County Agent News Dan Folske April 6, 2015

Another snowy weekend and several cool days ahead according to the weatherman. Many producers are working on equipment and getting ready for spring. I've once again been hearing some of the old sayings about anhydrous ammonia fertilizer making the ground hard and how anhydrous ammonia kills all the earthworms. Neither of those sayings is true but both have some basis for having become believable. First let's



look at "anhydrous makes the ground hard". Anhydrous ammonia by itself does not make the ground hard however when anhydrous ammonia became a popular fertilizer it was common practice to apply it in the very early spring. Many producers applied it to all of their acres and then went back and seeded those acres. This meant that much of the tillage and application was done when soils were just barely dry enough to pull the equipment through. Under those conditions soil compaction can be a serious problem and not just in the wheel tracks. The knife or other style openers on the anhydrous applicator also cause vertical or horizontal compaction as they move through the soil. This destroys the soil structure and causes the soils to become very hard, especially heavy clay type soils. It wasn't the anhydrous ammonia but the application process which caused the soil to become hard. Any type of tillage can destroy the soil aggregates but the problem is compounded by wet conditions. I know producers need to get any early start to get over all their acres but any activity on those wet soils too early in the season can cause problems whether it is a fertilizer application, weed control operation or even planting with a notill air seeder. The more vigorous the tillage part of the operation, the worse the compaction and soil structure degradation but even a sprayer or fertilizer spreader can leave compacted wheel tracks.

Does anhydrous ammonia kill earthworms?

