

## **INITIATIVE 102: AGRICULTURAL BIOSECURITY**

**Program Team Leader: Dr. George Askew**

US Agriculture is a \$1 trillion-per-year industry, responsible for 1/6 of the gross national production. National leaders and intelligence analysts have growing concerns about the nation's ability to safeguard the agricultural industry and related food supply. Reducing South Carolina's vulnerability to terrorism and responding rapidly to suspected activity is more important now than ever.

As South Carolina faces major concerns of foreign animal, zoonotic, emerging disease outbreaks, invasive plant species introduction, exotic plant pest and disease introduction, food safety, and other agroterrorism issues, the roles of state/county emergency officers and first responders are rapidly expanding. Agroterrorist attacks could involve biological, chemical, radiological or other agents. Biological agents could be produced locally or obtained elsewhere and brought into the state. They may be natural or weaponized in production.

Anti-livestock agents include foot and mouth disease, classical swine fever, African Swine fever, rinderpest, rift valley fever, avian influenza, and Newcastle disease. These are highly infectious and contagious, available, easy to acquire or produce, easily disseminated, and not harmful to the terrorist. Plant diseases include soybean rust, geranium wilt, corn downy mildew and plum pox virus.

Many of these diseases have the capability of crippling portions of food production industries and have long-term economic consequences beyond the immediate medical challenges. Additionally, in plant or animal incidents, there could be tremendous impact on the US economy from the introduction of a pest or disease subject to interstate or international quarantines and export bans.

Groups and individuals such as growers, producers, packers and distributors, veterinarians, Extension agents and specialists, state agriculture employees, agriculture food inspectors, food processors, food transporters, Department of Health and Environmental Control, Natural Resource Conservation Service, and Farm Services Agency agents and specialists will be targeted.

### **Goals:**

1. Improve state, regional, and local capabilities to detect, recognize, diagnose and prevent agroterrorism and threats to food safety.
2. Improve state, regional, and local capabilities to respond to agroterrorism, foreign animal diseases, foreign plant diseases, or other disasters that threaten agriculture or food safety.
3. Establish and support local and regional agroterrorism emergency response capabilities.
4. Assist in the development of County Animal/Agriculture Response Teams (CART) and the State Animal/Agriculture Response Team (SART).
5. Conduct training in biosecurity issues, animal and plant disease recognition and identification, and mitigation of agroterrorist attacks.

## **Project 010: Plant Disease and Pest Surveillance & Detection**

Extension will work to enhance South Carolina agricultural security by quickly detecting introduced pests and pathogens. This will be achieved through participation in the Southern Plant Diagnostic Network (SPDN), a network of public agricultural institutions in the south, which is networked nationally with other public agricultural institutions through the National Plant Diagnostic Network (NPDN). This network provides a cohesive, distributed system to quickly detect high consequence, biological pests and pathogens which may have been deliberately introduced into our agricultural and natural ecosystems and provides a means for quick identifications and establishment of protocols for immediate reporting to appropriate responders and decision makers. Extension will train Extension Agents, Plant Industry Inspectors, Master Gardeners, and growers to become First Detectors utilizing training materials developed by members of the SPDN.

### ***Objectives:***

1. Assist the plant community in recognizing a disease, insect, or weed that could harm or destroy this community.  
Specific target audience: Extension Agents, growers, and First Detectors
2. Develop a system to alert state diagnostic personnel and officials of a plant disease or pest outbreak.  
Specific target audience: Extension Agents and First Detectors
3. Learn how agroterrorists could threaten the agriculture community and develop plans to counter this threat.  
Specific target audience: Extension Agents, growers, and First Detectors
4. Assist local and state officials with the organization and management of the County Animal/Agriculture Response Teams (CART).  
Specific target audience: Extension Agents, growers, and First Detectors

### **Accomplishment Indicators:**

1. Number of educational programs and workshops conducted using “direct” methods.
2. Number of people participating in programs and workshops.
3. Number of people (no duplications) participating in programs and workshops for the first time during CUMIS FY 07-08.
4. Number of people gaining knowledge.
5. Number of people using practices learned.
6. Number of people (when race and gender are known) receiving non-program information through telephone, office, one-on-one and/or farm visits, etc. when using “direct” methods.
7. Number of activities conducted using “indirect” methods. List all “indirect” methods in narrative box.
8. Number of people (when race and gender are not known) reached through fairs, newspaper articles, television, radio, web sites, etc. when using “indirect” methods. List potential audience and/or subscribership and describe in narrative box.
9. Number of people reached by volunteers (including non-Extension staff).
10. Number of agencies collaborating to develop a system to alert state officials.

11. Number of articles, fact sheets, bulletins, and newsletters published.
12. Potential audience reached through publications.
13. Number of radio programs produced.

**Project 011: Man-Made or Natural Disaster Preparedness, Prevention, Mitigation, and Recovery for Animals**

***Objectives:***

1. Assist the animal community to recognize a disease or other foreign agent that could harm or destroy this community.  
Specific target audience: Extension Agents, producers, and other first responders
2. Develop a system to alert state diagnostic personnel and officials of an animal disease outbreak.  
Specific target audience: Extension Agents, producers, and other first responders
3. Learn how agroterrorists could threaten the agriculture community and develop plans to counter this threat.  
Specific target audience: Extension Agents, producers, and other first responders
4. Assist with the development of local and regional animal emergency preparedness plans and activities.  
Specific target audience: Extension Agents, producers, and other first responders
5. Assist local and state officials with the organization and management of the County Animal/Agriculture Response Teams (CART).  
Specific target audience: Extension Agents, producers, and other first responders

**Accomplishment Indicators:**

1. Number of educational programs and workshops conducted using “direct” methods.
2. Number of people participating in programs and workshops.
3. Number of people (no duplications) participating in programs and workshops for the first time during CUMIS FY 07-08.
4. Number of people gaining knowledge.
5. Number of people using practices learned.
6. Number of people (when race and gender are known) receiving non-program information through telephone, office, one-on-one and/or farm visits, etc. when using “direct” methods.
7. Number of activities conducted using “indirect” methods. List all “indirect” methods in narrative box.
8. Number of people (when race and gender are not known) reached through fairs, newspaper articles, television, radio, web sites, etc. when using “indirect” methods. List potential audience and/or subscribership and describe in narrative box.
9. Number of people reached by volunteers (including non-Extension staff).
10. Number of Extension Agents completing educational workshops.
11. Number of agencies collaborating to develop a system to alert state officials.
12. Number of articles, fact sheets, bulletins, and newsletters published.
13. Potential audience reached through publications.
14. Number of radio programs produced.