

DRY YEAR

continued from page 4

loam and heavier textured soils in Nebraska generally contain adequate moisture to react with and retain ammonia, even when seemingly very dry, as long as the injection depth is five to six inches below the soil surface and application rates are not excessive.

Of greater concern is the ability to seal the injection slot. If the soil is very dry and cloddy, the farmer may observe white "smoke" behind the applicator. This "smoke" is actually water vapor condensed from the air by escaping ammonia. Although it takes a lot of "smoke" to add up to any significant fertilizer loss, it's still best to try to minimize fertilizer loss. If vapor loss cannot be minimized by 1) going to a deeper injection depth, 2) slowing down, or 3) reducing

the application rate, it may be advisable to wait for better soil conditions or switch to a different form of nitrogen fertilizer.

Due to the warmer than normal winter, ammonia applied last fall may have partially nitrified and could be leached; however, dry soil conditions have generally minimized any nitrate leaching from fall-applied ammonia. Continued dry conditions will insure fall-applied nitrogen will be in the root zone when the crop needs it this spring.

Broadcast Fertilizers

Both dry and liquid fertilizers broadcast on the soil surface will be influenced by large amounts of residue, which may not have decomposed significantly due to the dry winter. Urea and nitrogen solutions can lose nitrogen to the atmosphere through ammonia

volatilization when surface-applied to high residue soils. If incorporated with residue, the nitrogen in broadcast fertilizers can be immobilized in decomposing residue, resulting in delayed availability to the crop.

Starter Fertilizers

Producers should be cautious about applying starter fertilizer with the seed this spring. Starter fertilizers which contain nitrogen and potassium are particularly hygroscopic—they will draw moisture away from the seed, resulting in germination damage and loss of stand. This effect will be accentuated with dry soils. Placing starter fertilizer in a band a couple of inches away from the seed will minimize the potential for germination damage. (TD)

Source: Richard B. Ferguson, Extension Soils Specialist, South Central REC



ANHYDROUS AMMONIA

continued from page 4

Other safety tips:

- Never fill an anhydrous tank more than 85 percent full of liquid. This reserves room for expansion should the tank warm up after filling. Overfilling the tank can result in dangerous pressure build up, resulting in activation of the pressure relief valve and release of anhydrous to the atmosphere.
- Keep a lot of water available. All anhydrous tanks should have a five-gallon water reservoir in or on them. Fill or replace the water daily. Keep a squirt bottle in the tractor cab. By dosing tissues in contact

with anhydrous with an external water source, one can greatly reduce the drying/burning effect. People who work with very large amounts of anhydrous ammonia, such as people who fill nurse tanks at a central location have large tubs of water (horse tanks) available so they can literally dive into the tank if exposed to anhydrous.

- Every field applicator and nurse tank should be equipped with an emergency breakaway valve. Keep hoses level when connecting and disconnecting so liquid anhydrous won't collect in low spots. Any anhydrous left in the hoses could shoot out under pressure onto the person disconnecting the equipment.

- Inspect all tanks before moving them.
- Don't travel faster than 20 miles per hour as anhydrous tank tires are only rated for 25 miles per hour.
- Always use a safety chain when transporting a tank and make sure all hitch pins have keys.
- Don't haul more than one tank at a time.
- Don't de-activate the excess flow valve and be sure it has been tested recently.
- Use only metal snap couplers.
- Handle hoses gently.
- Don't be caught without safety equipment in case of emergency. Keep backup safety goggles, gloves, clean flushing water and a cartridge respirator in the tractor cab. (TD)



NEW EXHIBITS

continued from page 8

design, stage make-up, written scripts, set design or other related learnings.

- **Puppet**—Exhibit consists of a puppet made by the 4-H'er for use in a theater arts production. Include description of production and puppets role.
- **Script**—A script written by the 4-H'er for a play, musical, skit, puppet show or other type of theater arts production.
- **You Be The Teacher**—Share with others what you learned in this project. Exhibit may be a poster, notebook, display, audiotape or videotape.
- **Stage Set Photography Display**—A display of photos of a stage set that was designed and built by the 4-H member. Include description of the photos.

- **Acting Portfolio**—A collection of photographs of the 4-H'er acting in a play. Include a written description of the photos.

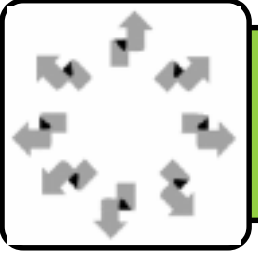
Leather Craftsmanship (county only)

- **Level 1 (No carved articles to be used in Level 1 exhibits)**—Exhibit board. Exhibit board is to measure approximately 12-inches by 18-inches by 1/4-inch. Peg board is a good choice. Board should include (1) three steps of tooling (tracing, beveling and backgrounding), (2) three types of lacing (whip stitch, running stitch and double loop stitch) and (3) two completed articles using skills and tools studied in Unit 1 manual. Fasten each sample of basic skill and article to the exhibit board (use double-sided tape

or lacing, do not glue or nail), label each sample and article.

- **Level 2 (Carved articles may be used in Level 2 exhibits)**—Exhibit board. Exhibit board is to measure approximately 12-inches by 18-inches by 1/4-inch. Peg board is a good choice. Board should include (1) eight steps of tooling (swivel knife, camou-flage tool, shade tool, beveler tool, veiner tool, seeder tool, background tool), and a sample showing ornamental cuts, (2) three types of lacing (whip stitch, running stitch and double loop stitch) and (3) three completed articles using skills and tools studied in Unit 2 manual. Fasten each sample of basic skill and article to the exhibit board (use double-sided tape or lacing, do not glue or nail), label each sample and article.

Miscellaneous



RABBIT DAMAGE

continued from page 3

bits are protected by Nebraska game regulations. If you plan to trap or shoot rabbits, contact Nebraska Game and Parks Commission or your local Animal Control office to obtain

any necessary permits.

For more information, stop by your extension office to pick up Prevention and Control of Rabbit Damage (NebGuide G-1401) or visit the Lancaster County Extension Web site at www.lancaster.unl.edu. (SC)

Rabbit Resistant Perennials

According to Brooklyn Botanical Gardens, the following list of perennial flowers are less appealing to a rabbit's hearty appetite.

Try to introduce a few of these plants into your garden if rabbits have been a problem in your area. (MJF)

- | | | |
|---------------|-----------------|----------------------|
| • Yarrow | • Foxglove | • Narcissus |
| • Monkshood | • Daylily | • Yucca |
| • Wormwood | • Leopards Bane | • Oriental Poppy |
| • Aster | • Meadow Sweet | • Lambs Ear |
| • Astilbe | • Hosta | • Sedum |
| • Bellflower | • Red Hot Poker | • Globe Flower |
| • Wild Indigo | • Cranesbill | • Meadow Sage |
| • Snakeroot | • Geranium | • Bergenia |
| • Autumn | • Iris | • Pearly Everlasting |
| • Crocus | • Bishops Hat | |

MULCH

continued from page 5

layer of new mulch each year.

- Apply to a depth of three to four inches.
- Apply mulch in a three- to six-foot diameter under newly planted trees.
- Apply mulch in a one-foot band around large tree trunks to make mowing easier.
- Apply beyond the spread of shrubs to allow for growth without lawn mower interference.
- Cover the soil to the drip line under fruit trees for optimum growth.

It's an Alternative

Wood chip mulch is an alternative to:

- river rock
- volcanic rock
- white marble rock
- cypress mulch
- bark chips
- straw

It's Available

From:
 • Arborists
 • Christmas tree recycling locations
 • The Lincoln Landfill Transfer Station has chip mulch available. (DJ)

FOOD GIFTS

continued from page 6

cookies won't make the trip intact. When mailing firm cookies and homemade candies, wrap each piece individually and pack items in commercially popped popcorn or foam packing "peanuts" to help cushion the trip. Place the food gifts in a sturdy box and seal it securely with packing tape.

For additional information, call the USDA Meat and Poultry Hotline's toll-free number 1 (800) 535-4555; the toll-free number for the hearing impaired (TTY) is 1 (800) 256-7072. The hotline operates weekdays 9 a.m. to 3 p.m.

This article is adapted from an article on the USDA Web site at: <http://www.fsis.usda.gov/OA/news/2002/milgifts.htm> (AH)

"Education offers the greatest opportunity for really improving one generation over another."

— W.K. Kellogg

Nebraska Pioneer Farm Awards

The Knights of Ak-Sar-Ben Foundation and the Nebraska Association of Fair Managers welcome nominations for the 47th Annual Nebraska Pioneer Farm Awards. The program honors farm families in Nebraska whose land has been owned by members of the same family for 100 years or more.

To date, nearly 6,000 families in 93 Nebraska counties have been honored at various

county fairs. Honoree's receive an engraved plaque and gatepost marker as permanent recognition of this milestone. The awards will be presented at the 2002 Lancaster County Fair. Nomination forms are available at the extension office or Lancaster County Fair office, 4100 North 84th street. Nominations must be received by the Lancaster County Fair office no later than May 1, 2002. (GB)



Visit Our 4-H Embryology Egg Cam!

The 4-H Embryology Web site gives Web surfers a bird's-eye view of chicks hatching! Visit the site online at www.lancaster.unl.edu for Egg Cam, which provides a live view as incubated eggs give way to new baby chicks. The site also features fun activities, photos of the embryos as they develop, and resources for parents and teachers. Currently, a batch of both duck and chicken eggs have been set in the incubator and are expected to begin hatching April 22 and 23.