Oklahoma’s Feral Swine Program

Oklahoma Department of Agriculture, Food and Forestry
Wildlife Services Division
Personal Experiences
J.C. Goyer, Luther, Okla.
What is the problem?
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- Competition with native wildlife, prey on some
- Nose-to-nose contact with livestock and pets
What is the problem?

- Pollute and degrade water quality (feces)
- Negatively impact ecosystems and wildlife habitats
- Increase soil erosion and decrease soil quality
- Wallows attract mosquitoes which then spread disease
Diseases and Sicknesses of Feral Swine

Abscesses
Muscle Tearing
Actinobacillosis
Mycoplasma Arthritis
Actinobacillus Pleuropneumonia (App)
Mycotoxicosis
Agalactia
Navel Bleeding
Anaemia
Nipah virus disease
Anthrax
Non-Antibiotic Growth Promoters
Arthritis, joint infections
Oedema Disease
Ateles Ani - No Anus or No Rectum
Osteochondrosis, OCD
Atrophic Rhinitis (AR)
Osteodystrophy
Aujesky’s disease AD,
Osteomalacia
Back Muscle Necrosis
Osteoporosis
Biotin Deficiency
Pale Pig Syndrome
Blue Eye Disease
Pasteurellosis (Pasteurella multocidia)
Border Disease (BD)
Penis Bleeding
Bordetellosis (Bordetella bronchiseptica)
Petitronitis
Boma Disease
Pneumonia
Botulism
Streptococcal Infections
Greasv Pig Disease
Streptococcal Meningitis
Haematomata
Swine Dysentery
Hepatitis E Virus

Porcine Cytomegalovirus Infection (PCMV)
Bovine (Porcine) Spongiform Encephalopathy (BSE)
Porcine Dermatitis and Nephropathy Syndrome (PDNS)
Bovine Viral Diarrhoea Virus (BVD)
Porcine Enteropathy
Brucellosis
Porcine Epidemic Diarrhoea (PED)
Bursitis
Porcine Parovirus Infection (PPV)
Bush Foot, Foot Rot
Porcine Reproductive & Respiratory Syndrome (PRRS)
Campylobacter
Porcine Respiratory Corona Virus Infection (PRCV)
Clostridial Diseases
Porcine Spongiform Encephalopathy (PSE)
Coccidiosis (Coccidia)
Porcine Stress Syndrome (PSS)
Colitis
Post Weaning Multisystemic Wasting Syndrome (PMWS)
Congenital Tremor (CT) - Shaking Piglets
Prepuceal Uceration
Cryptosporidiosis
Progressive Atrophic Rhinitis (PAR)
Cystic Ovaries
Prolapse of the Bladder
Cystitis and Pyelonephritis
Prolapse of the Rectum
Dipped Shoulder (Humpy Back, Kinky Back, Kyphosis)
Prolapse of the Uterus
E. coli - Scour (Diarrhoea)
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Prolapse of the Vagina and Cervix
E. coli Diarrhoea
Pseudorabies PR
Glässers Disease Swine Fevers: African, Classical, Hog Cholera
Udder Oedema, Failure of Milk Let Down
Leptospirosis
Vesicular Exanthema
Listeriosis
Vesicular Stomatitis
Lymphosarcoma
Salt Poisoning, Water Deprivation

Eclampsia
Rabies
Electrocution
Rectal Stenure
Encephalomyocarditis
Reproduction
Endometritis
Retroviruses
Enteroviruses, SMEDI
Rotavirus Infection
Enzootic Pneumonia (EP)
Ruptured Blood Vessel
Eperthyrozoonosis
Ruptures, Hemias
Salmonellosis
Erysipelas
Exudative Epidermitis
Savaging of Piglets (Cannibalism)
Fever
Scour (E. coli)
Foot-and-Mouth Disease
Seasonal infertility
Fractures
Shoulder Sores
Frostbite
Spirochaetal Diarrhoea
Gastric Ulcers
Swine Influenza Virus (SI), Flu
Hypoglycemia
Swine Pox
Ileitis (Lawsonia intracellularis)
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Hypoglycemia
Swine Pox
Ileitis (Lawsonia intracellularis)
Swine Vesicular Disease (SVD)
Inherited Thick Legs, Hyperostosis
Teat Necrosis
Internal Parasites (Worms etc.)
Tetanus
Japanese B Encephalitis
Virus (JE)
Thin Sow Syndrome
Jaw and Snout
Deviations
Tromboc yto pathen
Pupura, Bleeding
Joint Ill in Piglets
Torson of the Stomach
and the Intestines
Transmissible Gastroenteritis, TGE
Laminitis
Tuber culosis
Leg Weakness
Vulval Biting
Mange Mites, Sarcoptes
Scabies
Vulval discharge
syndrome
Mastitis
Vulval Haematomata
Meningitis
Worms / Nematodes
Metritis
Yersina Infection
Middle Ear
Infections
Vice
M-Hyo (Haemophilus Parasuis)
Swine Influenza Virus (SI), Flu
Hypoglycemia
Swine Pox
Ileitis (Lawsonia intracellularis)
Swine Vesicular Disease (SVD)
Inherited Thick Legs, Hyperostosis
Teat Necrosis
Internal Parasites (Worms etc.)
Tuschen Disease
Vomiting, Wasting
Disease, Ontario
Encephalitis
Mammary Hypoplasia,
Undeveloped Udder
Intoxicity (Vitamin E
Deficiency)
Epitheligenesis
Impfecta
In 2017, 227 feral swine were tested in 33 locations and 19 counties in Oklahoma. Positive: brucellosis, pseudorabies, influenza A and leptospirosis. More than 30% carried or had been exposed to a zoonotic disease. In a test case of 55, 44% positive for leptospirosis.
What is the problem?

• Females can farrow two litters a year with four to 10 piglets per litter.
• Migrate up to 19 miles; no “home.”
How many?

- Estimates range from 5 million to 14.5 million in at least 35 states.
- Each feral hog is estimated to cause $140 of damage.
- Studies show we must eliminate 70% of feral swine population annually just to maintain the current population.
Progression

Feral Swine Population 1982
By County
How many?

Feral Swine Distribution
2017

• = 50,000
Constraints: Structure

Governor

Sec. of Agriculture
USDA APHIS
Wildlife Services
Veterinary Services
Agriculture (ODAFF)
Private helicopters
Sporting facilities
Buying stations
Conservation (OCC)
84 county districts
Wildlife (ODWC)
Enforcement of all wildlife laws, hunting and fishing
Sec. of Environment

Agriculture (ODAFF)
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Cooperation Required

- USDA
  - APHIS
    - Wildlife Services
    - Veterinary Services
  - Agricultural Groups
    - Commodities, Industry and Organizations
      - No transport
      - No sport
  - Legislators
    - Night hunting (spotlighting)
    - Deer season
    - Aerial Hot air balloon hunting
  - Bureau of Indian Affairs
    - 39 Tribes
      - Jurisdiction Ownership
        - Cooperation needed
  - County Governments and Municipals
    - Paying minimal fees for service
Constraints: Hunters

**Fenced hunts**
- Fosters the idea that feral hogs/hog hunting is glamorous
- Fosters desire for more hogs

**Hog hunters**
- Hog Baying
- No boundaries
- No intention to eliminate
Oklahoma’s initiative

- Public meetings, stakeholder meetings
- Emergency rules adopted August 2015
- Permanent rules adopted March 2016
Feral Swine Rule Summary

1. **Purpose and goal.**
   - Eradication (current and new methods) is objective, not preservation.
   - Goal is to render State of Oklahoma free of feral swine.
   - Investigate and implement new population control methods, technologies, and toxicants.

2. **Creates a moratorium on licensing of new feral swine hunting facilities.**
   - Utilize existing feral swine hunting facilities as terminal destinations. No new facilities.

3. **Creates an electronic tracking system for transporters of feral hogs.**
   - Adds a $25 annual transport license for feral hog transporters.
   - Previous license was free and lasted 5 years.
   - Previously, a phone call and free license were the remedies for those caught illegally transporting.

4. **Creates a free 24 hour transport permit.**
   - A specific permit for each load required to haul feral swine, must identify number and destination.
   - Prior to this, there was no tool for law enforcement to easily identify those illegally transporting swine.
   - Permits accessible via app (click location, number of hogs, destination, receive permit number).

5. **Requires feral swine hunting facilities to keep number records (enter and exit) and report monthly.**
   - This will validate and keep accurate information that was previously estimated.

6. **Creates a Feral Swine Free Zone**
   - Prohibits feral swine facilities in zone, prohibits any transport of feral swine into zone.
   - Requires reporting any sightings of feral swine.
   - USDA will assist eradication.

7. **Adds a $25 captive hog hunter fee**
   - Feral hog hunt facilities will charge and remit a $25 captive hunt fee to ODAFF.
   - Used for enforcement purposes and equipment purchases to equip and educate citizens.

8. **Funds raised with the fees in these rules will be used to:**
   - Create the smartphone app and software compatibility to institute the 24 hour transport permit.
   - Purchase hog traps for Oklahoma Conservation Districts to rent or loan to landowners and to train landowners and districts how to trap hogs effectively.
   - Set up a 24 hour hotline for illegal feral swine transportation or release complaints.
   - Investigate illegal transportation of feral swine more effectively.
Additional Improvements

Agreement with ODWC to enforce illegal transportation
- ODAFF investigator meets with ODWC quarterly
- Agree to share enforcement fines

Purchased traps and gates for 84 conservation districts
- Purchased traps and gates from 9 FFA chapters
- USDA/Wildlife Services provided 39 training exercises statewide with conservation districts, counties, tribes, and the public
- Currently upgrading trap gates to live streaming

Bottom Line: We can’t catch them all. We empowered citizens by giving them access to equipment and training to eliminate their own feral swine.
Success

live video of trap closing
Success

- 2011: eliminated 2,246
- 2017: eliminated 32,237
- 217% increase annually (see handout)
- Trapping most effective method. ODAFF’s initiative to educate and provide traps and resources has allowed for this increase.
- OK had 3rd highest feral swine population in 2015, 6th highest in 2017.

Source: National Wildlife Research Center
Success

Oklahoma Feral Swine Free Zone

Presence of Feral Swine in Oklahoma by County in 2016

Revised: September 2016
Conclusion: Impact

• More Oklahomans are seeking assistance and working to eliminate feral swine.
• All related agencies collaborating with the goal of feral hog elimination.
• It is critical to stop the progression of feral swine moving northward.
• We have to continue equipping the public with the most innovative solutions.
Sources


Oklahoma Department of Agriculture, F. a. F. Feral Swine.

