

Diseases and Safe Handling Techniques of Feral Swine

Presented by
Sheldon Owen

Feral Hog Management Workshop
August 17-18, 2010

Protecting People
Protecting Agriculture
Protecting Wildlife

Common Types of Feral Swine Damage

- Agricultural Crop Damage
- Livestock Predation
- Habitat Destruction
- Endangered Species Predation
- Game Species Competition
- **Disease Threats**
 - **Wildlife**
 - **Livestock**
 - **Humans**



Protecting People
Protecting Agriculture
Protecting Wildlife

Known Feral Swine Diseases & Risks

<ul style="list-style-type: none"> • Pseudorabies • Swine Brucellosis • Classical Swine Fever • African Swine Fever • Bovine Tuberculosis • Influenza • PRRS • Anthrax 	<ul style="list-style-type: none"> • Tularemia • West Nile virus • E. coli • Salmonella • Trichinosis • Streptococcus • Ticks, Fleas, Lice • Internal parasites
--	---

Protecting People
Protecting Agriculture
Protecting Wildlife

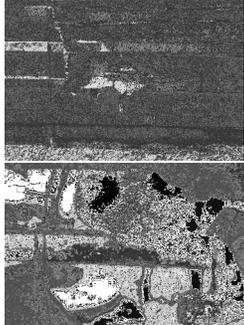
Feral Swine Diseases of Interest

<ul style="list-style-type: none"> • Pseudorabies • Swine Brucellosis • Classical Swine Fever • African Swine Fever • Foot-and-Mouth Disease 	<ul style="list-style-type: none"> • PRRS • Circovirus • Influenza Virus • Trichinosis • Toxoplasmosis
---	---

Protecting People
Protecting Agriculture
Protecting Wildlife

Pseudorabies

- Herpesvirus 1
- Signs
 - Inapparent to fatal
 - Impacts Young
 - Vomiting
 - Tremors
 - Incoordination
- Transmission
 - Nasal/oral secretions
 - Contaminated environment
 - Venereal
- Economic Disease
- No Public Health Concerns



Protecting People
Protecting Agriculture
Protecting Wildlife

Swine Brucellosis

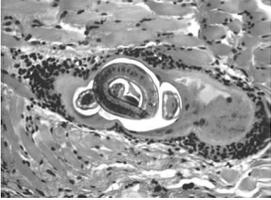
- *Brucella suis*
- Primarily reproductive tract disease
 - Abortion, stillbirth, inflamed testes
- Transmission
 - Ingestion of organisms
 - Venereal
- Economic Disease
- Zoonotic
 - Flu-like symptoms



Protecting People
Protecting Agriculture
Protecting Wildlife

Trichinosis

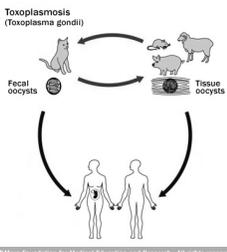
- *Trichinella* spp.
 - Nematode parasite
- Zoonotic
 - Consumption of undercooked meat
 - Flu-like Symptoms
 - Incoordination
 - Heart Issues
 - Difficulty Breathing



Protecting People
Protecting Agriculture
Protecting Wildlife

Toxoplasmosis

- *Toxoplasma gondii*
 - Protozoan parasite
- Zoonotic
 - Ingestion of tissue cysts
 - Spread to Muscle, Eye, Heart, and Brain
 - Major Risk during Pregnancy



© Mayo Foundation for Medical Education and Research. All rights reserved.

Protecting People
Protecting Agriculture
Protecting Wildlife

Safe Handling Techniques

- Disposable Gloves
- Wash Hands
- Freeze
 - 20 days
- Cook Thoroughly
 - 170 degrees



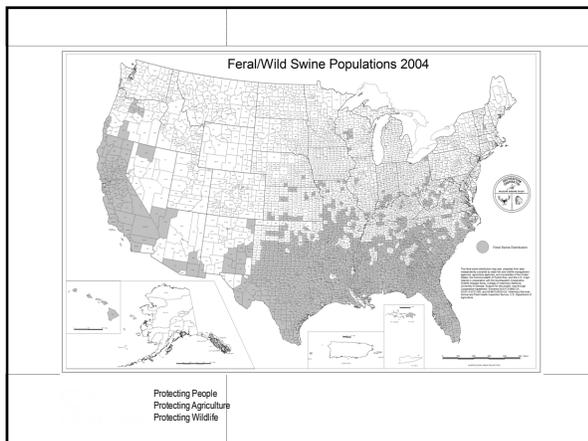
Protecting People
Protecting Agriculture
Protecting Wildlife

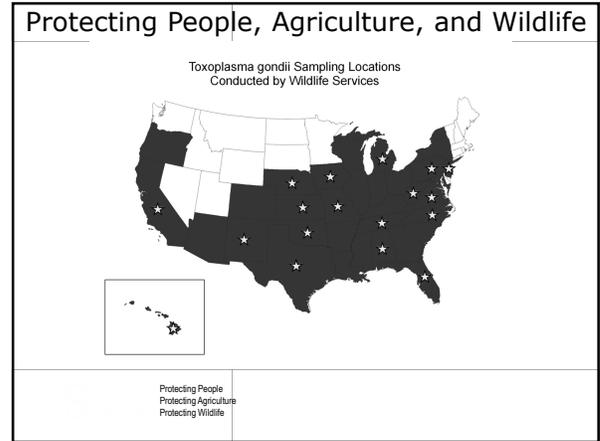
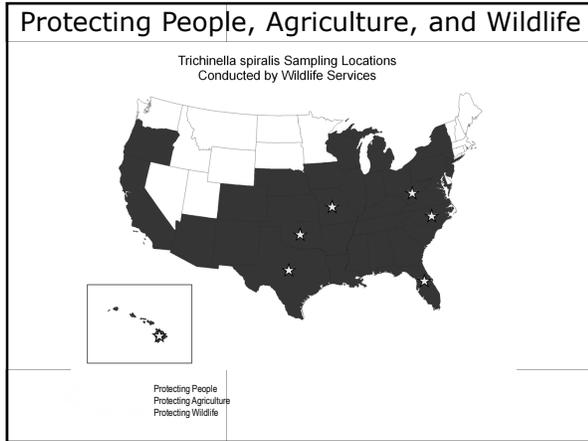
Wildlife Disease Monitoring and Surveillance

- Estimating Disease in Wildlife Populations
 - Requires knowledge of
 - Population Size
 - Number at Risk
 - Number Infected
 - What, When, and Where



Protecting People
Protecting Agriculture
Protecting Wildlife

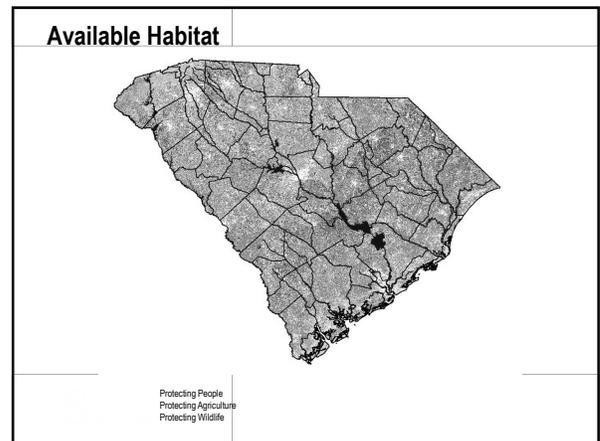


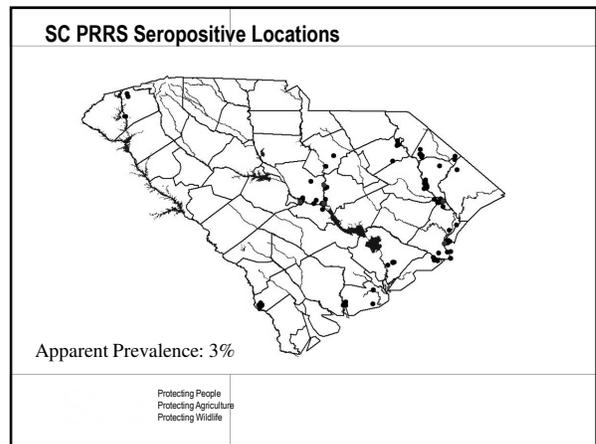
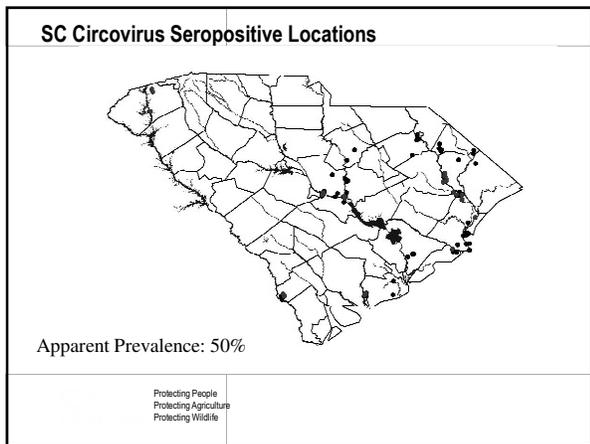
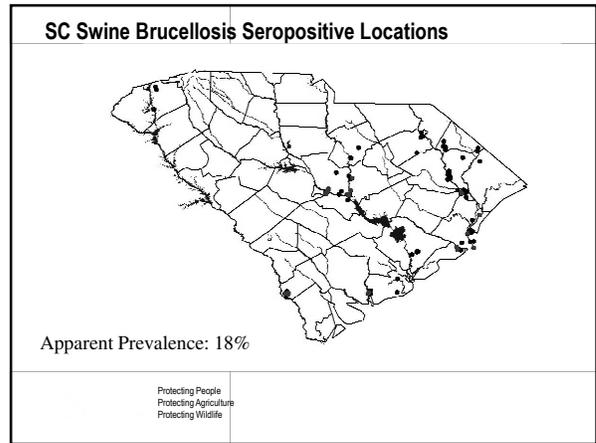
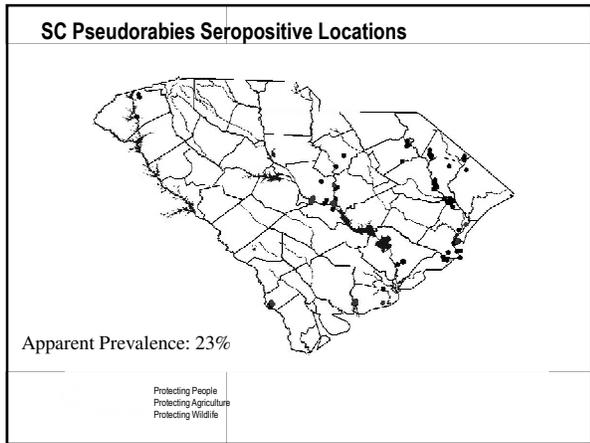
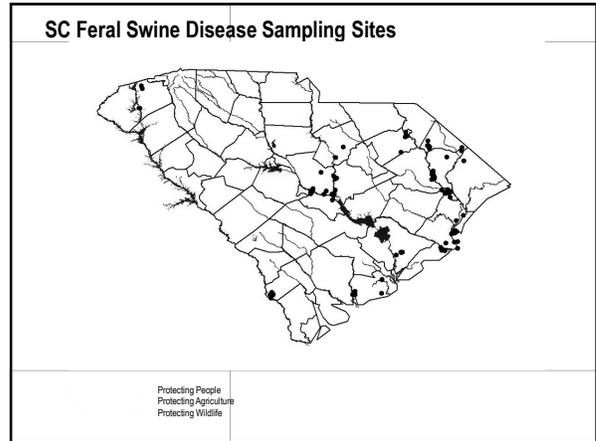
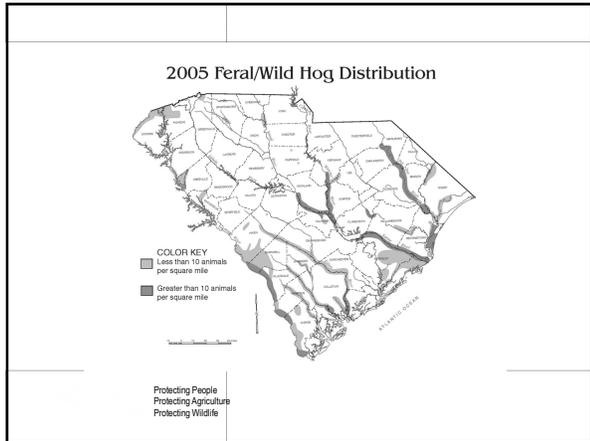


SC Disease Monitoring and Surveillance

- Classical Swine Fever
- Pseudorabies
- Swine Brucellosis
- Circovirus
- PRRS

Protecting People
 Protecting Agriculture
 Protecting Wildlife





Feral Swine Disease Management: Can We Succeed?	
<ul style="list-style-type: none">• Devise adaptive, holistic approaches• Increase investment in comprehensive surveillance and prevention efforts• Education and Awareness• Collaborate – integrate	
<p>Protecting People Protecting Agriculture Protecting Wildlife</p>	

Partnerships	
<ul style="list-style-type: none">•Federal Agencies•State Wildlife Agencies•State Agriculture Departments•Domestic Swine Industry•Universities•Landowners and Hunting Public	
<p>Protecting People Protecting Agriculture Protecting Wildlife</p>	

Sentinels in the Field	
	
<p>Protecting People Protecting Agriculture Protecting Wildlife</p>	

Questions?	
	
<p>Sheldon Owen USDA Wildlife Services 803-786-5418 sheldon.f.owen@aphis.usda.gov</p>	
<p>Protecting People Protecting Agriculture Protecting Wildlife</p>	