be scanned at the program automatically registering that producer's license number into the attendance roster.

If you have a Pesticide Applicators License, please call (903-675-6130), e-mail ([sparis@ag.tamu.edu](mailto:sparis@ag.tamu.edu)) or stop by the Henderson County Extension Office on the 3<sup>rd</sup> Floor of the Courthouse in Athens with your name and Pesticide License Number and an I. D. Card will be issued.

#### **OXYGEN DEPLETION IN FARM PONDS:**

As hot, dry weather continues, fish in Henderson County ponds can run into some real problems. Using a few simple, inexpensive remedies could save pond owners thousands.

An estimated 800,000 small ponds pepper the Texas landscape. East Texas alone has about 300,000 ponds, 80 percent of which have been stocked with fish. Many of these fish are in danger as the hot, dry days cause oxygen levels in ponds to decline.

Ordinarily, aquatic plants, mostly single-celled algae, produce enough oxygen as a by-product of photosynthesis to maintain oxygen levels in ponds. Wind or rain also help to aerate the water.

Hot weather slows down these processes in a number of ways. Warm water holds less oxygen than cool water. Cloudy days slow down photosynthesis, making even less oxygen available to fish. If the pond is too heavily stocked, fish can run into oxygen debt even in cool weather. Hot weather can bring about oxygen debt in moderately stocked ponds.

Oxygen starved fish can be seen gasping at the surface or swimming weakly to the edge of the pond. Oxygen depletion will affect all sizes and species of fish to various degrees but hurts the smallest fish first. Because photosynthesis shuts down during the night, fish showing symptoms of oxygen-depletion will be most obvious during early and mid morning.

Pond owners who have a motor equipped boat can easily and cheaply counteract oxygen depletion. Just back the trailer into shallow water and leave the motor running in gear all day. The submerged prop will move enough water about to cause more oxygen to be absorbed by osmosis. If you don't have a trailer, I recommend you lodge the boat against a stump or in deep water against the bank.

What's not effective is just cruising around the pond in the boat. Cruising means the prop is pushing the boat, not the water, resulting in considerably less oxygen absorption.

Hot, dry weather also causes other water quality problems. Pond water evaporates and waste products, primarily nitrites, are not flushed out. Under these conditions some species of fish, most notably catfish, are susceptible to nitrite poisoning.

At first glance, nitrite-poisoning fish look like oxygen depleted fish. They may come to the surface and gasp for air, or sickly swim to the shore. But where oxygen depletion affects the smaller fish of all species first, nitrite poisoning affects catfish first. And where pond owners will see the worse effects of oxygen depletion in the mornings, fish will exhibit the symptoms of nitrite poisoning throughout the day and night.

There is a simple remedy for nitrite poisoning: common cattle salt. The chloride in salt prevents uptake of nitrites by fish. I recommend using 50 pounds of granular stock salt per acre foot of water, twice a year. An acre-foot equals 43,560 cubic feet or about 326,000 gallons of water.

**IMPORTANT DATES:**

- September 5<sup>th</sup> - Hunter Education Class - 7:30 a.m. - Fellowship Baptist Church - Athens - 903-907-0327 - 5:00 p.m.
- September 26<sup>th</sup> - Private Applicator Pesticide License Training - 8:00 a.m. - Call 903-675-6130 to register - \$10.00/Person

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