Introduction

Agriculture and food account for 13 percent of the United States’ gross domestic product, 18 percent of its employment, and $140 billion in revenue. Since September 11, 2001, there has been an increased awareness of the vulnerability of our domestic infrastructure, including the food and agricultural sector, to acts of terrorism.

The protection and integrity of America’s agricultural production and food supply are essential to the health and welfare of both the domestic population and the global community. While farm security presents unique challenges for producers, there are some basic and practical security measures that can be instituted at the farm level.

The voluntary guidelines and checklist presented here provide a pre-harvest security resource and are designed to help the agricultural producer reduce security risks at the farm level. Each producer should review the guidelines and checklist to determine the recommendations most appropriate for his or her operations. Due to the unique nature of the industry, not all recommendations may be appropriate for all operations. Additional helpful information, including examples of referenced security plans, are available via the Internet links listed in the Farm Security Resources and References section at the end of this guide.
General Security

Threats to farm security are varied and numerous. The prevention of intentional or unintentional injury to crops or livestock is of primary concern in pre-harvest agricultural production. Risk assessments have great utility in the realm of prevention in that they help to identify hazards that need to be addressed and rank their importance. Information obtained from a facility-specific risk assessment can be a powerful tool. In addition to prevention, early identification to minimize damage should an event occur is also very important.

As a producer, there are some things that you can do to protect your facility.
Awareness

• Periodically conduct random security checks along the perimeter of all fields and pastures for signs of suspicious activity or unauthorized entry.
• Encourage employees to report any suspicious activity or any unauthorized personnel on or near the facility.
• Educate employees and customers to be alert for signs of possible tampering with crops, livestock, supplies, equipment, and facilities.
• Alert all employees and family members to watch for sick animals, including wildlife, especially birds, or unusual changes in the appearance of crops.

Planning

• Develop or update a risk management plan and share it with employees, family, and local law enforcement.
• Identify areas or activities where threats might occur and increase security in those areas.
• Consult with experts when you are developing your plan. Include your veterinarian, crop consultant, Extension agent, university scientist, and State department of agriculture experts.
• Plan how to respond to threats or tampering with your animals, crops, equipment, chemicals, supplies, and energy and water sources.
• Update your plan regularly. Make sure you have contact names and telephone numbers. Include in your plan how you will notify appropriate local law enforcement officials, as well as Federal and State agriculture officials.
• Develop a biosecurity plan that includes requirements for quarantining new stock, cleaning and disinfection procedures, and disposal of fallen stock.

Barriers

• Minimize the number of places where people can easily hide around the farm. Trim trees and shrubs that could provide concealment to criminals or block visibility of security patrols.
• Maintain fences in good repair.
• Secure hazardous materials, energy sources, and production inputs like feed and nutrients.
• Secure water wells or other water supplies, and identify alternative water sources as backups.
Community

• Get to know your neighbors.
• Initiate or join a community crime watch program.
• Don’t advertise when you’ll be away from your facility.

Inventory Control

• Maintain an up-to-date inventory of anhydrous ammonia, ammonium nitrate, bulk urea, pesticides, herbicides, and other hazardous materials and immediately investigate any discrepancies.
• Make sure that all storage areas for hazardous chemicals and drugs are secured, reasonably isolated, and that they are built and vented according to national and State codes. Supervise employees with access to these materials.
• Secure chemical containers inside buildings, whether they are empty or not.
• Inventory critical farm assets (e.g., trucks and tractors) and review your inventory regularly. Frequently inspect trucks, tractors, and other farm equipment for signs of tampering.
• Restrict access to computer data systems, secure on-line communications, and safeguard them with virus protection. Back-up all files at least weekly and store back-up files off-site.

Law Enforcement

• Talk with your local or county sheriff or State police office to find out if your farm or facility is subject to any specific risks based on its locality.
• Arrange to have a security survey of your facility by local law enforcement or your insurance agent.
• Request local law enforcement to routinely conduct patrols along your facility’s perimeter.
• Immediately report any unusual or suspicious persons, vehicles, or activity to local law enforcement.
Lighting

- Make sure that the areas surrounding and within farm buildings are well lit.
- Install back-up lighting for emergencies.
- Install alarms, motion detection lights, cameras, and/or other appropriate security equipment as needed. Use electronic sensors around sensitive areas during times when no one should be working at these sites.

Locks

- Be sure your water supply system is secured with locks on wellheads and pump houses, water storage tanks, etc.
- Install entry prevention devices on exterior ladders, protecting the ladders from unauthorized use and preventing access to the top of bulk storage bins.
- Install locks on all doors and seal or lock all windows and vents on buildings that contain critical inventories and equipment.
- Lock all vehicles parked outside at night or during times of owner and employee absence.
- Use deadbolt locks on doors with a minimum of 1.5-inch throw.
- Padlock entry and discharge points of exterior liquid tanks (above and below ground) and all other storage areas when not in use.
- Keep padlocks locked on hasps while not in use.
- Distribute keys to employees on an as-needed basis and verify when they are returned.

Signage

- Post signs on fields that direct visitors to a central sign-in area, away from fields, animal pens, and other restricted areas.
- Post alarm monitoring service signs in highly visible locations.
- Post “No Trespassing” signs along the perimeter of the property and “Do Not Enter” signs outside of all buildings.
- Periodically check the signs, and replace or repair them, as necessary.
Training

- Make an emergency preparation and response plan that includes all emergency phone numbers and information that may be needed by first responders (such as the type and location of all chemicals at the facility).
- Hold frequent safety and security meetings with all employees and family members who work or live on the farm/ranch.
- Make sure employees know how and where to report concerns or suspicious activities.

Visitors and Personnel

- Have only one (clearly marked) entry way for visitor use.
- Require all visitors to check in with a designated farm representative.
- Designate a specific area for visitor parking.
- Maintain a record of visitor names/companies, arrival/departure times, and purposes of the visit.
- Use visitor badges or identification cards if needed and explain disease prevention to visitors.
- Do not allow visitors, including delivery personnel, contract providers, and service support, to have unlimited access to the premises.
- Restrict visitor access to key areas such as gasoline, fertilizer, and pesticide storage.
- Require proof of identity for non-service visitors.
- Screen prospective employees, check with references, and consider regular background checks on all employees.
- Develop a system to identify employees and visitors.
Security Plan Guidance—Voluntary Checklist

Purpose:
This voluntary checklist has been developed to provide the producer with information to consider when developing a security plan. Each producer should review all items and select those most appropriate to his or her operations. While it is difficult to address every contingency that may be encountered, instituting appropriate preventive and response measures will limit liability for farms and protect American agriculture.

The checklist that follows is divided into a general security and production-specific sections. The general security section is applicable to a wide variety of production facilities. Additional sections follow that focus upon particular types of production facilities.

General Security

- Procedures are in place for notifying appropriate law enforcement when a security threat is received, or when evidence of actual product tampering is observed.
- Procedures are in place for heightened awareness (especially when the Department of Homeland Security terrorism threat level is elevated) for unusual activities around the farm and increased disease symptoms among animals or crops.
- A current local, State, and Federal Government Homeland Security contact is maintained.
- All employees are encouraged to report any sign of product tampering.
- Facility boundaries are secured to prevent unauthorized entry.
- “No Trespassing” and “Restricted Entry” signs are posted appropriately.
- Alarms, motion detection lights, cameras, and/or other appropriate security equipment are used in key areas, as needed.
- Facility perimeter is regularly monitored for signs of suspicious activity or unauthorized entry.
- Doors, windows, gates, roof openings, vent openings, trailer bodies, railcars, and bulk storage tanks are secured at all times.
- Outside lighting is sufficient to allow detection of unusual activities.
Fire, smoke, and heat detection devices are operable throughout the farm.

Storage tanks for hazardous materials and potable water supply are protected from, and monitored for, unauthorized access.

Wells and other water supplies are secured and routine testing is performed.

Truck deliveries are verified against a roster of scheduled deliveries. Unscheduled deliveries are held away from facility premises pending verification of shipper and cargo.

Records are maintained for all vehicles and equipment; make, model, serial number, service date, etc.

Vehicles and equipment are secured or immobilized when not in use; keys are never left in unattended vehicles.

Machinery is removed from fields and stored appropriately; valuable equipment and tools are locked in a secure building.

Entry into facility is controlled by requiring positive identification (i.e., picture ID).

New employees are screened and references are checked.

Visitors and guests are restricted to non-production areas unless accompanied by a facility employee.

Where required by biosecurity procedures, visitors wear clean boots or coveralls (disposable boots and coveralls are provided for visitors).

Areas are designated for check-in and check-out for visitors/deliveries (with a sign-in sheet for name, address, phone number, reason for visit).

An inspection for signs of tampering or unauthorized entry is performed for all storage facilities regularly.

Hazardous materials are purchased only from licensed dealers.

A current inventory of hazardous or flammable chemicals (including drugs, chemicals, pesticides, fertilizers) or other products (including chemical trade names, product type, EPA numbers, quantity, and usage) is maintained, and discrepancies are investigated immediately.

A current inventory of stored fuel (diesel, gasoline, fuel oil, propane, oxygen, acetylene, kerosene, etc.) is maintained.

A disease surveillance plan is available.
Risk management plans have been developed or updated and shared with employees, family, visitors, customers, and local law enforcement. Plans include awareness of animal and plant health, as well as signs of tampering with crops, livestock, supplies, vehicles, equipment, and facilities.

Orientation/training on security procedures is given to all facility employees at least annually.

Passwords for USDA systems and programs are protected to prevent unauthorized user entry.

Dairy Security

Appropriate sanitation measures are in place to ensure milk tanks and milk supply are not contaminated.

Access to milking or milk storage areas is limited to essential personnel only. These areas are locked when an owner or employee is not present. (Arrangements must be made with State regulatory agencies, when applicable, to ensure that they have access to areas needed for routine inspections.)

Any time a previously locked area is found to be unlocked or evidence of break-in or tampering is found, the cooperative or plant is notified immediately (the milk is held until an investigation determines that no tampering occurred).
Crop Security

- Aerial applicators are kept in locked hangars; anti-theft devices are installed.
- Access to pesticide storage areas or chemical application equipment is controlled and limited to essential personnel only.
- All imported plant material, including seeds, meets phytosanitary import requirements.
- A stringent pest control program, using chemical or physical measures, is in effect.
- A disease outbreak or infection is limited through steam or chemical sterilization procedures, pasteurizing or sterilizing media, and disinfecting containers.
- Routine surveys are conducted for unusual pests (insects, diseases, or weeds) or crop symptoms. Plant and soil samples are collected and submitted for diagnostics and verification.
- Greenhouses are locked and keys are available to essential personnel only.
- Signs are posted at the entries indicating that access is restricted.
- Benches are thoroughly cleaned and disinfected. (Solid concrete floors and drains facilitate cleaning and disinfection.)
- Routine maintenance is performed on ventilation and water systems.
- Records are maintained for plant health management, including invoices with dates, history of purchases, sources, arrival dates, etc.
Cattle Security

- Animal identification system is maintained (ear tags, horn brands, tattooing hoof brands, freeze markings, micro-chipping, or other permanent markings, etc.).
- Records are maintained for animal health management, including vaccination dates, history of purchases, sources, arrival dates, etc.
- New additions to the herd are quarantined and inspected for disease symptoms.
- Quarantine area is at a sufficient distance from general population to prevent cross contamination of resident livestock.
- Cattle are transported in clean vehicles.
- Coveralls and boots are available for individuals coming in contact with animals.
- Equipment and clothing coming in contact with animals are cleaned and disinfected before it enters your property.
- Vaccinations are current and a parasite control plan is in place.
- Sick animals are isolated immediately and your veterinarian notified.
- Postmortem examinations are performed on every animal that dies unexpectedly and information on the situation is kept confidential until the diagnosis is confirmed.
- An emergency carcass disposal plan is available and provides approved burial sites, transportation routes, and/or composting or incineration facilities and plans.
Poultry Security

- Chicks are selected from reliable sources and records are kept of all poultry purchased.
- Disease outbreaks are responded to quickly; sick birds are evaluated by a veterinarian; dead birds are removed immediately and stored for necropsy or buried or incinerated.
- Brooder houses are disinfected before a new shipment of chicks arrives.
- Vaccinations are given before chicks are introduced into flock.
- Vehicles entering and departing the area where poultry are housed are washed, then sprayed with a disinfectant.
- Personnel with access to the flocks wear protective outer clothing, including boots and headgear.
- Disinfecting foot dips or footpads are at entrances and exits to poultry areas.
- Egg flats, racks, trolleys, and pallets are high-pressure and/or water-washed and sanitized between uses at egg processing facilities.
**Facility Map**

A map and a list of emergency contacts are critical components for any farm security plan and can be particularly useful for first responders in the event of a fire, explosion, or biohazard incident. The map should include the following:

- The name and address of the owner/proprietor and relationship of the farm to adjacent fields or structures
- Buildings/structures labeled, including houses, barns, greenhouses, nurseries, shops, outbuildings, silos, grain bins, chemical and fertilizer storage, manure storage/pits (Indicate sizes and locations of entrances)
- Transportation routes, including access roads, highways, crossroads, etc.
- Storage areas for machinery, equipment, airplanes
- Fences and gates (indicate dimensions)
- Well and/or municipal water supply, hydrants, ponds, streams, rivers, lakes, and wetlands
- Electric, gas, and phone lines and shutoff
- Septic tanks, wastewater systems, cisterns
- Drainage ditches, culverts, surface drains
- Fields/pastures
- Fuel storage tanks
- Areas where animals and/or crops of concern are located
Emergency Contacts
(Name and Phone Number)
- 911
- Fire Department
- Hospital
- Police Department
- County Sheriff
- County Extension Agent
- Doctor
- Poison Control Center
- Veterinarian
- Gas Company
- Electric Company
- Chemical Suppliers
- Feed Suppliers
- Vehicle/Equipment Dealers
- Ambulance
Farm Security Resources and References

General Farm Security

Extension Disaster Emergency Network (EDEN):
http://www.agctr.lsu.edu/eden/

Guide for Security Practices in Transporting Agricultural and Food Commodities:

Michigan State University; Emergency Planning for the Farm:
http://www.pested.msu.edu/

National Association of State Departments of Agriculture:
http://www2.nasda.org/NASDA/

North Carolina Dept of Agriculture & Consumer Services; Farm Biosecurity Guidelines:
http://www.ncagr.com/vet/Biosecurity.htm

NDSU Disaster Preparedness Lessons:
http://www.ag.ndsu.edu/prepare/

Purdue Pesticides Program:
http://www.btny.purdue.edu/Pubs/PPP/PPP-64.pdf

University of Arkansas Cooperative Extension Service; Farm and Home Biosecurity Introduction:
http://www.uaex.edu/biosecurity/default.asp

Identity Theft:
http://www.consumer.gov/idtheft

Crop Security

American Phytopathological Society (APSnet):
http://www.apsnet.org/

Entomological Society of America:
http://www.entsoc.org/

National Agricultural Aviation Association:
http://www.agaviation.org/
Livestock Security

Farm & Ranch Biosecurity:
http://www.farmandranchbiosecurity.com/

Farm and Aquaculture Training:
http://www.hehd.clemson.edu/msp/farm_animal_training/

Farm Security – “Treat It Seriously”
Security for Animal Agriculture: Security Checklist:

Nebraska Cooperative Extension:
http://ianrpubs.unl.edu/animaldisease/g1411.htm

Massachusetts Department of Agricultural Resources – Animal Health Information:

Practical Biosecurity for Dairies
Where Is the Evidence, Does It Really Matter?:

Security Guide for Pork Producers:

Information for Employers

U.S. Department of Homeland Security Web site
U.S. Citizenship and Immigration Services:
http://uscis.gov/graphics/services/employerinfo/index.htm
U.S. Department of Agriculture Web sites

Animal and Plant Health Inspection Service (APHIS):
http://www.aphis.usda.gov/

Agricultural Research Service (ARS):

Cooperative State Research, Education, and Extension Service:
http://www.csrees.usda.gov/qlinks/extension.html

Farm Service Agency (FSA):
http://www.fsa.usda.gov/pas/

Grain Inspection, Packers and Stockyards Administration (GIPSA):
http://www.gipsa.usda.gov

National Animal Health Laboratory Network
http://www.csrees.usda.gov/nea/ag_biosecurity/in_focus/apb_if_healthlab.html

National Plant Board:
http://www.aphis.usda.gov/npb/

National Plant Diagnostic Network:

Rural Development:
http://www.rurdev.usda.gov

U.S. Department of Agriculture:
http://www.usda.gov

U.S. Department of Agriculture; Homeland Security: