

BIOSECURITY

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ing good biosecurity measures on their operations.

Now as ag-terrorism becomes a more realistic threat, those same biosecurity measures can, and should, be practiced to prevent an ag-terrorism attack on our food supply.

According to the National Animal Health Emergency Management System, there are several reasons why animal agriculture is a potential target for ag-terrorism.

- Relative ease (when compared to incident affecting human population) of implementing an ag-terrorist attack.
- The disruption of the nation's food supply and the negative effects throughout the food processing and transportation infrastructure.
- Public fear regarding the safety of their food purchases.
- Public apprehension/confusion resulting from media coverage of response activities; e.g., destruction/disposal of affected livestock, quarantines, etc.
- Disruption of United States' ability to export food products. Ag-terrorism poses a greater threat to states like Nebraska which rely heavily upon animal agriculture and food processing for economic well-being.

Fortunately, livestock producers can greatly reduce or prevent any ag-terrorism attack.

According to the team of University of Nebraska veterinarians there are four main biosecurity principles livestock producers should practice to protect their animals.

- Check Livestock Frequently – look for unusual behavior, blisters, illness or death and report them to your veterinarian immediately, do not hesitate.
- Don't spread disease from place to place – check all animals before they move on to or off of your operation. If something doesn't look right call a vet immediately.
- Assure the safety and quality of feed and water – always know your source of feed and don't be afraid to ask questions. Also always store your feed in a safe location.
- Know who is on your farm or ranch – it is very important to keep your eye out for people who do not belong on your place or your neighbors'. Always control visitors contact with your animals and their feed. Restrict access to your livestock and insist visitors register with you and wear clean clothes. Don't be afraid to call law enforcement if you suspect a problem.

Bioterrorism and Crops

According to University of Nebraska Extension Plant



DEPRESSION

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depression include loneliness, the financial aftermath of holiday shopping and even disappointment over presents received.

Nearly everyone is susceptible to holiday depression regardless of age, sex or background. However, it most often affects those people who feel they have a lack of control over their lives.

One of the best ways to combat holiday depression is by participating in activities with

other people. Visit a nursing home; go to a holiday service at a church, synagogue or temple; play in the snow with your favorite little person or sing—it's a lot harder to be depressed when you're doing something worthwhile with people you enjoy.

Seeking help with depression does not mean you are crazy or something is wrong with you. It doesn't mean you can't handle your own problems. It's just smart. Getting help when it's needed is a sign of strength and intelligence, not weakness. Successful people



ACREAGES

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2,800 dwelling units over 25 years.

Acreage growth could occur in various styles and locations throughout the county. Some development will occur in towns that permit acreage development. Some will occur in towns that utilize farmstead split-off provisions and some will likely cluster within agricultural areas.

Acreage Principles

Acreages should:

- Be limited in the Lincoln areas of growth Tier I, Tier II and Tier III in order to provide for future urban growth.
- Be directed to appropriate areas of the county. Predetermined focus areas where acreage developments generally are concentrated enhances the ability to provide county services and aids in reducing

the impact on the agriculture community.

- Provide for adequate and appropriate locations of this type of development.
- Be sensitive to: soil productivity, agricultural production, existing rural water, existing and planned; paved roads, ground water conditions, environmentally sensitive areas; reflect existing zoned and designated acreage areas.

Geographic Distribution

Area A

Area A is suggested as a very low density area to reflect, better farming soils, poorer groundwater, a lack of a rural water district, a low frequency of paved roads, the location of wetlands, both saline and fresh water, the location of threatened and endangered species and the location of native prairie.

Densities of eight dwellings per square mile, or less, are suggested.

Area B

Area B shows an area of poorer soils, better access to paved roads, little impact on wetland and native prairies and better ground water or rural water availability. This may have selected opportunities for focus areas of higher acreage development, perhaps at densities of 200 dwellings per square mile. Until specific areas are identified, density should be held at about 32 dwellings per square mile.

Area C

Area C has generally good ground water but is not in a rural water district and does not have a fine grain of paved roads. This area has not had much acreage activity yet except near the state lakes and Crete. It is suggested this have an overall density of 16-32 dwellings per square mile.

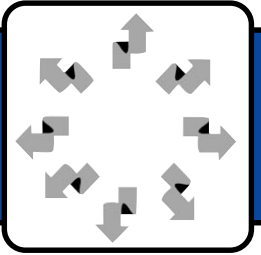
Pathologist, John E. Watkins the likelihood of a bioterrorism attack working and causing any damage to our crops is very small. Even though it can be done in a greenhouse "For any plant disease to occur and then become epidemic, the three essential components — a virulent pathogen, susceptible host, and favorable environment — have to be in balance, as this doesn't happen very often in nature."

Also, new genetics in crops and new chemicals used to fight crop diseases aid in reducing the likelihood of a successful attack on our crops.

Hopefully, we will never have to deal with a bioterrorism or ag-terrorism attack here in Nebraska. I believe it is very comforting to know that the University of Nebraska is on the forefront of these very serious issues providing quality information and research to aid the citizens of Nebraska.

For more information on biosecurity issues, contact Lance Cummins-Brown at the University of Nebraska Cooperative Extension in Saunders County at 1-800-529-8030 or by e-mail at lbrown4@unl.edu.

Miscellaneous



WATER

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malfunctioning heat tapes. The CPSC recommends using only new heat tapes certified by Underwriter's Laboratories (UL) or similar agency. They also recommend using a ground fault circuit interrupter and replacing any heat tapes more than three years old with new, certified heat tapes utilizing grounded (three-prong) plugs. Check the CPSC web page at www.cpsc.gov for more information, or call CPSC at 1 (800) 638-2772.

Underground Pipes

Even buried, underground water pipes are subject to freezing. Problems usually arise when soil in new water line trenches has not fully settled, or when earthwork or construction above the pipeline removes too much soil or replaces soil with materials like concrete that conduct heat away more easily.

If you have a buried water line that is at risk because of fresh backfill or thin cover, you can add insulation on top of the ground in the form of hay, leaves or even snow piled over the water line. In extreme cases, letting a small flow of water run continuously through the water line can supply enough warm water to keep a line open through temporary periods.

With buried lines, remember that the risk period may last for days or even weeks beyond the extreme cold weather until ground heat from below can migrate back up to the water line.

Livestock Waterers

Keeping waterers open in an unheated barn, can be challenging and frustrating in winter. If electricity is available, submersible electric trough, tank and bucket heaters are available for \$20 to \$50.

For safe operation, you must have a power supply with a third wire ground. If electricity is not available, liquid propane gas (LPG) stock tank heaters are available for \$300-\$500.

Energy-free waterers are available for new installations. These waterers channel heat up from the ground below and use lots of insulation to keep water warm. If properly adjusted, they seem to work very well. Expect to pay \$450 to \$700 for energy-free waterers (about \$100 more than their electrically heated counterparts).

An inexpensive alternative for large stock tanks without access to electricity is the propane bubbler. This device is anchored to the bottom of the stock tank and releases a slow stream of bubbles from a 20-pound (5 gallon) propane tank. The bubbles, which are not harmful to livestock, carry warmer water from the bottom of the tank up to the surface where they maintain a small open hole in the ice during moderate weather. The bubbler costs less than \$100 and operates for up to three months on five gallons of propane (about \$10).

Adding insulation to the outside of a water tank and even to the water surface can help conserve heat and keep water available longer during cold weather. When adding insulation, be sure to protect the insulation from animal chewing, manure and spilled water.

For small quantities of water, electrically heated buckets and water dishes are available for \$30-\$100 from hardware and farm supply stores. Make sure these units are properly grounded for safety. (DJ)

Information Source: Shawn Shouse, ISU Extension Field Specialist/Ag Engineering, SW Area Extension Center.



COOKING AHEAD

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must be kept refrigerated, as bacteria love to grow in these foods. Avoid letting a pumpkin pie set at room temperature for more than **TWO** hours. That means it shouldn't sit out more than **TWO** hours total including after its baked and while waiting to be served.

Note: Some commercial pumpkin pies that are purchased at room temperature may later need to be refrigerated. Check the label on commercially baked pies for storage requirements. Don't buy pies stored at room temperature if label directions are unclear or missing.

• If you'd like to get a head start on preparing your pumpkin pie, it's easiest and safest to freeze just your shaped and unbaked pie crust in a freezer- and oven-safe pie pan. Or, purchase an unbaked frozen pie crust already in a pie pan. Then, add the pumpkin filling, mixed according to directions, to the

frozen crust just before baking. It takes just a few minutes to mix together the ingredients.

Unless the directions with your frozen pie crust recommend otherwise, place a baking sheet in your oven and pre-heat your oven to the baking temperature given in your pie recipe. Then place your pie on the hot baking sheet and bake your pie as usual the day of your meal. To save additional time, buy a pie filling with the spices already added, especially if you must buy extra spices just for your pie.

• Instead of making a baked pumpkin pie, consider making a form of pumpkin pie that can be frozen, such as the Pumpkin Ice Cream Pie recipe in this month's "Healthy Eating Section."

Set the Table Ahead

Save time by setting your table the day before your holiday meal. Also, set out all food preparation and service utensils. Or, assign children or others to set the table before you eat.