

Add Lime Now for Next Spring's Alfalfa

Acidic soil can inhibit alfalfa growth, but adding lime now to fields that will be seeded to alfalfa next year may improve establishment and increase future yields.

Establishing alfalfa often is difficult because the soil pH is too low. Alfalfa grows best in soils with a neutral pH of about 7. Soils with a pH of 6.2 or lower become acid and alfalfa plants grow slowly and often look yellow.

With a low pH, the alfalfa roots are unable to absorb the necessary nutrients from soil. The nodules on alfalfa roots, which convert nitrogen from the air into nitrogen the plants can use, also have difficulty forming and working effectively in acidic soils.

Most sandy, low-organic matter soils, as well as more heavily textured soils that have been tilled and fertilized with nitrogen for a number of years, usually become acid. Soil tests should be done to determine the pH level. The acid layer of soil sometimes is only a few inches deep so gather a shallow sample only a couple inches deep as well as a more normal seven or eight-inch deep sample. Test the shallow sample just for pH, but test the deeper sample more thoroughly for phosphorus, potassium, organic matter, soil and buffer pH.

If the pH is low, the soil needs lime to neutralize the acidity. Neutralization may take some time, so it is wise to apply lime at least four months ahead of planting alfalfa. Normally, the recommended amount of lime is determined using the buffer pH.

Though adding lime to soil is costly, it costs much less than having several years of low alfalfa yields or even a complete crop failure. (TD)

SOURCE: Bruce Anderson, Ph.D., forage specialist, NUIANR



Don't Become a Farm Accident Statistic

Sept. 21-27 was Farm Safety Week. While this NEBLINE issue will be mailed a couple of weeks after Farm Safety Week, safety should be foremost in the minds of farmers and rural residents at all times, especially during harvest season. I routinely receive farm-related accident statistics from the University of Nebraska. In the latest summary which included data from January through Aug. 28, 2003, 18 farm-related deaths had been reported in Nebraska. It saddens me to read the brief facts that accompany these statistics from year to year. "Truck box, greasing, box fell, pinned; Caught in auger; crushed when tractor overturned; crushed when caught between tractor and implement; crushed when jack slipped while working under machinery; trapped in moving grain, suffocated; 4W ATV; checking cattle; rode into washout hidden by tall grass; rolled, pinned, found by husband; caught in PTO; tractor run into by truck on highway."

Most modern tractors have some form of roll-over protective structure (ROPS) to protect the driver in the event of an overturn. When there are cases of death or serious injury reported when operating a ROPS equipped tractor, it is often the result of the operator being thrown from the tractor in the accident and suffering head injuries or from being crushed under the machine. In order to benefit from ROPS, the operator must remain inside the protective structure. More people could be saved if tractor operators would wear their seat belt when operating a ROPS equipped tractor.

People need to be aware of the dangers of standing on moving grain. Every year, people "drown" in grain that is being unloaded from a bin or wagon. When caught in moving grain, it can take only five seconds before an adult is unable to extricate himself and 20 seconds to be fully engulfed. Never enter a bin with the



Roll-over protective structures (ROPS) for tractors come in a variety of styles including this simple two-post design.

unloader operating or where the grain has bridged and never allow children to climb on trucks or grain carts that are being, or are about to be, unloaded. Speaking of child safety, all-terrain vehicles should be considered tools not toys.

Finally, so many times one reads about passengers, not the driver, being fatally injured in an accident. Tractors, combines and other equipment are no place for passengers. Passengers, precariously perched on a tractor's fender, are easily dislodged when the tractor hits a bump or the driver makes a sudden turn. Falls from the tractor can result in the passenger being run over by the tractor itself or by a pulled implement. Sometimes the passenger is actually part of the cause of an accident because they interfere with the driver's ability to react to an emergency.

By the time this article is published, harvest will be underway and we will be into one of the busiest times of the year for farmers. Long hours and dangerous working conditions are accepted as a normal part of the life of a farmer but no one should become a statistic for the sake of getting done a day or two sooner.

Family members who don't normally operate machinery are often recruited to help during harvest (many times after school or after returning from off-farm jobs). Remember these people

can be at increased risk because of the additive effects of not being as proficient with machinery as the usual operator, because of fatigue after a full day's activities off the farm and because typically they are working in poor light as the days get shorter in the fall.

For the rural residents reading this (high school students included) remember to be watchful on county roads and highways during harvest. A car going 50 mph overtaking a tractor or combine moving at 15 mph closes at a rate of over 50 feet per second. To put this in

roadway.

Headers on combines can be 20 to 30 feet wide and take up essentially all of a rural roadway. When meeting or overtaking a combine, give the farmer time to see you and to find a place where he/she can safely pull over to make room for you to pass. Never try to pass a combine or other farm implement on the shoulder of the road where you might encounter a washout or a culvert that can cause your vehicle to overturn and never attempt to pass (in either direction) until the farmer is aware of your presence. (TD)

Fatality Rate Higher for Senior Farmers

Farmers aged 75 and older are more than twice as likely to die on the job than their younger counterparts, according to the National Institute for Occupational Safety and Health (NIOSH). NIOSH Statistician Dr. John Myers reported that farmers over age 75 had a death rate of 57 per 100,000, compared to an overall death rate of 21 per 100,000 for all agricultural workers.

Much of this increased risk is related to aging and involves a decrease in sensory abilities that can impact the

safety of older farmers. Vision is known to be consistent throughout a person's younger adult life, but begins to decline by age 60.

Hearing also degrades as people age. Nearly one-half of adults have some level of hearing impairment. Some of this is normal; however, hearing loss is also attributed to noise exposure while working. This is especially true among farmers, who experience the highest rate of hearing loss among all workers. (TD)

Source: National Safety Council

Protect Hearing on the Farm

The drone and roar of farm equipment impairs hearing. Although there are federal safe limits for sound levels, ways to measure them precisely aren't readily available to farmers.

How loud is too loud? If you can hear your irrigation engine from a mile away, you should wear hearing protection when you check the well.

Hearing loss can be temporary and return overnight, but long-term noise can lead to permanent loss. Excess noise not only risks losing the sense of hearing, it aggravates fatigue and stress and slows reaction time to hazardous situations. Hearing should be checked annually and protective hearing devices worn as needed.

Federal guidelines for

maximum noise level are 85 decibels at any time. Hearing protection, such as ear muffs or ear plugs, should be worn whenever the noise level approaches this level. Stuffing cotton wads in your ears doesn't protect hearing.

When shopping for protective equipment to protect hearing, look for the noise reduction rating (NRR) number. The higher the number, the greater the protection. However, don't assume the device will reduce the noise level by the total amount. For example, an NRR for a set of ear plugs may reduce the noise level by only 10-15 decibels, depending on the predominant frequencies in the noise source. Noise reduction effectiveness also may be

reduced if the device isn't fitted or worn properly.

Protective ear muffs must fit the individual, so try them on for comfort and effectiveness. They should fit snugly but not too tight. Brush back hair so the muffs directly contact ears. Muffs are most protective when the strap is over the top of the head. Test how well the muffs will work by listening to a loud noise with them on. If the noise volume is significantly reduced and some frequencies eliminated, they offer some protection.

Ear plugs, on the other hand, may take some getting used to. They should fit comfortably in the outer ear canal and not be painful. Some plugs are rolled and inserted so the plug expands in the ear. Others

are simply wiggled in. Follow manufacturer directions for proper use.

People who hear a continuous roaring or rumbling hours after the work day ends are at risk for a hearing loss. Ringing noises and muffled sounds also indicate a potential problem.

Remember, too, to reduce noise at the source. A new muffler on the tractor will reduce engine noise. Loose or missing weather stripping around cab doors and windows are noise leaks. Hoods and panels on newer equipment also reduce noise and should always be replaced after maintenance. Small engines on transfer pumps, augers and elevators also should be equipped with adequate mufflers. (TD)