Arkansas Feral Hog Eradication Task Force
Report to Arkansas Legislative Council
December 28, 2017

Legislative History:

The Arkansas Feral Hog Eradication Task Force (Task Force) was created by Act 1010 of the 91st Arkansas General Assembly to create a plan for the eradication of feral hogs. Per Act 1010, the Task Force was to be composed of the following:

- The Director of the Arkansas State Game and Fish Commission;
- The Secretary of the Arkansas Agriculture Department;
- The Deputy Director of the Arkansas Livestock and Poultry Commission;
- The Executive Director of the Arkansas Natural Resources Commission;
- The Director of the Department of Arkansas Heritage;
- The Director of the Rural Services Division of the Arkansas Economic Development Commission;
- The Director of the Department of Parks and Tourism;
- The University of Arkansas System Division of Agriculture Vice-President for Agriculture or his or her designee;
- One (1) representative from each of the following groups:
    - Arkansas Association of Counties
    - Arkansas Association of Conservation Districts;
    - Arkansas Farm Bureau Federation;
    - Arkansas Forestry Association;
    - Arkansas Pork Producers Association;
    - The Nature Conservancy;
    - Arkansas Dog Hunters Association.

Act 1010 also allowed for additional members to serve as advisory members. During initial meetings, the following individuals and organizations were approved by the task force to serve in an advisory capacity:

- Adam McClung, Executive Vice President, Arkansas Cattlemen's Association;
- Thurman Booth, Arkansas State Director for USDA APHIS Wildlife Services;
- Mike Hoy, USDA APHIS Wildlife Services;
- Mike Sullivan, Arkansas State Conservationist for USDA NRCS;
- James Baker, USDA NRCS;
- Bo Sloan, U.S. Fish and Wildlife Service (USFWS) White River Refuge;
- Norman Wagoner, U.S. Forest Service (USFS) Ouachita National Forest;
- Cherie Hamilton, U.S. Forest Service (USFS) Ozark National Forest; and
- Dr. Sue Weinstein, Arkansas Department of Health.

Since the unexpected death of Adam McClung in August 2017, others affiliated with the Arkansas Cattlemen's Association have served in his place in an advisory capacity. These individual include Mr. Jerry Christie and Mr. Marcus Creasy who are both officers of the Arkansas Cattlemen's Association.

Summary of Task Force Meetings:
Wes Ward, Arkansas Secretary of Agriculture was elected as Chair, and Jeff Crow, Director of the Arkansas Game and Fish Commission, was elected Vice Chair. Chris Colclasure was elected to serve as the Vice Chair and representative for the Arkansas Game and Fish Commission when Mr. Crow announced his resignation in October, 2017.

The Task Force developed and launched a webpage at http://www.aad.arkansas.gov/feral-hog-eradication-task-force in August in order to provide a repository of educational information about feral hogs and other available resources to the task force members. Additional information has been added throughout the year.

The Task Force met five times between July 11 and December 6, 2017.

- Tuesday, July 11, 2017
- Tuesday, August 1, 2017
- Wednesday, August 23, 2017
- Wednesday, October 25, 2017
- Wednesday, December 6, 2017

The Task Force actively solicited input and resources about feral hog control and eradication measures from a wide variety of sources. The Task Force members heard presentations from the following:

National Feral Swine Program Coordinator, USDA APHIS Wildlife Services
Dr. Dale Nolte, the National Feral Swine Program Coordinator for USDA APHIS Wildlife Services made a presentation to the task force on August 23, 2017. Dr. Nolte presented an overview of their program concerning damages due to feral swine and how to provide federal leadership in addressing problems encountered with wildlife, to include feral animals. The objective of the program is to minimize damage. They have few, if any, natural predators and have reached an estimated population of four to five million across approximately 39 states in the United States. **Based on outdated information,** their damage and control are conservatively estimated to result in agricultural and ecological costs of $1.5 billion annually. These include:

- Damage to and loss of crops of at least $800 million,
- Injury and transmission of disease to livestock,
- Ecological destruction,
- Property damage,
- Threats to native ground nesting birds and other small wildlife (including endangered species),
- Contamination of human food and water supplies

Where feral swine exists in some of the southern states, the intent is to work at the state agency or local level to help determine what can be done to resolve the problems or stop the damages caused by feral swine. Nolte stated they would be working with Thurman Booth, Arkansas Wildlife Services State Director.

USDA Natural Resources Conservation Service (NRCS)
USDA NRCS reported that their pilot program in the state had been available in eight counties in Arkansas for approximately four years. The program offered financial assistance to landowners for conducting game camera surveillance as the first step in an effective trapping strategy. Time limitations and a lack of technical expertise of landowners have limited the success of the program.

Tennessee Wild Hog Eradication Action Team (W.H.E.A.T.)
Mr. Chuck Yoest, Assistant Chief of Wildlife and Forestry, Tennessee Wildlife Resources Agency made a presentation to the task force on the Tennessee Wild Hog Eradication Action Team (W.H.E.A.T.) on August 23, 2017. Mr. Yoest stated he has been involved as the past wild hog program leader in Tennessee and as a result has been very involved in their partnership. He shared Tennessee's experience with wild hogs and the history, along with recommendations for Arkansas' partnership.

Buying Stations
On December 6, 2017 the task force received two presentations regarding buying stations. The first was from Mr. Will Herring and Mr. Bryan Martin of the Wild Boar Meat Company. Mr. Herring and Mr. Martin presented an overview of their company and how they operate. Wild Boar Meat Company, located in Hubbard, TX is a processing plant for feral hogs, purchasing dead and live hogs. The second presentation was from Mr. Phillip Swallows who operates Hogs Gone Wild. Mr. Swallows presented an overview of his company and how they operate. Hogs Gone Wild is a live hog buying facility located in Texas.

Animal and Human Health Concerns:
Dr. Sue Weinstein, the Arkansas Department of Health Public Health Veterinarian and task force advisory member provided the task force with consistent feedback regarding animal and human health concerns. Dr. Weinstein deals with major diseases that can be transmitted from animals to humans and is working with Dr. Doss, the Arkansas Agriculture Department's Livestock and Poultry Commission's State Veterinarian on a One Health Plan. The One Health initiative strives to bring together scientists, physicians, and veterinarians to work inclusively on animal, environment, and human health issues. Dr. Weinstein stated that feral hogs can carry major bacteria, parasites and diseases such as Brucellosis, E.coli, Leptospirosis, Trichinellosis, and Pseudorabies. Due to the importance of this topic, Dr. Brandon Doss prepared a report entitled "Animal Health Risks Associated with Feral Swine" which is included as attachment one (1).

TOXICANTS

A considerable amount of time was devoted to the discussion of two feral hog toxicants and their potential use in Arkansas to help with eradication efforts. One is a warfarin-based toxicant, and the other is a sodium nitrate based toxicant.

1. Kaput Feral Hog Bait (Warfarin):

The EPA registered Scimetrics' Kaput Feral Hog Bait on January 3, 2017 (EPA Registration Number 72500-26). The federal product label from the EPA is included as attachment two (2). The bait formulation is warfarin-based and has demonstrated efficacy against feral hogs at a formulation strength one-fifth the concentration of warfarin that has been registered for controlling rodents in the United States for more than 60 years. Kaput Feral Hog Bait is the only EPA approved pesticide for feral hogs. Currently, this product has not received registration and use approval in any other state in the country.

Despite being a federally approved product through the EPA the product must still be registered and approved for use in the state in accordance with A.C.A. 2-16-407(a) which states that, "each pesticide must have been accepted for registration by the State Plant Board, and the registration must be in force at the time it is sold, offered for sale, or distributed in this state." A.C.A. 2-16-407(f) further provides that product manufacturers must pay an annual registration fee and that "all registrations shall expire December 31 each year."

In accordance with A.C.A. 2-16-408(b), the Arkansas Agriculture Department's Plant Board is not required to approve every product and may refuse to register or cancel or suspend the current registration "if the board determines that any federally registered pesticide, with respect to its use in this state, requires further restrictions pursuant to A.C.A. 2-16-406(d)(1)."

A.C.A. 2-16-406(d)(1) states that the board may "adopt restricted-use pesticides classifications as determined by the United States Environmental Protection Agency. In addition, the board may declare certain pesticides or pesticide uses as state-restricted pesticides when, after investigation and public hearing, it finds and determines the pesticide to be injurious to persons, animals, or vegetation other than the pest or vegetation which it is intended to destroy, or otherwise requires additional restrictions under the conditions set forth in A.C.A. 2-16-403(28). The sale or distribution of such pesticides in Arkansas or their use in pest control or other operation is prohibited, except in accordance with such rules and regulations as may be made by the board after a public hearing."

Further, in accordance with A.C.A. 2-16-406(d)(1), the Arkansas Agriculture Department's Plant Board "may include rules and regulations prescribing the time when and the conditions under which the materials may be used in different areas in the state."

The following is a summary of how others have responded to Warfarin based toxicants:

Texas

Texas pushed to use warfarin to kill feral hogs earlier in 2017. Within a week of the product being registered, the Wild Boar Meat Company, the Texas Hog Hunters Association and the Environmental Defense Fund successfully sued to block the rule change. In addition to the law suit, the Texas legislature considered a bill (House Bill 3451) requiring that before approving a feral hog poison for use the state would have to conduct a study on its potential negative impact on other wildlife. A coalition of hunters, animal rights advocates, conservationists and meat processors mobilized against the use of the poison. The Texas State Rifle Association, Wildlife Rescue and Rehabilitation, the Texas Hog Hunters Association and the Texas Veterinary Medical Association are all among the groups that support the bill. The bill was passed on April 18, 2017 by a vote of 127-12. Citing the threat of lawsuits, on April 25, 2017, Scimetrics announced that it had withdrawn its request for registration in Texas.

Louisiana

The Louisiana Department of Agriculture and Forestry (LDAF) registered Kaput Feral Hog Bait in February 2017 with the following restrictions: the classification of the product as a state restricted use pesticide (RUP) and the requirements for a pesticide stewardship training for the person(s) selling, purchasing and applying the product. The state RUP classification and the pesticide stewardship training requirements were implemented through a Section 24(c) registration. On April 18, 2017 the Louisiana Agriculture Commissioner cancelled the state registration of Kaput due to a major concern regarding the registration of the Kaput Feral Hog Bait pertaining to the recommended "feeders" for use which may pose potential threats with the Louisiana black bear. Recently, the Louisiana black bear was delisted from the Federal List of Endangered and Threatened Wildlife.

Georgia

On April 21, 2017, the Georgia Department of Agriculture denied the registration of Kaput Feral Hog Bait with the conclusion that, even when the applicator follows all label directions, secondary exposure to non-target species is likely to occur. Additionally, the safeguards to protect contaminated meat from entering the human food chain are not sufficient. The Georgia Department of Agriculture stated that it would re-consider the decision for the 2018 registration period under the condition that Scimetrics is able to provide sufficient use data showing the product can be used safely and effectively with little or no harm to non-target species.

Australia

Australia's experience with warfarin as a feral hog toxicant ended with them concluding that this wasn't a satisfactory method of control. Ultimately, Australia concluded that the method of death was so cruel that use of warfarin should be outlawed. Warfarin is an anti-coagulant, so hogs die by bleeding to death – including bleeding out of the eyes, nose, mouth, and other body orifices. The death is painful and gruesome. And they found that the timeline for feral hog death was 4-17 days while the product label says 4-7 days.

Organizations and Associations

The following organizations and associations asked the EPA to suspend or cancel the federal registration of Kaput Feral Hog Bait until such time that formal consultation can be completed with the United States Fish and Wildlife Service (USFWS), the United States Department of Agriculture (USDA), and the Food and Drug Administration (FDA):

- National Environmental Coalition on Invasive Species

- Center for Invasive Species Prevention
- National Wildlife Federation
- The Wildlife Society
- American Bird Conservancy
- Association of Fish and Wildlife Agencies
- Southeastern Association of Fish and Wildlife Agencies

* The EPA denied this request on August 17, 2017.

Kaput Feral Hog Bait in Arkansas:

At the time of the initial meetings of the task force the product manufacturer, Scimetrics, had not applied to register their product for use in Arkansas but there was speculation that the manufacturer would submit their application by the end of the year. Mr. Richard Poche', President of Scimetrics, was present at the August 23, 2017 task force meeting to discuss the product as well as feeder development and further research and testing for using Warfarin. Mr. Poche' stated they were currently working toward meeting the criteria for approval of the product in Arkansas but would conduct additional testing prior to applying to register their product in the state. However, Scimetrics did apply to the Arkansas Agriculture Department's Plant Board for registration of their product on September 15, 2017.

The Task Force sought input from Arkansans, through the use of an online survey, regarding the registration and potential restrictions on authorized uses of Kaput Feral Hog Bait as a viable method of control in eradication efforts. A press release announcing the survey was issued on October 3, 2017 with the survey closing on October 22, 2017. The survey yielded more than 5,000 responses with 95 percent being from Arkansas residents and 85 percent being from Arkansas landowners. 71 percent of the respondents did not believe that toxicants should be an option for feral hog control in Arkansas. The full results of the survey are included as attachment three (3).

The results of the survey were presented to the task force at the October 25, 2017 meeting. Ms. Sue Valentine, the regulatory manager for Scimetrics, attended the meeting to answer questions about the product as well as provide a presentation to the task force on current and ongoing research and common misconceptions. Dr. Jen Ballard, Wildlife Veterinarian, Arkansas Game and Fish Commission shared information on some of her research and some of the research questions that have been identified as being useful before moving forward including; the overall effect of the bait on non-target wildlife; confirming a timeline that it takes for the methylene blue dye to appear; determining or confirming the post exposure duration of that dye; and whether the methylene blue dye is also transferred if there is a secondary exposure, etc.

Additional questions raised by task force members regarding the product and the need for additional research included:

- The potential for direct exposure of wildlife species to the product resulting in mortality.
- The complicated nature of the label instructions which could make the inappropriate use of the product by some individuals inevitable and thereby increase the potential for wildlife exposure.
- A lack of research regarding sub-lethal dosage effects including the possibility of reproductive failure or embryo deformity to non-target species including humans.

- The potential for indirect exposure of wildlife and domestic animals to warfarin through the scavenging of carcasses containing the toxin.
- The toxin's persistence in water given feral hog's proclivity to water and that unclaimed poisoned carcasses will likely enter watershed systems.
- Potential human exposure due to feral swine being used as a food source for many residents of the state.

The Task Force has heard from several different and sometimes opposing viewpoints regarding the use of toxicants. The task force welcomed all feedback and invited participation from all interested parties and stakeholders. Task force members agree that there is great need to have all methods of removal available in the quest for eradication, but many have reservations about warfarin for the reasons previously described.

Due to the work and reservations of the task force the Arkansas Agriculture Department's Plant Board submitted a written response to Scimetrics on October 25, 2017 stating that "due to the potential for adverse effects involved with the use of this product the Board has instructed staff to delay registration until further information is obtained."

2. Sodium nitrate product status:

Despite the concerns raised in regards to the warfarin based toxicant, a different product is currently being developed to assist with feral hog control and eradication. The following Press Release was submitted by USDA APHIS Wildlife Services on December 8, 2017 regarding a sodium nitrite based feral hog toxicant:

In November, USDA's Animal and Plant Health Inspection Service (APHIS) accomplished two key tasks as part of its efforts to evaluate an oral toxic bait for use with invasive feral swine. First, on November 6, 2017, APHIS Wildlife Services (WS) received an Experimental Use Permit (EUP) from the U.S. Environmental Protection Agency to conduct sodium nitrite toxic bait field trials on free-roaming feral swine in Texas and Alabama. Second, on November 20, APHIS signed a final environmental assessment and issued a Decision and Finding of No Significant Impact (FONSI) associated with conducting such field trials. Copies of the final environmental assessment and FONSI can be accessed at https://www.regulations.gov/docket?D=APHIS-2017-0067.

"Wildlife Services takes the selection and use of toxic baits for use in wildlife damage management very seriously. The final environmental assessment, FONSI and EUP are the result of years of collaborative research by WS and multiple private, state, federal and international partners," states WS Deputy Administrator Bill Clay. "With these in place, we can now begin field trials to help determine the effectiveness of the sodium nitrite toxic bait for removing feral swine sounders in natural settings, as well as any potential impacts to non-target wildlife."

The EUP allows WS researchers to partner with landowners to identify and target 3 to 9 feral swine sounders (i.e., social groups containing adults and juveniles) each in Texas and Alabama. Bait delivery systems designed to prevent access by non-target wildlife will be filled with placebo bait, placed in the sounders' territories and monitored with motion-activated cameras. Following a period of acclimation to confirm feral swine use of the baiting areas, the placebo bait will be replaced with sodium nitrite toxic bait for two nights. Furthermore, at least 30 feral swine and no more than 30 raccoons in each state's study area will be live captured and radio-collared prior to baiting in order to monitor their movements and exposure to the bait. Landowners within 300 meters/328 yards of bait stations will be notified and signs will be placed on bait stations and along roads leading into the study areas.

Sodium nitrite ($NaNO_2$) is a meat preservative commonly used to cure meats such as sausage and bacon. When eaten in high doses over a short period of time, it is toxic to feral swine. The mode of death is similar to carbon monoxide poisoning. Once enough sodium nitrite bait is eaten, the feral swine gets faint, is rendered unconscious, and quickly dies. In most cases, feral swine die within 2.5 to 3 hours after eating a lethal dose.

Many factors are considered when developing a toxic bait for feral swine. Not only must it be effective and humane in eliminating feral swine, but also low risk for those handling it, the environment, and wildlife. Other wildlife, such as raccoons, bears and deer, may be attracted to the sodium nitrite toxic bait. To prevent non-target species from accessing the bait, WS researchers will use delivery systems and baiting strategies designed for feral swine. Trials will not be conducted in areas with known black bear populations.

Feral swine (also called wild pigs, Eurasian boar, or feral hogs) are a harmful and destructive invasive species causing damage and disease threats to crops, public property, native ecosystems, livestock health, and human health. More than 6 million feral swine are located in at least 35 states across the United States. Their damages to agricultural crops alone are estimated at $190 million each year. "Although trapping, aerial operations, and recreational hunting of feral swine have effectively reduced damage in some areas, studies show that at least 70 percent of feral swine must be removed each year in order to prevent population growth," states Clay. "Should the U.S. Environmental Protection Agency approve the toxic bait for use with feral swine, it could become another tool in the toolbox for integrated feral swine damage management."

The development of tools and techniques for use in feral swine damage management supports the National Feral Swine Damage Management Program— a nationally-coordinated effort among Federal, State, Tribal and local entities to manage feral swine damage and stop their spread.

More information about the sodium nitrite toxic bait for feral swine, please see our factsheet.

COMMITTEE ACTION

The Task Force formed the following three committees at their August 23, 2017 meeting in order to address specific topics and provide recommendations to the full task force:

- Management/Control Committee
- Policy and Legislation Committee
- Education Committee

Each committee set its own schedule of meetings and provided a report or recommendation to the full Task Force. Each Task Force member chose which committee to work with based on interest, experience, or area of expertise.

1. Management and Control Committee:

The goal of this committee was to research, investigate and recommend methods for reducing feral hog numbers across the state. The full Management and Control Committee report and recommendations are included in attachment four (4) but include the following topics:

1. Increase the availability of traps and trained trappers to assist willing landowners and land managers statewide.
    a. Identify the most appropriate means of providing state and federal resources at a county level to acquire traps and provide training opportunities.
        i. Request that the Legislature consider appropriating funding to the Arkansas Natural Resources Commission for increasing staff capacity at select conservation districts.
        ii. Request that AGFC, USDA APHIS assess their budgets and manpower and increase capacity for feral hog control where appropriate.
        iii. Encourage collaboration between the USDA Natural Resources Conservation Service, the USFWS, US Forest Service, USDA APHIS and the State of Arkansas in sharing resources to better address the feral hog issues in the state.
    b. Request Arkansas Game and Fish Commission, University of Arkansas Division of Agriculture, and USDA APHIS assist in developing training opportunities for trappers.
    c. Develop a strategy for resource allocation based on feral hog distribution and current resources.
        i. AGFC and USDA APHIS will provide an updated distribution map.

2. Develop a web-based feral hog reporting tool to capture control efforts across the state. This would also be helpful in determining / developing methods for estimating the feral hog population.

3. Encourage increased collaboration between state, federal and other partners to engage in organized gunning projects such as during high water and via helicopter.

4. The majority of committee members oppose the use of live buying stations at this time due to a lack of data from other states indicating such facilities decrease feral hog populations, and concern that

buying stations would create a new industry conducive to the continuance of feral hog populations for the purpose of generating income rather than their eradication.

*Transporting live feral hogs is prohibited by Arkansas law, A.C.A. 2-38-504(c). However, there are no laws against transporting dead feral hogs and there are no laws that prevent a buying station from purchasing dead feral hogs in Arkansas for use in the pet food industry.

5. Allow the restricted use permitting of Kaput under the research and demonstration classification, or other designation which limits use to the following users: state and federal agencies, colleges and universities in accordance with state and federal property use agreements/clearances in conjunction with task force approved Kaput-related research projects conducted by colleges and universities. Proposed research related to Kaput, and all feral hog toxicants, should be considered by the full task force and related committees.

6. Encourage stakeholders and state institutions to pursue and engage in research related to one, or more of the prioritized research items listed below:

a. What is the species-specific sensitivity (LD50) of native wildlife to warfarin (ex. black bears, raccoon, bobcat, fox, representative song bird species, representative bird of prey species, white-tailed deer, Virginia opossum, etc.)?
b. What is the concentration of warfarin in the tissues of animals with primary exposure to the toxin? What is the likelihood of secondary toxicosis based on the answers to questions 1 and 2?
c. What are the sub-lethal effects of warfarin exposure in non-target species, such as alterations to immunity, reproductive function, etc.?
d. What is the effectiveness of the product for population-level control in an open system?
e. What proportions of carcasses are expected to be recovered with reasonable effort?
f. Is the methylene blue dye transferred to non-target species with secondary exposure to the toxin?

7. Support aerial gunning operations as a supplemental control method under permits issued by the Arkansas Agriculture Department for private landowners. Aerial removal services provided to landowners through contractors/vendors should be strictly regulated to avoid future commercialization and limited to properties delineated within the above referenced permit.

2. Policy and Legislation Committee

The goal of this committee was to identify and recommend changes to policy or legislation that will enhance the ability of state agencies and the general public to eradicate feral hogs. The full Policy and Legislation Committee report and recommendations are included as attachment five (5) which includes the following topics:

1. Amending current laws to strengthen and support the purpose of the task force which is to eradicate feral hogs:

a) To amend Act 1104 Arkansas Code § 2-38-502 (Capturing and Killing Feral Hogs).

- Adding language that would allow an individual to obtain a permit that would allow them to hunt feral hogs from an airborne craft.
- Remove language that refers to any terminal facility that allows hunting of feral hogs in confinement.
- Add an exemption to Authorized or qualified personnel to catch and release feral hogs for research purposes.

b) To amend Act 1104 Arkansas Code § 2-38-504 (Releasing Hogs into the Wild).

- Increase penalties for the illegal transportation of feral hogs.
- Increase penalties for the illegal release of feral hogs onto private or public land.
- Remove language that refers to any terminal or hunting facilities.
- Remove language that restricts a landowner from possessing a feral hog.

c) To amend Act 1104 Arkansas Code § 2-38-501.

- Amending the definition of a feral hog; adding language that would make identifying a feral hog easier for law enforcement.

2. Development of a Memorandum of Understanding (MOU) or Memorandum of Agreement (MOA) between current Arkansas Feral Hog Task Force members to ensure that collaborative efforts will continue beyond the expiration of Act 1010 on June 30, 2018.

3. Education Committee

The full Education Committee Report and recommendations are included as attachment six (6) which includes the following topics:

1. Task Force's feral hog education website
2. Targeted media kit and outreach campaign
3. Endangered species and habitats affected by feral hogs (Arkansas Heritage Commission)
4. Stakeholder survey proposal
5. Youth education
6. Landowner education
7. Finances

It should be noted that Act 1010, which created the Feral Hog Eradication Task Force, includes an expiration date of June 30, 2018. While the task force has been very active in attempting to accomplish the tasks set forth by the legislature there is still a lot of work left to be done. The task force members are committed to helping eradicate feral hogs in Arkansas and plan to continue to operate through a Memorandum of Understanding (MOU) even after the legislatively created task force dissolves.

Attachments:

(1) Animal Health Risks Associated with Feral Swine
(2) Kaput Feral Hog Bait EPA Registration (72500-26)
(3) Kaput Feral Hog Bait Registration for Use Survey Results
(4) Management and Control Committee Report
(5) Policy and Legislation Committee Report
(6) Education Committee Report

Animal Health Risks Associated with Feral Swine

Brandon Doss, DVM
State Veterinarian
Arkansas Livestock and Poultry Commission
Arkansas Agriculture Department

Feral swine (*Sus scrofa*) are a non-native, invasive species that present a significant risk to human health, animal health, and agriculture in Arkansas. In addition to competing for resources, damaging wildlife habitat, damaging agricultural crops, and preying on domestic animals and wildlife[1]; they also serve as a highly mobile reservoir for at least 45 animal diseases and parasites. Feral swine are also a potential reservoir for several Foreign Animal Diseases (animal diseases that have potential significant health and economic impacts and are not known to exist in the United States). In many cases, the introduction of these diseases in domestic livestock could have devastating animal health and economic impacts. While the risk of disease introduction posed by feral swine extends across multiple animal agriculture sectors, the most significant risk is to domestic swine operations with inadequate facilities and maintenance.[2] The purpose of this document is to provide a brief summary of the animal health risks, focusing on significant animal diseases associated with feral swine and recent cases of these diseases attributed to feral swine in Arkansas.

Known Feral Swine Diseases and Risks[3]: (*Foreign Animal Diseases)

- Pseudorabies Virus (PRV)
- Swine Brucellosis (*Brucella suis*)
- Influenza
- Bovine Tuberculosis (TB)
- African Swine Fever *
- Classical Swine Fever (Hog Cholera)*
- Foot and Mouth Disease*
- Leptospirosis
- E. coli
- Salmonellosis
- Toxoplasmosis
- External Parasites
- Internal Parasites
- Hepatitis E
- Porcine Reproductive and Respiratory Syndrome (PRRS)
- Anthrax
- Rabies
- Trichinosis
- Giardiasis
- Cryptosporidiosis
- Campylobacter
- *Coxiella burnetti* (Q Fever)
- *Erysipelothrix rhusiopathiae*
- *Francisella tularensis* (Tularemia)
- *Streptococcus suis*
- *Yersinia pestis* (Plague)
- West Nile Virus

Pseudorabies Virus (PRV)

A highly contagious viral disease in swine that has been endemic in most parts of the world. It is caused by *Suid herpesvirus 1* (SuHV1), and is also known as Aujesky's disease. PRV is considered to be the most economically important viral disease of swine in areas where hog cholera has been eradicated. The disease is characterized by three overlapping syndromes that reflect lesions in the central nervous system (CNS), respiratory system or reproductive system. Swine are the only natural host of pseudorabies virus (PRV). The disease was eradicated from the U.S. commercial swine industry in 2004 but remains in some localized feral swine populations. The disease remains common in many other major swine-raising countries. Most domestic animals (cattle, sheep, dogs, cats, and goats) and many wild animals (rats, mice, raccoons, opossums, rabbits, and several fur-bearing mammals) are susceptible to the virus but transmission only occurs when these species are kept in close contact with acutely infected swine; death is the usual outcome in these aberrant hosts. The term "pseudorabies" is found inappropriate by many people, as PRV is a herpesvirus and not related to the rabies virus.

Pseudorabies virus is spread and persists by several mechanisms. Swine that recover from PRV excrete large amounts of virus in saliva and nasal secretions, and perhaps in urine and feces, for up to two weeks. Virus can persist in the tonsils of carrier swine for at least several weeks. Latent virus can persist in the CNS for many months. Recrudescence and shedding of virus often occur after stress. Inapparent shedders are frequently the means of introduction of virus into susceptible herds. Once introduced, the virus spreads by nose-to-nose contact, through feed and water contaminated by oral secretions, and by aerosols coughed into the air. Feral swine remain a possible source of infection to domestic swine. Other PRV-infected animals (e.g. rats, mice, dogs, cats, raccoons, opossums) are considered "dead-end" hosts and will shed PRV only a short time. They may, however, visit swine facilities and either shed virus that contaminates the facility or they may die and be eaten by swine.[4]

Arkansas Feral swine surveillance conducted by the United States Department of Agriculture Animal Plant Health Inspection Service Wildlife Services in FY 2016 resulted in 139 samples from 15 counties. Nineteen of the samples were positive for PRV (13.7% positive rate). Positive samples were collected from Chicot, Desha, Drew, and Phillips counties.[5]

Arkansas participates in the PRV Program, a cooperative surveillance and management program between the United States Department of Agriculture Animal Plant Health Inspection Service Veterinary Services and Arkansas Livestock and Poultry Commission/Arkansas Agriculture Department with annual PRV surveillance targets for domestic swine that must be achieved. Arkansas is recognized as a PRV Free State via participation in this program, which facilitates interstate movement of Arkansas Swine. As part of this program, the detection of PRV in a domestic swine herd requires regulatory action including quarantine, epidemiological investigation, and aggressive disease risk mitigation tactics. Since October of 2015, there have been two PRV positive domestic swine herds detected in Arkansas as a result of this surveillance (Please see Figure 1 for additional information).

Swine Brucellosis (SB)
An infectious bacterial disease of swine characterized by reproductive impairment or failure. The etiologic agent is *Brucella suis*. Swine brucellosis was once common in the U.S. but now, due to rigorous control measures, is uncommon. SB occurs as a serious zoonosis, primarily among abattoir workers, farmers, veterinarians, and feral swine enthusiasts. *Brucella suis* is usually transmitted to susceptible swine through direct contact with infected swine. The route of exposure ordinarily is through the alimentary or genital tract. Pigs often are infected by ingesting aborted fetuses, fetal membranes or fluids discharged at the time of abortion. The organisms are also transmitted in infectious semen during natural breeding and artificial insemination. Transmission through abraded skin, conjunctiva and nasal mucous membranes is possible. Most owners of *B. suis*-infected herds notice no signs of infection prior to evidence of infertility in the herd. In dams infected at breeding, disease is first suspected when numerous sows or gilts return to heat 30-45 days after breeding. Females first exposed during late gestation have abortions or dead and weak pigs.[6]

Arkansas Feral swine surveillance conducted by the United States Department of Agriculture Animal Plant Health Inspection Service Wildlife Services in FY 2016 resulted in 139 samples from 15 counties. Thirty-two of the samples were positive for SB (23% positive rate). Positive samples were collected from Chicot, Cross, Desha, Lawrence, Phillips, and Stone counties.[7]

Arkansas participates in the SB Program, a cooperative surveillance and management program between the United States Department of Agriculture Animal Plant Health Inspection Service Veterinary Services and Arkansas Livestock and Poultry Commission/Arkansas Agriculture Department with annual SB surveillance targets for domestic swine. Arkansas is recognized as a SB Free State via participation in this program, which facilitates interstate movement of Arkansas Swine. As part of this program, the detection of SB in a domestic swine herd requires regulatory action including quarantine, epidemiological investigation, and aggressive disease risk mitigation tactics. Since October of 2015, there have been four SB positive domestic swine herds detected in Arkansas as a result of this surveillance (Please see Figure 2 for additional information).

Influenza
Swine influenza is a rapidly spreading viral disease characterized by sudden onset of fever, oculonasal discharge, prostration and weakness, followed by paroxysmal coughing over a relatively short course of 5-7 days, and relatively low mortality in uncomplicated outbreaks. In the United States, swine influenza (SIV) is common and widespread.

Increased interest in zoonoses and public health has included an intense interest in all influenza viruses. There is clear evidence of interspecies transmission of influenza viruses among swine, chickens, ducks, turkeys, many wild birds and people. When concurrent infection of poultry or swine with 2 or more strains of virus occurs, there is potential for reassortment of segments of genetic material with development of new strains resulting (genetic "shift").[8]

In a recent study, 8,239 serum samples were collected from feral swine across 35 U.S. states and tested for influenza antibodies. Four hundred and six (406) of those samples were positive

for influenza antibodies. Sixteen of these samples cross reacted for avian and swine influenza viruses, suggesting that feral swine could potentially be infected with both avian and swine influenza viruses, generating novel influenza viruses by hosting and reassorting viruses from wild birds and domestic swine and facilitating adaptation of avian influenza viruses to other hosts. Additional research and surveillance is needed to fully understand the role of feral swine in the ecology of influenza viruses.[9]

African Swine Fever
A viral foreign animal disease that can infect domestic and wild swine. Direct and indirect transmission can occur. There are two forms (acute and chronic). Recovered pigs may be carriers for life. Morbidity can approach 100%. Mortality varies with the virulence (0 – 100%). The virus usually disappears from feral swine when controlled in domestic swine.

Classical Swine Fever (Hog Cholera)
A highly contagious infectious foreign animal disease of swine. The U.S. was declared free in 1978 after a 16 year eradication program that cost over $140 million. The cost today would exceed $525 million. The virus is distributed worldwide, and endemic in some feral swine populations.

Foot and Mouth Disease (FMD)
A viral foreign animal disease that infects cloven-hoofed animals. The last outbreak of this disease in the U.S. occurred in 1929. Feral swine are not expected to serve as a reservoir, but may play a role in limited disease spread.

In summary, the animal health threat posed by feral swine is significant. However, disease spread by feral swine will depend on these critical factors population (distribution and density), social and spatial structure, movements, habitat connectivity, and inter-species contact. A thorough understanding of these factors, along with the implementation of critical control points (i.e. population control, biosecurity, etc.) are necessary to mitigate the animal health risk posed by feral swine.[10]

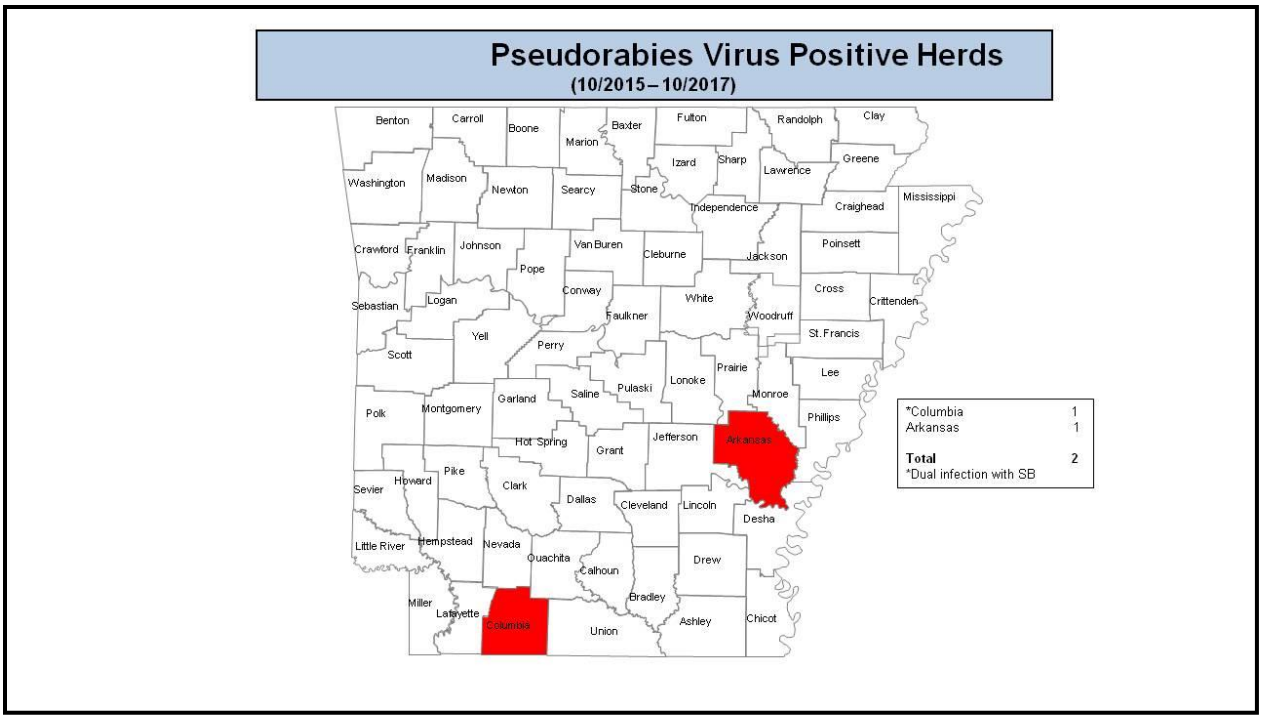


Figure 1. PRV Summary in Domestic Swine

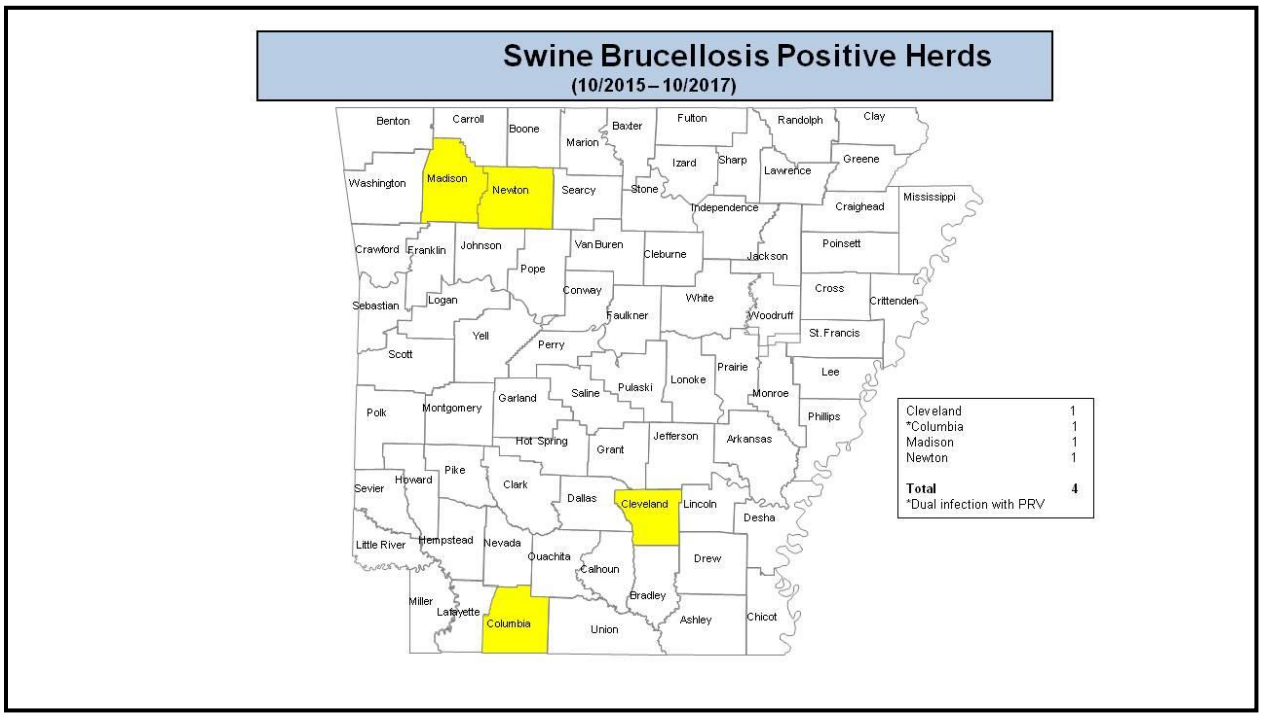


Figure 2 Swine Brucellosis Summary in Domestic Swine

[1] https://www.aphis.usda.gov/wildlife_damage/nwdp/pdf/Hutton_Pig_Paper_177657_7.pdf

[2] http://www.wildpiginfo.msstate.edu/diseases-wild-pigs-public-health.html

[3]https://www.aphis.usda.gov/aphis/ourfocus/wildlifedamage/programs/nwrc/nwdp/ct_feral swine

[4] https://vetmed.iastate.edu/vdpam/FSVD/swine/index-diseases/PRV

[5] Personal communication with Clint Turnage. USDA APHIS Wildlife Services Arkansas Feral Swine Surveillance FY 2016

[6] https://vetmed.iastate.edu/vdpam/FSVD/swine/index-diseases/brucellosis

[7] Personal communication with Clint Turnage. USDA APHIS Wildlife Services Arkansas Feral Swine Surveillance FY 2016

[8] https://vetmed.iastate.edu/vdpam/FSVD/swine/index-diseases/influenza

[9] http://aem.asm.org/content/early/2017/07/18/AEM.01346-17.abstract

[10] http://www.animalagriculture.org/Resources/Documents/Conf%20-%20Symp/Conferences/2013%20Annual%20Conference/Holmstrom_Lindsey.pdf

U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Pesticide Programs
Registration Division (7505P)
1200 Pennsylvania Ave., N.W.
Washington, D.C. 20460

NOTICE OF PESTICIDE:
_X_ Registration
___ Reregistration
(under FIFRA, as amended)

EPA Reg. Number:	**Date of Issuance:**
72500-26	1/3/17

Term of Issuance:
Conditional

Name of Pesticide Product:
KAPUT® FERAL HOG BAIT

Name and Address of Registrant (include ZIP Code):

Ms. Sue Valentine
Regulatory Manager
Scimetrics Ltd., Corp.
P.O. Box 1045
Wellington, CO 80549-1045

Note: Changes in labeling differing in substance from that accepted in connection with this registration must be submitted to and accepted by the Registration Division prior to use of the label in commerce. In any correspondence on this product always refer to the above EPA registration number.

On the basis of information furnished by the registrant, the above named pesticide is hereby registered under the Federal Insecticide, Fungicide and Rodenticide Act.

Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency. In order to protect health and the environment, the Administrator, on his motion, may at any time suspend or cancel the registration of a pesticide in accordance with the Act. The acceptance of any name in connection with the registration of a product under this Act is not to be construed as giving the registrant a right to exclusive use of the name or to its use if it has been covered by others.

This product is conditionally registered in accordance with FIFRA section 3(c)(7)(A). You must comply with the following conditions:

1. Submit and/or cite all data required for registration/reregistration/registration review of your product under FIFRA when the Agency requires all registrants of similar products to submit such data.

Signature of Approving Official:

Venus Eagle, Acting Chief
Invertebrate-Vertebrate Branch 3, Registration Division (7505P)

Date:
1/3/17

EPA Form 8570-6

2. Be aware that proposed data requirements have been identified in a Preliminary Work Plan. For more information on these proposed data requirements, you may contact the Chemical Review Manager in the Pesticide Reevaluation Division: http://iaspub.epa.gov/apex/pesticides/f?p=chemicalsearch:1

3. The data requirements for storage stability and corrosion characteristics (Guidelines 830.6317 and 830.6320) are not satisfied. A one year study is required to satisfy these data requirements. You have 18 months from the date of registration to provide these data.

4. Make the following label changes before you release the product for shipment:

    - Revise the EPA Registration Number to read, "EPA Reg. No. 72500-26."

5. Submit one copy of the final printed label for the record before you release the product for shipment.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) lists examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

If you fail to satisfy these data requirements, EPA will consider appropriate regulatory action including, among other things, cancellation under FIFRA section 6(e). Your release for shipment of the product constitutes acceptance of these conditions. A stamped copy of the label is enclosed for your records. Please also note that the record for this product currently contains the following CSFs:

- Basic CSF dated 12/30/2016
- Alternate CSF 1 dated 12/30/2016

If you have any questions, please contact Mark Suarez by phone at 703-305-0120, or via email at suarez.mark@epa.gov.

Enclosure

Kaput® FERAL HOG BAIT

Active Ingredient:	
Warfarin (CAS Number 81-81-2)	0.005%
Other Ingredients	99.995%
Total	100.000%

Keep Out of Reach of Children

CAUTION

See back [side] panel for First Aid and Precautionary Statements.

EPA Reg. No. 72500-_
EPA Est. 72500-CO-1

Net Wt. ___ lbs
{25 to 100 lbs}
[{11.34 to 45.36 kg}]

{Back [Side] Panel}

FIRST AID	
If Swallowed	• Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by the poison control center or doctor. • Do not give anything by mouth to an unconscious person.
If in Eyes	• Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.
TREATMENT FOR PET POISONING	
If animal eats bait, call veterinarian at once.	
NOTE TO PHYSICIAN OR VETERINARIAN	
Contains Warfarin, an anticoagulant. If swallowed, this material may reduce the clotting ability of the blood and cause bleeding. For humans or animals that have ingested this product and/or have obvious poisoning symptoms (bleeding or prolonged prothrombin times), give Vitamin K_1, intramuscularly or orally.	
Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact the National Poison Information Center at 1-800-858-7378 for emergency medical treatment information.	

ACCEPTED
01/03/2017
Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 72500-26

PRECAUTIONARY STATEMENTS

Hazards to Humans and Domestic Animals

CAUTION: Harmful if swallowed. Keep away from humans, domestic animals and pets. Any person who retrieves carcasses or unused bait following application of this product must wear protective gloves.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and Other Handlers Must Wear:

- Long-sleeved shirt and long pants,
- Shoes plus socks, and
- When handling bait or retrieving animal carcasses, chemical-resistant gloves made of barrier laminate, polyethylene, butyl rubber (≥14 mils), nitrile rubber (≥14 mils), neoprene rubber (≥14 mils), natural rubber (≥14 mils), polyvinyl chloride (≥14 mils), or Viton (≥14 mils).

Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Remove clothing/PPE immediately if pesticide gets inside. Then, wash thoroughly and change into clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing them. As soon as possible, wash thoroughly and change clothing.

ENVIRONMENTAL HAZARDS

This product may be toxic to fish, birds and other wildlife. Dogs and other predatory and scavenging mammals and birds might be poisoned if they feed upon animals that have eaten the bait. Do not apply this product directly to water, to areas where surface water is present or to intertidal areas below the mean high-water mark. Do not contaminate water when disposing of equipment wash waters.

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

READ THIS LABEL:

Read this entire label and follow all use directions and use precautions.

IMPORTANT: Do not expose children, pets, domesticated animals or other non-target wildlife to this product. To help prevent accidents:

1. Store product not in use in locations out of reach of children, pets, domesticated animals and wildlife.
2. Apply this product only as specified on this label.
3. Dispose of product container as well as unused, spoiled or recoverable unconsumed bait as specified on this label.

USE RESTRICTIONS: This product may only be used to control feral hogs (*Sus scrofa*) on pastures, rangeland, forests, non-crop areas, and crop lands. This bait may only be applied in hog feeders equipped with heavy lids (8 to 10 lbs. of total weight) on bait compartments so as to limit direct access to bait by nontarget animals. Feral hogs must be conditioned to accept feed from the bait dispensers and to open the weighted lids to bait compartments.

- Do not apply this bait directly on the ground, including all types of ground surface (e.g., bare or plant-covered ground, paved surfaces, etc.). Apply this product only in hog feeders consistent with the description provided above.
- Apply bait in fenced areas, if available.
- When handling bait or animal carcasses, wear protective gloves made of barrier laminate, polyethylene, butyl rubber (≥14 mils), nitrile rubber (≥14 mils), neoprene rubber (≥14 mils), natural rubber (≥14 mils), polyvinyl chloride (≥14 mils), or Viton (≥14 mils).
- Store this product out of reach of children, pets, domesticated animals, and wildlife.
- Post bilingual caution signs (English and Spanish) in the treated areas to warn the public of the presence of the Warfarin bait and to forbid disturbance of bait dispensers and hog carcasses. Post these signs on public roads, trails, and pathways within and at common points of access to treated areas.

GRAZING RESTRICTIONS: Do not allow livestock to graze on baited areas (whether fenced or open) during the baiting program. If bait is to be applied in areas used for grazing, ensure that all livestock are removed and excluded from baited areas before applying this product and for at least 90 days after toxic baits are removed from bait dispensers.

SELECTION OF BAITING SITES: Baiting sites must be consistent with the limitations set forth in the USE RESTRICTIONS on this label (above). Before applying this product, observe the area selected for treatment to identify where hog activity and trails are located. Look for evidence of recent activity, including hog sightings, hog damage to crops, rooting of the soil, hog wallows, and fresh hog tracks and fecal material.

PLACING AND SECURING HOG FEEDERS: Locate hog feeders in or near probable resting areas for hogs, including brush along streams, dense cover, and tall vegetation. Do not place feeders in open areas in crops, fields, or pastures. From one to three bait feeders may be used per placement location, according to the apparent number of hogs visiting the location. Three dispensers spaced no more than 10 feet apart may be used where hog numbers are excessive (e.g., if large hog family groups, or sounders, are present). Secure feeders in place, so that hogs cannot tip them over, by use of T-posts or by tying the feeders to trees or shrubs.

CONDITIONING HOGS TO FEEDERS: After the feeders are situated and secured, feral hogs must be conditioned (trained) to feed from them. To accomplish this, load the feeding compartments with a non-toxic feed, and open the lids to the feeding compartments by about 6 inches so that hogs can access this feed with little difficulty. To condition hogs to accept this product, use one of the following preparations as the non-toxic feed: (1) cracked or whole corn, soaked in water for 3-5 days until it has a noticeable odor; (2) cracked or whole corn treated with a commercially available hog attractant which includes scents of hog urine, fruit, or pet food; or (3) Kaput Feral Hog Lure. Load 25 to 50 lbs. of the non-toxic feed into each hog feeder. Provide access to non-toxic feed for three to six weeks, until hogs are feeding readily from the bait compartments. Failure to condition hogs to feeders or ending the conditioning period too early may reduce the number of hogs taken or prolong the period of time needed for toxic baiting.

BAIT APPLICATION: After feral hogs have been conditioned to take non-toxic feed from bait compartments, remove all of the non-toxic feed remaining in the feeders. Add 25 to 50 lbs. of *Kaput*® FERAL HOG BAIT to each feeder and close lids to bait compartments so that hogs must lift the doors with their snouts in order to access bait. (Do not load this product into feeders from which no non-toxic bait was consumed during the conditioning period.) Monitor feeders every 1 to 4 days once treatment has begun to determine whether hogs are accessing bait, to assess whether bait is being spilled around feeders, and to replenish bait, if appropriate. Refill feeders if bait is significantly depleted or degraded, and there still is evidence of hog activity at the feeder. As bait take and hog numbers decline, the feeders may be monitored at 5-day intervals, but site surveillance must continue as described below. If possible, feeders should be checked at mid-day to minimize disturbance to feral hogs. Bait spilled around feeders must be collected and disposed of properly.

SURVEILLANCE AND FOLLOW-UP: Dead hogs may begin to appear in or near the treatment areas within 4 to 7 days after bait placement. Applicators must return to the treatment site within 4 days after the first bait placements were made, and at 2- to 4-day intervals thereafter, to inspect the site for evidence of dead or dying feral hogs and/or dead nontarget animals. All carcasses found must be disposed of properly. Carcasses may be buried on site in

holes dug deeply enough that the entire carcass is at least 18 inches below the ground surface. Cover buried carcasses up to the level of the surrounding ground. If burial is not practical (e.g., due to frozen or extremely hard ground) and other disposal methods are allowed by State and local authorities, carcasses may be disposed of by other methods to ensure that carcasses are not accessible to scavengers. Continue to monitor the treatment area to collect and dispose of feral hogs and to search for non-target animals for at least two weeks after the removal of all bait from the hog feeders. Deaths of any animals other than feral hogs that appear to be the result of baiting with this product must be reported to State authorities.

Note: A dye in this product will impart a blue color to the fatty tissues of hogs that have eaten the bait.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

Pesticide Storage: Store in original container in a cool, dry place inaccessible to children and pets.

Pesticide Disposal: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Container Handling: Non-refillable container. Do not reuse or refill this container. Offer container for recycling, if available, or reconditioning, if appropriate. Otherwise, dispose of empty container in a sanitary landfill.

Batch Code [Lot Number]: {Description of where lot number is located}

{*Per PR Notice 2007-4 the batch code/lot number will appear on the label or container.****}***

WARRANTY

To the extent consistent with applicable law, Manufacturer and Seller make no warranty, express or implied, concerning the use of this product other than indicated on the label. Buyer assumes all risk of use and/or handling of this material when such use/handling is contrary to label instructions.

[WARRANTY DISCLAIMER

The directions for use of this product must be followed carefully. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, (1) THE GOODS DELIVERED TO YOU ARE FURNISHED "AS IS" BY MANUFACTURER OR SELLER, AND (2) MANUFACTURER AND SELLER MAKE NO WARRANTIES, GUARANTEES OR REPRESENTATIONS OF ANY KIND TO BUYER OR USER, EITHER EXPRESS OR IMPLIED, OR BY USAGE OF TRADE, STATUTORY OR OTHERWISE, WITH REGARD TO THE PRODUCT SOLD, INCLUDING, BUT NOT LIMITED TO MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, USE OR ELIGIBILITY OF THE PRODUCT FOR ANY PARTICULAR TRADE USAGE. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, UNINTENDED CONSEQUENCES, INCLUDING BUT NOT LIMITED TO INEFFECTIVENESS, CROP OR PLANT DAMAGE, OR LOSS OF YIELD, MAY RESULT BECAUSE OF SUCH FACTORS AS THE PRESENCE OR ABSENCE OF OTHER MATERIALS USED IN COMBINATION WITH THE GOODS, OR THE WEATHER, WIND, AND TEMPERATURE, OR THE MANNER OF USE OR APPLICATION, ALL OF WHICH ARE BEYOND THE CONTROL OF MANUFACTURER OR SELLER, AND ASSUMED BY BUYER OR USER. THIS WRITING CONTAINS ALL OF THE REPRESENTATIONS AND AGREEMENTS BETWEEN BUYER OR MANUFACTURER, AND SELLER, AND NO PERSON OR AGENT OF MANUFACTURER OR SELLER HAS ANY AUTHORITY TO MAKE ANY OTHER REPRESENTATION OR WARRANTY OR AGREEMENT RELATING IN ANY WAY TO THESE GOODS. NO WARRANTIES SHALL BE CREATED BY COURSE OF DEALING, USAGE OF TRADE, OR COURSE OF PERFORMANCE. THERE ARE NO WARRANTIES THAT EXTEND BEYOND THE FACE HEREOF. THE SELLER OR MANUFACTURER ASSUMES NO RESPONSIBILITY THAT THE GOODS WILL BE FIT FOR ANY PARTICULAR PURPOSE FOR WHICH YOU MAY BE BUYING OR USING THE GOODS, EXCEPT AS OTHERWISE PROVIDED IN THE CONTRACT.

LIMITATION OF LIABILITY

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, IN NO EVENT SHALL MANUFACTURER OR SELLER BE LIABLE FOR SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, OR FOR DAMAGES IN THE NATURE OF PENALTIES RELATING TO THE GOODS SOLD, INCLUDING USE, APPLICATION, HANDLING, AND DISPOSAL. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, NEITHER MANUFACTURER NOR SELLER SHALL BE LIABLE TO BUYER OR USER OR TO CUSTOMERS OF BUYER, IF ANY, FOR INDEMNIFICATION OR ANY DAMAGES OR SUMS OF MONEY, CLAIMS OR DEMANDS WHATSOEVER, RESULTING FROM OR BY REASON OF, OR RISING OUT OF THE USE, MISUSE, OR FAILURE TO FOLLOW LABEL WARNINGS OR INSTRUCTIONS FOR USE, OF THE GOODS SOLD. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, ALL SUCH RISKS SHALL BE ASSUMED BY THE BUYER, USER, OR CUSTOMERS. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, BUYER'S OR USER'S EXCLUSIVE REMEDY, AND MANUFACTURER'S OR SELLER'S TOTAL LIABILITY, SHALL BE FOR DAMAGES NOT EXCEEDING THE PURCHASE PRICE OF THE GOODS AND, IF BUYER OR USER WISHES, THE RETURN OF THE GOODS BY BUYER TO SELLER.

If you do not agree with or do not accept any of directions for use, the warranty disclaimers, or limitations on liability, do not use the goods, and return it unopened to the Seller, and the purchase price will be refunded. *By using the goods, you expressly agree to all of the terms and conditions of this contract.*]

[Attention [Notice]: This product contains a chemical known to the state of California to cause birth defects or other reproductive harm.]

Manufactured by:

Scimetrics
LTD. CORP.

[Pest Management Solutions]
P.O. Box 1045
Wellington, CO 80549
(970) 482-1330
customerservice@kaputproducts.com
Made in [the] U.S.A. [USA]
[Patent Pending]

[Kaput® is a registered trademark of Scimetrics Ltd. Corporation]

{ } Denotes language that does not appear on the market label
[ ] Denotes alternate/optional language

Minimum text for warning signs

CAUTION

- Warfarin bait to control feral hogs is being used in this area.
- Do not touch dead animals or bait dispensers.
- Do not eat meat from animals shot or found dead in this area.
- Do not eat animals with internal parts that are dyed blue.
- Do not allow livestock to graze in this area.

PRECAUCIÓN

- Cebo con warfarin se utiliza en esta área para controlar marrano salvajes.
- No toque animales muertos ni dispensadores de cebo.
- No coma carne de animales disparados o encontrados muertos en esta zona.
- No coma animales con partes internas teñidas azul.
- En esta zona no permita ganado a pacer.

Arkansas Feral Hog Eradication Task Force

Constant Contact Survey Results

Survey Name: Kaput Feral Hog Bait Registration for Use Survey

Response Status: Partial & Completed

Filter: None

10/24/2017 4:15 PM CDT

Are you an Arkansas resident?

Answer	0% 100%	Number of Response(s)	Response Ratio
Yes		4791	95.1 %
No		158	3.1 %
No Response(s)		85	1.6 %
	Totals	**5034**	**100%**

Do you own property in Arkansas?

Answer	0% 100%	Number of Response(s)	Response Ratio
Yes		4323	85.8 %
No		618	12.2 %
No Response(s)		93	1.8 %
	Totals	**5034**	**100%**

How important are feral hogs to you?

Answer	0% 100%	Number of Response(s)	Response Ratio
Very important		1460	29.0 %
Fairly important		836	16.6 %
Important		1058	21.0 %
Slightly Important		586	11.6 %
Not at all important		1008	20.0 %
No Response(s)		86	1.7 %
	Totals	**5034**	**100%**

In what ways are feral hogs important to you? (Check all that apply).

Answer	0% 100%	Number of Response(s)	Response Ratio
Feral hogs are a public nuisance.		1887	51.8 %
Feral hogs are a public health concern.		1163	31.9 %
Feral hogs pose a threat to animal health (e.g., pets, livestock, wildlife).		1784	49.0 %
Feral hogs cause property damage (e.g., crops, pastures, equipment, forestlands, wildlife habitat).		2569	70.5 %
Feral hogs harm native wildlife and habitats (e.g., deer, wild turkey, bobwhites, salamanders).		2355	64.6 %
Feral hogs are fun to hunt.		1698	46.6 %
Feral hogs are enjoyable to see in the wild.		549	15.0 %
I get money or other benefits for removing feral hogs from other people's properties.		96	2.6 %
Other		279	7.6 %
	Totals	**3640**	**100%**

Do you believe toxicants should be an option for feral hog control in Arkansas?

Answer	0% 100%	Number of Response(s)	Response Ratio
Yes		589	11.7 %
Maybe		273	5.4 %
No		3612	71.7 %
Don't know		80	1.5 %
No Response(s)		480	9.5 %
	Totals	**5034**	**100%**

TextBlock:

Kaput® Feral Hog Bait is an EPA approved toxicant for controlling feral hogs which is being considered by the Arkansas State Plant Board for registration and use in the state.

How familiar are you with Kaput® Feral Hog Bait?

Answer	0% 100%	Number of Response(s)	Response Ratio
Very familiar		407	8.0 %
Fairly familiar		556	11.0 %
Familiar		1015	20.1 %
Slightly familiar		1279	25.4 %
Not at all familiar		1178	23.4 %
Don't know		97	1.9 %
No Response(s)		502	9.9 %
	Totals	**5034**	**100%**

Do you know the active ingredient in Kaput® Feral Hog Bait?

Answer	0% 100%	Number of Response(s)	Response Ratio
Brodifacoum		13	<1 %
Cholecalciferol		13	<1 %
Warfarin		2897	57.5 %
Zinc phosphate		17	<1 %
Don't know		1555	30.8 %
No Response(s)		539	10.7 %
	Totals	**5034**	**100%**

Several potential risks have been discussed with Kaput® Feral Hog Bait. Which, if any, potential risks are you concerned about? (Check all that apply.)

Answer	0% 100%	Number of Response(s)	Response Ratio
Sickness or death in wildlife other than feral hogs		4091	90.3 %
Sickness or death in domestic pets and livestock		3606	79.6 %
Human health issues		3137	69.2 %
Environmental issues		3034	66.9 %
I am not concerned about potential risks.		237	5.2 %
Other		89	1.9 %
	Totals	**4530**	**100%**

TextBlock:

Specific federal restrictions for using Kaput® Feral Hog Bait are described by the product manufacturer and product label. Some are listed below. On a scale of 1 to 4, how confident are you that a particular restriction will reduce potential risks?

Example Restriction: Do not apply this bait directly on the ground. Apply this product only in hog feeders. The lid of the hog feeder needs to weigh a minimum of 8 to 10 lbs. How confident are you that this restriction will reduce potential risks?

1 = (1) Very confident, 2 = (2) Fairly confident, 3 = (3) Slightly confident, 4 = (4) Not at all confident, 5 = (5) Don't know

1	2	3	4	5	Number of Response(s)	Rating Score*
					4504	3.7

*The Rating Score is the weighted average calculated by dividing the sum of all weighted ratings by the number of total responses.

Example Restriction: If bait is to be applied in areas used for grazing, ensure that all livestock are removed and excluded from baited areas before applying this product and for at least 90 days after toxic baits are removed from bait dispensers.How confident are you that this restriction will reduce potential risks?

1 = (1) Very confident, 2 = (2) Fairly confident, 3 = (3) Slightly confident, 4 = (4) Not at all confident, 5 = (5) Don't know

1	2	3	4	5	Number of Response(s)	Rating Score*
					4497	3.6

*The Rating Score is the weighted average calculated by dividing the sum of all weighted ratings by the number of total responses.

Example Restriction: Blue fatty tissue is an indication that the hog consumed Kaput® Feral Hog Bait. People should not consume the meat if the tissue is blue in color.How confident are you that this restriction will reduce potential risks?

1 = (1) Very confident, 2 = (2) Fairly confident, 3 = (3) Slightly confident, 4 = (4) Not at all confident, 5 = (5) Don't know

1	2	3	4	5	Number of Response(s)	Rating Score*
					4499	3.5

*The Rating Score is the weighted average calculated by dividing the sum of all weighted ratings by the number of total responses.

Example Restriction: Carcasses may be buried on site in holes dug deeply enough that the entire carcass is at least 18 inches below ground surface. If burial is not practical, carcasses may be disposed of by other methods to ensure that carcasses are not accessible to scavengers. How confident are you that this restriction will reduce potential risks?

1 = (1) Very confident, 2 = (2) Fairly confident, 3 = (3) Slightly confident, 4 = (4) Not at all confident, 5 = (5) Don't know

1	2	3	4	5	Number of Response(s)	Rating Score*
					4484	3.7

*The Rating Score is the weighted average calculated by dividing the sum of all weighted ratings by the number of total responses.

Example Restriction: Secondary toxicity is very minimal due to the high tolerance of other wildlife to the active ingredient, and very low residue levels in the deceased hog. Bait spilled around feeders must be collected and disposed of properly. Continue to monitor the treatment area for at least two weeks. Deaths of any animals other than feral hogs that appear to be the result of baiting with this product must be reported to State authorities.How confident are you that this restriction will reduce potential risks?

1 = (1) Very confident, 2 = (2) Fairly confident, 3 = (3) Slightly confident, 4 = (4) Not at all confident, 5 = (5) Don't know

1	2	3	4	5	Number of Response(s)	Rating Score*
					4494	3.7

*The Rating Score is the weighted average calculated by dividing the sum of all weighted ratings by the number of total responses.

Do you support or oppose Kaput® Feral Hog Bait being registered for use in the State of Arkansas to help control feral hogs?

Answer	0% 100%	Number of Response(s)	Response Ratio
Support with current federal restrictions		339	6.7 %
Support with current federal restrictions plus additional state restrictions		315	6.2 %
Oppose		3723	73.9 %
Don't know		144	2.8 %
No Response(s)		513	10.1 %
	Totals	**5034**	**100%**

What state restrictions should be considered for Kaput® Feral Hog Bait? (Check all that apply.)

Answer	0% 100%	Number of Response(s)	Response Ratio
Restricted Use Pesticide (can only be used by agriculture and pest business operators who attend safety courses and receive state certification)		184	40.4 %
Pilot Project (allow use for a limited timeframe, for example one year, and re-evaluate)		226	49.6 %
Limit number of users in the state		77	16.9 %
Limit time / season of use of the product		105	23.0 %
Don't know		28	6.1 %
Other		85	18.6 %
	Totals	**455**	**100%**

Do you have any additional comments or feedback for the Arkansas Feral Hog Eradication Task Force? Is so, please include below.

1902 Response(s)

FERAL HOG MANAGEMENT AND CONTROL COMMITTEE
Recommendations

The Management and Control Committee of the Feral Hog Task Force met September 6, 2017 and October 11, 2017. Participants represented nine agencies or organizations: Arkansas Game and Fish Commission (AGFC), Arkansas State Parks (ASP), University of Arkansas Division of Agriculture Research and Extension (UADARE), Arkansas Livestock and Poultry (ALP), Arkansas Dog Hunters Association (ADHA), Arkansas Forestry Association (AFA), Arkansas Association of Conservation Districts (AACD), US Fish and Wildlife Service (USFWS), and US Department of Agriculture – Animal and Plant Health Inspection Service (USDA APHIS).

The goal of this committee was to research, investigate and recommend methods for reducing feral hog numbers across the state. The recommendations of this committee are provided below:

Recommendations:

1. Increase the availability of traps and trained trappers to assist willing landowners and land managers statewide.
    a. Identify the most appropriate means of providing state and federal resources at a county level to acquire traps and provide training opportunities.
        i. Request that the Legislature consider appropriating funding to the Arkansas Natural Resources Commission for increasing staff capacity at select conservation districts.
        ii. Request that AGFC, USDA APHIS assess their budgets and manpower and increase capacity for feral hog control where appropriate.
        iii. Encourage collaboration between the USDA Natural Resources Conservation Service, the USFWS, US Forest Service, USDA APHIS and the State of Arkansas in sharing resources to better address the feral hog issues in the state.
    b. Request AGFC, UADARE, and USDA APHIS assist in developing training opportunities for trappers.
    c. Develop a strategy for resource allocation based on feral hog distribution and current resources.
        i. AGFC and USDA APHIS will provide an updated distribution map.
2. Develop a web-based feral hog reporting tool to capture control efforts across the state. This would also be helpful in determining the feral hog population.
3. Encourage increased collaboration between state, federal and other partners to engage in organized gunning projects such as during high water and via helicopter.
4. The majority of committee members oppose the use of buying stations at this time due to a lack of data from other states indicating such facilities decrease feral hog populations, and concern that buying stations would create a new industry conducive to the continuance of feral hog populations for the purpose of generating income rather than their eradication.
5. Allow the restricted use permitting of Kaput under the research and demonstration classification, or other designation which limits use to the following users; state and federal agencies, colleges and universities in accordance with state and federal property use agreements/clearances in

conjunction with task force approved Kaput related research projects conducted by colleges and universities. Proposed research related to Kaput, and all feral hog toxicants, should be considered by the full task force and related committees.

6. Encourage stakeholders and state institutions to pursue and engage in research related to one, or more of the prioritized research items listed below:
    a. What is the species-specific sensitivity (LD50) of native wildlife to warfarin (ex. black bears, raccoon, bobcat, fox, representative song bird species, representative bird of prey species, white-tailed deer, Virginia opossum, etc.)?
    b. What is the concentration of warfarin in the tissues of animals with primary exposure to the toxin? What is the likelihood of secondary toxicosis based on the answers to questions 1 and 2?
    c. What are the sublethal effects of warfarin exposure in non-target species, such as alterations to immunity, reproductive function, etc.?
    d. What is the effectiveness of the product for population-level control in an open system?
    e. What proportion of carcasses are expected to be recovered with reasonable effort?
    f. Is the methylene blue dye transferred to non-target species with secondary exposure to the toxin?
8. Support aerial gunning operations as a supplemental control method under permits issued by the Arkansas Agriculture Department for private landowners. Aerial removal services provided to landowners through contractors/vendors should be strictly regulated to avoid future commercialization and limited to properties delineated within the above referenced permit.

Objective:

There has been a general call for additional research into the Kaput® product before it is used on the landscape. In light of that, we felt it would be appropriate to review some of the research questions pertinent to the State of Arkansas.

Pertinent Research Issues:

1. Can non-target wildlife (especially black bears) access the bait when it is used according to label instructions?
2. The time required for the methylene blue dye to appear in the tissues should be confirmed.
3. How long does the methylene blue dye persist in tissues relative to warfarin persistence?
4. What is the species-specific sensitivity (LD50) of native wildlife to warfarin (ex. black bears, raccoon, bobcat, fox, representative song bird species, representative bird of prey species, white-tailed deer, Virginia opossum, etc.)
5. What is the concentration of warfarin in the tissues of animals with primary exposure to the toxin? What is the likelihood of secondary toxicosis based on the answers to questions 4 and 5?
6. Is the methylene blue dye transferred to non-target species with secondary exposure to the toxin?
7. What are the sublethal effects of warfarin exposure in non-target species, such as alterations to immunity, reproductive function, etc.?
8. What proportion of carcasses are expected to be recovered with reasonable effort?
9. What is the effectiveness of the product for population-level control in an open system?

On-going Kaput Research*:

Bear, bird, and small mammal access to feeders	Louisiana Department of Wildlife and Fisheries
Warfarin levels in pig meat	Louisiana Department of Wildlife and Fisheries
Timing to appearance of blue dye	Louisiana Department of Wildlife and Fisheries
Bear access to feeders	Auburn University
Assessing whether the mechanism of mortality is effective and humane	Mississippi Department of Agriculture/Mississippi State
Assessing attractiveness of the lure (not bait) to non-target wildlife	Mississippi Department of Agriculture/Mississippi State
Time required to condition pigs to the feeder system	Auburn University
Timing to appearance of blue dye	Texas Tech University
Warfarin levels in pig meat	Texas Tech University

*This list was compiled from the best available information but may not be comprehensive

FERAL HOG POLICY AND LEGISLATIVE COMMITTEE
Recommendations

Members: Patrick Fisk-Arkansas Livestock and Poultry (ALPC), J.P. Fairhead-Arkansas Game and Fish Commission (AGFC), Bruce Holland-Arkansas Natural Resources Commission (ANRC), Jeromy Sullivant-Arkansas Dog Hunters Association (ADHA), Jerry Creasy -Arkansas Cattleman Association (ACA), Debbie Morland-Arkansas Association of Conservation Districts (AACD), and Josh Curtis-The Association Arkansas of Counties (AAC).

The goal of this committee was to identify and recommend changes to policy or legislation that will enhance the ability of state agencies and the general public to eradicate feral hogs.

The recommendations of this committee are provided below:

1. Amending current laws to strengthening and support the purpose of the task force which is to eradicate feral hogs:
    a) To amend Act 1104 Arkansas Code § 2-38-502 (Capturing and Killing Feral Hogs).
    Refer to appendix A
        I. Adding language that would allow an individual to obtain a permit that would allow them to hunt feral hogs from an airborne craft.
        II. Remove language that refers to any terminal facility that allows hunting of feral hogs in confinement.
        III. Add an exemption to Authorized or qualified personnel to catch and release feral hogs for research purposes.
    b) To amend Act 1104 Arkansas Code § 2-38-504 (Releasing Hogs into the Wild).
    Refer to appendix B

        I. Increase penalties for the illegal transpiration of feral hogs.
        II. Increase penalties for the illegal release of feral hogs onto private or public land.
        III. Remove language that refers to any terminal or hunting facilities.
        IV. Remove language that restricts a landowner from possessing a feral hog.
    c) To amend Act 1104 Arkansas Code § 2-38-501.
    Refer to appendix C

        I. Amending the definition of a feral hog; adding language that would make identifying a feral hog easier for law enforcement.

2. Development of an MOU or MOA between current Arkansas Feral Hog Taskforce members to assure that the purpose of the Taskforce is met. Feral hogs have been one of our biggest and most challenging adversaries in Arkansas agriculture since the early 1980's. In the last few years it seems the population has exploded, making it imposable for landowner to gain any grounds on reducing the number of feral hogs that damage their property. The many other risks that feral hogs pose to the agriculture

community also have the potential to have a significant impact on the citizens of Arkansas. The ever growing population of feral hogs here in Arkansas is not a problem than can be solved in a few months or even a year. The Policy and Legislative Committee has drafted an MOU that will assure the continued cooperation between state agencies and other organizations. The MOU will be an agreement that will allow the Task Force to continue its battle against feral hogs for years to come, or at least until the problem has be resolved. ***Refer to appendix D***

Appendix A

2-38-502. Capturing and killing feral hogs -- Definition.

(a) A person may capture or kill a feral hog only as follows:

(1) On private land if the person is the landowner or lessee or has the permission of the landowner or lessee; and

(2) (A) On public land if:

(i) Allowed by the l~~andowner~~ **landowning entity**; and

(ii) The person possesses a valid Arkansas hunting license and complies with Arkansas hunting regulations.

(B) However, a certified law enforcement officer or a public employee engaged in the performance of his or her official duties is exempt from the requirement under subdivision (a)(2)(A) of this section, **or**

(3) With a valid permit issued by the Arkansas Livestock and Poultry Commission pursuant to the Airborne hunting provisions of 16 U.S.C § 742j-1.

(b) A person whose hunting license is revoked shall not take or kill a feral hog during the period of the revocation.

(c) A feral hog captured by any means under subsection (a) of this section shall be immediately:

(1) ~~**(A)**~~ Killed.

(2) ~~**(B)**~~ If a feral hog is captured on private property and not moved from the private property, the landowner or a lessee is not required to kill the feral hog immediately.~~; or~~

~~**(2) (A)** Permanently identified by eartag approved by the Arkansas Livestock and Poultry Commission and transported to a terminal facility that is certified by the commission.~~

~~**(B)** The commission shall adopt rules for the issuance of a certification permit for a terminal facility and the requirements for inspection of a terminal facility.~~

~~**(C)** A terminal facility shall:~~

~~**(i)** Maintain a record of each feral hog purchased, including without limitation the:~~

~~***(a)*** Name of the seller;~~

~~***(b)*** Date of the purchase;~~

~~***(c)*** Number of feral hogs purchased; and~~

~~***(d)*** Eartag number issued for each feral hog purchased; and~~

~~**(ii)** Comply with all swine rules adopted by the commission.~~

~~**(D)** As used in this subsection, "terminal facility" means a facility for the containment of~~

~~domestic and feral hogs that requires that a hog be killed before leaving the facility.~~

~~**(E)**~~ **(d)** A feral hog ~~shall not~~ may be released into the wild only under ~~any~~ **the following circumstances:**

(i) **The Livestock and Poultry Commission may authorize an employee of a state or federal agency for the purpose of capturing and/or releasing a feral hog for tracking, or for research purposes, and with permission of the owner or lessee of the property.~~; and~~**

(ii) **Feral hogs that are captured for the purpose of tracking, or research shall be sterilized before released on private or public land.**

HISTORY: Acts 1999, No. 457, § 1; 2013, No. 1104, § 2; 2015, No. 723, § 1; 2017, No. 697, § 1.

Appendix B

2-38-504. Releasing hogs into the wild.

(a) **Except as provided in § 2-38-502(d),** A person who knowingly releases or attempts to release a live hog upon public or private land upon conviction is guilty of an unclassified misdemeanor and is subject to a fine of not less than ~~one~~ **Five** thousand dollars ~~($1,000)~~ **($5,000)** per hog nor more than ~~five~~ **Ten** thousand dollars ~~($5,000)~~ **($10,000**) per hog, and**/or imprisonment not exceeding ninety (90) days,** and**/or** revocation of his or her hunting and fishing rights in the state for up to ~~five (5)~~ **eight (8)** years.

(b) ~~**(1)** A person who knowingly releases or attempts to release a live hog on private property upon conviction is guilty of an unclassified misdemeanor and is subject to a fine of not less than one thousand dollars ($1,000) per hog nor more than five thousand dollars ($5,000) per hog or imprisonment not exceeding thirty (30) days, or both.~~

~~**(2)**~~ However, subdivision ~~(b)(1)~~ **(a)** of this section does not prohibit a person from~~:~~

~~**(A)**~~ ~~I~~ **i**ntroducing a domestic hog for farm purposes onto private property enclosed with a fence sufficient under § 2-39-101 et seq. and with permission of the owner or lessee of the property. ~~; or~~

~~**(B) (i)** Continuing to operate a hog-hunting facility established before August 16, 2013, if:~~

~~***(a)*** The hog-hunting facility and operation meet the requirements imposed by the Arkansas Livestock and Poultry Commission for animal identification, transportation, and quarantine;~~

~~***(b)*** The hog-hunting facility and operation are subject to periodic inspections by the commission; and~~

~~***(c)*** The hog-hunting facility and operation are certified by the commission as a terminal facility, as defined in § 2-38-502(c).~~

~~**(ii)** An owner or operator of a hog-hunting facility that is in operation before August 16, 2013, that does not meet the requirements stated in subdivision (b)(2)(B)(i) of this section is prohibited from purchasing or transporting a live feral hog under this subchapter.~~

~~**(iii)** Except as provided in subdivision (b)(2)(B)(i) of this section, a person is prohibited from establishing or operating a business in which one (1) or more feral hogs are placed in one (1) or more fenced enclosures, regardless of the size of the enclosure, for the purpose of conducting a hog-hunting operation.~~

(c) A person who knowingly purchases, sells, offers for sale, receives, ~~possesses~~, imports, distributes, or transports a live feral hog upon conviction is guilty of an unclassified misdemeanor and is subject to a fine of not less than one thousand dollars ($1,000) per hog nor more than five thousand dollars ($5, 000) per hog or imprisonment not exceeding thirty (30) days, or both.

(d) Upon the arrest of a person under this section, the arresting law enforcement officer shall seize and take custody of any hog in the possession of the arrested person and may seize any equipment used in furtherance of the violation, including without limitation a motor vehicle, trailer, and trap.

(e) (1) A court having competent jurisdiction:

(A) Shall order the forfeiture and immediate euthanasia of any hog that was the basis of a conviction under this section;

(B) May order the forfeiture and immediate euthanasia of a hog before a conviction if the court determines that the hog poses an imminent risk to public health or safety; and

(C) May order the forfeiture of any seized equipment.

(2) However:

(A) A conveyance used by any person as a common carrier is not subject to forfeiture under this subsection unless it appears that the owner or other person in charge of the conveyance was a consenting party or privy to the commission or attempt to commit the violation;

(B) Equipment is not subject to forfeiture under this subsection by reason of any act or omission established by the owner of the equipment to have been committed or omitted without his or her knowledge or consent and without the knowledge or consent of any person having possession, care, or control of the equipment with the owner's permission; and

(C) A forfeiture of equipment encumbered by a security interest is subject to the security interest of the secured party if the secured party neither had knowledge of nor consented to the use of the equipment in the commission or attempt to commit the violation.

(f) In addition to the fines, penalties, and forfeitures imposed under this section, a court may require the defendant to make restitution to the state or any of its political subdivisions for transporting, housing, feeding, euthanizing, and disposing of any hog forfeited under this section.

(g) Any certified state law enforcement officer may write a citation for a violation under this section.

(h) Fines collected under this section shall be deposited into the Game Protection Fund to be used for eradication efforts to eliminate feral hogs.

(i) This section does not apply to the purchase, sale, receipt, possession, import, or transportation of a live feral hog that serves as a mascot for an institution of higher education.

HISTORY: Acts 1999, No. 457, § 3; 2005, No. 1994, § 22; 2007, No. 827, § 6; 2011, No. 567, § 1; 2013, No. 1104, § 3; 2015, No. 723, §§ 2, 3.

Appendix C

2-38-501. Definition.

As used in this subchapter:

(1) (A) "Feral hog" means an animal or hybrid animal of either the family Suidae, including without limitation a wild hog, Russian or European wild boar, and Old World swine, or the family Tayassuidae, including without limitation peccary, javelina, and New World swine, that is or has been roaming freely upon public land or private land.

(B) "Feral hog" includes a hog that is not conspicuously identified as required under §§ 2-34-101 and 2-34-102 [repealed].

(C) "Feral hog" does not include:

(i) A stray domestic hog that has escaped from domestic confinement for less than:

(a) Five (5) calendar days; or

(b) Fifteen (15) calendar days if the owner of the stray domestic hog provides notice of the escape to all adjacent landowners within the first five (5) calendar days of the escape; or

(ii) A hog held by a zoo accredited by the Association of Zoos and Aquariums or by the designated caretakers of the University of Arkansas mascot; ~~and~~ **or**

(iii) A hog transported to market with a premise identification or an official ear tag.

(2) A "feral hog" is deemed to be a public nuisance.

Appendix D

Memorandum of Understanding

Whereas, the parties have mutual interests in the preservation of wildlife, agriculture and natural resources in the State of Arkansas; and

Whereas, the hereinabove named parties recognize that feral hogs are destructive to native flora, fauna, habitats, agricultural lands, silvicultural lands and industrial lands, and the myriad of vast natural resources of an within the borders of Arkansas; that feral hogs are carriers for a myriad of maladies that affect humans, livestock, poultry and wildlife; that feral hogs pose a serious threat to the pristine water resources, tourism industry and economies of scale of the State of Arkansas and that, as such the threat posed to the public safety and welfare by feral hogs is imminent and significant; and

Whereas, having recognized that feral hogs pose a serious threat to public health, safety, outdoor pursuits, public and private property, the Natural State, the hereinabove named parties agree to join together to mitigate and eradicate the damages and problems caused by feral hogs, and

Whereas, the hereinabove named parties are also aware of the significant damage caused throughout the state by feral hogs, as well as the threats posed to livestock, pets and wildlife via infected feral hogs, and the danger these feral hogs pose to public health, these organizations also agree to jointly engage in efforts to protect the public and the interests of the state and the people of Arkansas, and to join the effort to eradicate this destructive, nuisance species.

Now therefore, this Memorandum of Understanding is herein entered into between the hereinabove named parties.

1. The parties agree to work cooperatively toward the goal of eradication of feral hogs in Arkansas.

2. The parties agree to uphold these four tenets for effective population reduction and eradication efforts as the core principles to steer policy and guide the actions of the partnership which include:

A. Develop a multi-partner alliance

B. Increase public understanding of the damage and harm feral hogs cause

C. Increase regulatory mechanisms and enforcement capability to control Illegal transport and release of feral hogs

D. Increase resources and Enable landowners and land managers to control feral hogs

3. The parties will develop and implement effective outreach tools to disseminate information to the public which defines the problems and issues associated with feral hogs, and will provide outreach tools for private landowners to assist with feral hog problems, and the parties will work together to develop landowner cooperatives through national, state, regional and county outlets.

4. The parties will work together to

-resolve ambiguity within existing statutes regarding livestock and feral hogs;

-develop adequate standards for new and existing domestic, heritage breed and Arkansas Surveyed Herd (ASH) producers that prevent free-ranging populations from developing, that protect producers from loss due to feral hogs and protection from disease transmission due to feral hogs; and

-ensure that existing livestock laws will be fairly and adequately enforced and clearly define the directives and enforcement authority, powers and jurisdiction of each partnering entity.

5. The parties will work together to appropriate, allocate, identify and pursue known and alternative funding mechanisms to aid and administer this cooperative endeavor. The parties should strive to develop monetary reward programs for individuals that provide information resulting in the conviction regarding illegal possession, transport or release of feral hogs.

6. The parties will work together to strengthen existing possession and transport laws to increase penalties for persons convicted of transport and release which prohibit any and all future hunting activities regardless of wildlife native or invasive classification.

7. The parties will work together to identify endangered and sensitive species, critical, sensitive or significant habitats, eco-regions or counties, which have been damaged, or are threatened by the negative impacts caused by feral hogs and to develop plans to remediate damage and remove feral hogs from these identified areas using collaborative projects, tools and funding for the benefit of the public and private lands and native flora and fauna held as public trust within those areas.

8. Parties may be added or removed from this MOU by mutual agreement of a majority of the parties.

9. This MOU is neither a fiscal not a funds obligation document. Any endeavor or transfer of anything of value involving reimbursement or contribution of funds between the parties to this agreement will be handled in accordance with applicable laws, regulations and procedures. Such endeavors will be outlined in separate agreements that shall be made in writing by representatives of the parties and shall be independently authorized by appropriate statutory authority. This agreement does not provide such authority. Each party shall be fiscally responsible for their own portion of work performed under the MOU.

THIS AGREEMENT will become effective when signed by all parties involved and may be renewed, revised or extended by mutual consent of the parties involved.

In witness whereof, the parties have executed this agreement,

By and between the following:

Arkansas Game and Fish Commission
Arkansas Agriculture Department
Arkansas Livestock and Poultry Commission
Arkansas Natural Resources Commission
Department of Arkansas Heritage
Rural Services Division of Arkansas Economic Development Commission
Arkansas Parks and Tourism
University of Arkansas Division of Agriculture
Association Of Arkansas Counties
Arkansas Association of Conservation Districts
Arkansas Farm Bureau
Arkansas Forestry Association
Arkansas Pork Producers Association
The Nature Conservancy
Arkansas Dog Hunters Association
Arkansas Cattlemen's Association

Education Committee Report
Feral Hog Eradication Task Force
December 6, 2017

Members: Adriane Barnes, Arkansas Department of Agriculture; Max Braswell, Arkansas Forestry Association; Alex Johnson, Arkansas Rural Services (substitutes: Kenneth Burleson and Jean Noble, Arkansas Economic Development Commission); J.P. Fairhead, Arkansas Game and Fish Commission; Stacy Hurst, Department of Arkansas Heritage; Martha Manley, Arkansas Association of Conservation Districts; Becky McPeake (chair), University of Arkansas; Debbie Moreland, Arkansas Association of Conservation Districts; Heidi Ward, University of Arkansas; Susan Weinstein, Arkansas Department of Health; and Melissa Whitfield, Department of Arkansas Heritage.

Act 1010 which created the Feral Hog Eradication Task Force addressed educational needs, namely:

- "Developing and implementing of effective outreach tools to disseminate information to the public that defines the problems and issues associated with feral hogs," (§2c3).
- "Increasing public understanding of the damage and harm caused by feral hogs," (§2c2b)
- "Identifying (A) endangered and sensitive species; (B) critical, sensitive, or significant habitats, or ecoregions or counties, that have been damaged or are threatened by the negative impacts caused by feral hogs," (§2c7); and
- "Appropriating, allocating, identifying, and pursuing known and alternative funding mechanisms to aid and administer the feral hog eradication program," (§2c5).

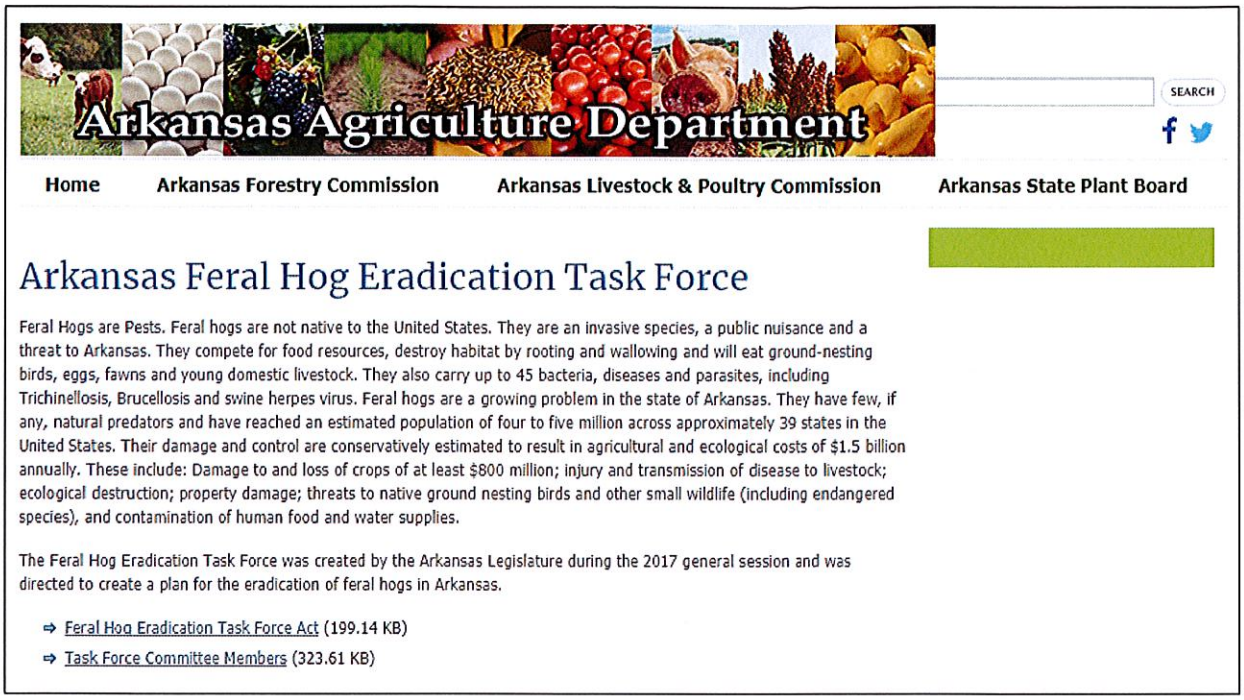
In response to these sections of the Act, the Task Force recommends the following actions:

1. The Department of Agriculture will maintain a feral hog education website titled Arkansas Feral Hog Eradication Task Force.
2. The Task Force will prepare and implement a targeted media outreach effort for voluntary use by agencies, organizations, and advisors serving on the Task Force.
3. The Arkansas Heritage Commission will make available a report about endangered species and habitats effected by feral hogs.
4. The Arkansas Forest Resources Center will conduct a survey which provides baseline information on stakeholder (a) perceptions of feral hog population size, (b) estimates of economic and ecological damage, (c) estimates of personal management cost (e.g., baiting, shooting, and trapping effort), (d) management practice preferences (e.g., trapping, shooting) and expectations (e.g., eradicate, control, reduce), and (e) sociological aspects pertaining to these topics (e.g., attitudes, risk perceptions).
5. The Task Force will conduct youth and teacher education about feral hog control.
6. The Task Force will continue collaborating on landowner educational outreach about feral hog control including workshops, exhibits, trapping demonstrations, and other outreach activities. Since 2011, over 50 have been conducted by Task Force members.
7. The Task Force will suggest alternative funding mechanisms for conducting feral hog education.

Additional details about each of these actions is provided.

1. **Task Force's feral hog education website.** The Arkansas Department of Agriculture will host a website containing reports and outcomes from the Task Force at www.add.arkansas.gov/feral-hog-eradication-task-force. The website contains reports and outcomes from the Task Force, feral hog information and resources, and links to relevant agencies and organizations about the issue. The

website will serve as a hub for educational outreach efforts by the Task Force and direct users to agencies and organizations providing specific feral hog control information on their websites.



2. **Targeted media kit and outreach campaign.** The Task Force will provide educational outreach to the public about feral hogs through social and print media channels. The Media Kit provides basic materials needed for respective private, state, and federal agencies to: 1) educate the public about feral hogs as a nuisance; 2) educate the public about eradication options; 3) feed multiple platforms of media; and 4) provide maximum flexibility in communicating consistent messages among agencies about feral hogs and feral hog eradication. Target audiences include residents (general), farmers, hunters, landowners, environmentalists/animal welfare advocates, and agriculture/wildfire/forestry industry advocates or representatives.

Communications Goals

- Develop consistent messages for use by multiple private, state, and federal agencies about feral hogs and feral hog eradication efforts and resources in Arkansas.
- Create resources to accommodate feral hog related media requests quickly and credibly with experts, testimonials, and other relevant materials.
- Create resources that are easily accessible via partner websites, including the previously mentioned shared Task Force web page, social media platforms, and general online web searches by residents and media.
- Use communications strategies to set the tone in Arkansas for feral hog eradication, and to lead the general public and industry partners in general understanding of why feral hog eradication is important, and how it is being implemented in Arkansas.

Key Messages

Key Message 1: Feral Hogs create significant risk to human health.

Supporting Facts:

- Feral hogs can host many parasites and diseases that threaten humans.
- Food outbreaks of *E. coli* have been traced to feral hogs.
- Improper handling and cooking of feral hogs can lead to disease.
    - When field dressing feral hogs, gloves are very important to prevent spread of diseases to the hunter.

Key Message 2: Feral hogs damage and destroy property across all regions of Arkansas.

Supporting Facts:

- Feral hogs destroy cropland and are an overall expensive nuisance to Arkansas's largest industry-agriculture.
- Feral Hogs cause significant damage to the forestry community including the destruction of recently planted tree seedlings and the negative impact on desired plant and wildlife species.
- Feral hogs threaten water quality (streams, lakes, rivers and ultimately drinking water), healthy forests, wildlife habitat and put at risk the economic future of many Arkansas families.
    - Feral hogs can change entire ecological systems.

Key Message 3: Feral Hogs create significant risk to animal health.

Supporting Facts:

- Feral hogs serve as a highly mobile reservoir for at least 45 animal diseases and parasites.
    - In many cases, the introduction of these diseases in domestic livestock could have devastating animal health and economic impacts.
    - While the risk of disease introduction posed by feral swine extends across multiple animal agriculture sectors, the most significant risk is to domestic swine operations with inadequate facilities and maintenance
- Feral hogs are a threat to native Arkansas wildlife, including white tailed deer, turkeys, bobwhites, squirrels, ducks, bears, and endangered/threatened species; they directly compete with them for food and habitat.
    - Feral hogs are an exotic species not native to North America.
    - Feral hogs have the potential to adversely impact 894 species of conservation concern in Arkansas. This includes 372 animal species and 522 plant species. A total of 239 of these species are considered to be globally rare and 33 are of federal concern (listed as endangered or threatened, or currently a candidate for listing).

Media Strategy: Feral Hog Eradication Task Force

Fact Sheets (tied to key messages, addressed to primary stakeholders)

- Feral Hogs Are a Threat to Human Health
    - Hunter Safety Tips for Handling of Feral Hogs
- Feral Hogs Damage and Destroy Property Across Arkansas
    - Feral Hogs Are a Threat to Arkansas Agriculture
    - Feral Hogs Are a Threat to Arkansas Forest Landowners
    - Feral Hogs Are a Threat to Arkansas Water Quality

- Feral Hogs Are a Threat to Animal Health
    - Feral Hogs Are a Threat to Arkansas Livestock and Swine
    - Feral Hogs Are a Threat to Arkansas Native Wildlife Species and Habitat
    - Feral Hogs Are a Threat to Arkansas Ecological Systems
- Feral Hog Eradication: What can you do?
    - Feral Hog Eradication Strategies for Landowners
    - Feral Hog Eradication Strategies for Hunters

Primary Resources for Fact Sheets:

- A Landowner's Guide for Wild Pig Management: Practical Methods for Wild Pig Control, by Bill Hamrick, Mark Smith, Chris Jaworowski & Bronson Strickland; Mississippi State University Extension Service & Alabama Cooperative Extension System
- Feral Hog Control in Arkansas, by UAEX
- White Paper: Animal Health Risks Associated with Feral Swine, by State Veterinarian Dr. Doss DVM
- White Paper: Public Health Issues Associated with Feral Swine, by State Public Health Veterinarian Dr. Weinstein, DVM, MPH

Monthly PR Campaigns (Proposed monthly efforts to take place March, 2018 – November, 2018)

- Monthly press release, drafted by the AAD, tied to a fact sheet theme.
    - Press releases would be circulated among Task Force 5 days prior to distribution. All agencies could choose to forward the release and/or take wording and distribute on their own letterhead and/or include the release in newsletters/other outreach.
- Social media message campaign, tailored to the monthly release. All agencies could use messages and link back to the press release OR fact sheet OR resources on respective agency websites.
    - Social media monthly message campaigns could include links to videos, posters, and graphics available from state/federal partner agencies to help boost messages.

Social Media

The hash tag below would accompany all social media posts relating to feral hogs.

- #StopFeralHogs

3. **Endangered species and habitats effected by feral hogs (Arkansas Heritage Commission).** In response to management objectives set forth in Act 1010 to create the Feral Hog Eradication Task Force, namely as of 2015-2016 (according to the maps depicting Arkansas counties with reported feral hog distribution), only two Arkansas counties did not report feral hog distribution: Lonoke and Clay counties. Every other county in Arkansas has reported the presence of feral hogs, including those counties surrounding and/or adjacent to Lonoke and Clay counties. Therefore, it seems more likely that feral hogs have not been officially reported rather than an absence of feral hogs in these two counties. Based on this information, it is likely that any endangered or sensitive species, critical, sensitive or significant habitats, or ecoregions or counties within the state have been damaged or threatened by the negative impacts caused by feral hogs, especially those occurring in the other 73 counties where feral hog distribution has been reported.

   Feral hogs have the potential to adversely impact 894 species of conservation concern in Arkansas. This includes 372 animal species and 522 plant species. A total of 239 of these species are considered to be globally rare and 33 are of federal concern (listed as endangered or threatened, or currently a candidate for listing). This tally excludes any species considered to be extirpated or of

historic occurrence (Global Ranks of GX or GH or State Ranks of SX or SH), some of which are included in the comprehensive list of species of federal concern listed below. See Addendum "Survey of Species of Conservation Concern in Arkansas" for a breakdown of numbers by specific groups.

The comprehensive list of species of federal concern including endangered, threatened, and candidate species includes:

- Ouachita Rock Pocketbook (*Arcidens wheeleri*)
- Spectaclecase (*Cumberlandia monodonta*)
- Curtis Pearlymussel (*Epioblasma florenina curtisii*)
- Snuffbox (*Epioblasma triquetra*)
- Turgid Blossom (*Epioblasma turgidula*)
- Pink Mucket (*Lampsilis abrupta*)
- Arkansas Fatmucket (*Lampsilis powellii*)
- Neosho Mucket (*Lampsilis rafinesqueana*)
- Speckled Pocketbook (*Lampsilis streckeri*)
- Scaleshell (*Leptodea leptodon*)
- Louisiana pearlshell (*Margaritifera hembeli*)
- Fat Pocketbook (*Potamilus capax*)
- Rabbitsfoot (*Quadrula cylindrica cylindrica*)
- Winged Mapleleaf (*Quadrula fragosa*)
- American burying beetle (*Nicrophorus americanus*)
- Rattlesnake-master borer moth (*Papaipema eryngii*)
- Benton County Cave crayfish (*Cambarus aculabrum*)
- Hell Creek Cave crayfish (*Cambarus zophonastes*)
- yellowcheek darter (*Etheostoma moorei*)
- Arkansas River shiner (*Notropis girardi*)
- leopard darter (*Percina pantherina*)
- pallid sturgeon (*Scaphirhynchus albus*)
- Ozark cavefish (*Troglichthys rosae*)
- Ozark Hellbender (*Cryptobranchus alleganiensis bishopi*)
- Ivory-billed Woodpecker (*Campephilus principalis*)
- Red-cockaded Woodpecker (*Picoides borealis*)
- Interior Least Tern (*Sternula antillarum athalassos*)
- Ozark big-eared bat (*Corynorhinus townsendii ingens*)
- gray bat (*Myotis grisecens*)
- northern long-eared bat (*Myotis septentrionalis*)
- Indiana bat (*Myotis sodalis*)
- geocarpon (*Geocarpon minimum*)
- pondberry (*Lindera melissifolia*)
- Missouri bladderpod (*Physaria filiformis*)
- harperella (*Ptilimnium nodosum*)
- running buffalo clover (*Trifolium stoloniferum*)

Based on the data compiled, the Feral Hog Eradication Task Force recommends that feral hogs be removed from the state.

Addendum

Table 1. Summary of Species of Conservation Concern in Arkansas, Arkansas Natural Heritage Commission, Department of Arkansas Heritage (11/2/2017).

Group	Total Count	Globally Rare (G1-G3)	Federal Concern
Animals	372	166	30
Invertebrates	222	124	17
Annelids (worms)	1	0	0
Planarians (flatworms	1	1	0
Mollusks (mussels, snails)	54	31	13
Arthropods (crayfish, isopods, insects, spiders...)	166	92	4
Vertebrates	150	42	12
Fish	60	24	4
Amphibians	28	8	1
Reptiles	14	0	0
Birds	28	4	3
Mammals	20	6	4
Plants	522	73	4
Non-vascular (Alga)	1	0	0
Vascular (flowering plants, conifers, ferns, clubmosses, horsetails)	521	73	4
Total Plants and Animals	894	239	33

As indicated in Table 1, feral hogs have the potential to adversely impact 894 species of conservation concern. This includes 372 animal species and 522 plant species. A total of 239 of these species are considered to be globally rare and 33 are of federal concern (listed as endangered or threatened or are currently a candidate for listing).

Note: This tally excludes any species considered to be extirpated or of historic occurrence (Global Ranks of GX or GH or State Ranks of SX or SH). Some of these species were included in the original list provided to the committee.

4. **Stakeholder Survey.** The Arkansas Forest Resources Center (AFRC) is preparing to conduct a stakeholder survey to investigate economic impacts and stakeholder perceptions, attitudes, and preferences related to feral hogs in Arkansas. This issue aligns with the mission of the Arkansas Forest Resources Center - to develop and deliver research and extension services and programs that enhance and ensure the sustainability of forest-based natural resources. This also aligns with the Arkansas Feral Hog Eradication Task Force toward achieving the goals and objectives of preparing a plan of action for legislative review. Part of the action plan is to propose educational outreach activities, recommend control/management options, and advise on policy changes and financial options; along with measurable outcomes from proposed activities. The AFRC survey will provide data that can serve as a baseline for potential future activities, such as a long-term, longitudinal

assessment (e.g., repeated periodically, every two or three years) to monitor trends as educational outreach and management practices are implemented.

Objectives

The survey objectives are to provide baseline information on stakeholder:
(a) perceptions of feral hog population size,
(b) estimates of economic and ecological damage,
(c) estimates of personal management costs (e.g., baiting, shooting, and trapping effort),
(d) management practice preferences (e.g., trapping, shooting) and expectations (e.g., eradicate, control, reduce), and
(e) sociological aspects pertaining to these topics (e.g., attitudes, risk perceptions).

Target Audiences and Methods

Whether aware or not, every resident of the state of Arkansas is a stakeholder in the feral hog issue. Stakeholders who are particularly affected by feral hogs include farmers, hunters, landowners, environmentalists, animal welfare advocates, and the agriculture/forest industry. Landowners affected by feral hogs include row crop farmers, livestock producers, organic and truck crop farmers, tree farmers, hunters, and other commercial and recreational users. Some hunters, particularly those who do not own larger acreages, may differ from landowners in their perspectives of feral hogs. Others could be: (a) residential landowners, (b) apartment dwellers, (c) absentee landowners, (d) outdoor enthusiasts (non-consumptive), and (e) public land users who do not own private land.

Capturing these diverse perspectives is challenging. The AFRC will conduct a statewide survey of Arkansas residents targeting those living in rural areas (who are more likely affected by feral hogs). Focus groups may be utilized to further elucidate the breadth and depth of individual and groups' perceptions of feral hogs' societal, economic, and ecological impact, and perspectives on management practices and methods.

Tentative Timeline and Anticipated Product

Sampling design and instrument development for the AFRC survey has begun, and is expected to conclude early 2018 (Jan/Feb). Data collection will commence early Spring 2018. Primary data collection will last approximately 6-8 weeks, with a non-response follow-up survey requiring an additional two weeks. Data cleaning and analyses will require a further six months, with a final report anticipated to be available late 2018/early 2019. An AFRC technical report will be made available to the Arkansas Feral Hog Eradication Task Force and all member organizations and participants, as well as relevant decision-makers and stakeholders.

5. **Youth education.** Several agencies and organizations on the Task Force conduct youth and teacher education about natural resources, including the Arkansas Forestry Association, the Arkansas Game and Fish Commission, and the University of Arkansas. Leaders in these organizations indicate interest in partnering and collaborating on integrating feral hog education into ongoing program activities. Task Force members will explore available curricula and resources for conducting feral hog education for adoption. If none are available, a curriculum will be developed for this purpose.

6. **Landowner Education.** Several agencies and organizations on the Task Force have conducted feral hog education and outreach to landowners and farmers. For example, since 2011, the University of Arkansas in cooperation with partners has conducted 19 workshops, 20 exhibits, and 12 demonstrations about feral hog control to educate landowners, farmers, and natural resource

professionals. Partners include the Arkansas Forestry Association, Arkansas Game and Fish Commission, and USDA Wildlife Services. The Arkansas Association of Dog Hunters provided exhibit space at their annual Razorback Roundup.

7. **Finances.** Currently on-going feral hog education efforts have been funded by agencies and organizations individually through internal budgets or external grants.

   An alternative funding mechanism to aid and administer feral hog education could be a portion of Game and Fish Fine Money made available to conduct statewide feral hog education. Arkansas Code Title 6 Education §6-16-1101 Fish and Wildlife Conservation Education, also known as Game and Fish Fine Money, is collected from Arkansas Game and Fish Commission game law convictions to fund educational programs focused on fish, wildlife and conservation in the counties where the offenses occurred. A school district or conservation district that receives fine money must submit an application to the Department of Rural Services. An example is the Department of Rural Services issues a Request for Proposals to eligible state government agencies and nonprofits for conducting feral hog education.

   It would be necessary for the legislature to make changes to the Arkansas Code Title 6 for this to occur. The Division of Rural Services and the Arkansas Economic Development Commission's position on this issue is neutral. Should the legislature make a change in the current legislation, the Arkansas Economic Development Commission will execute the program in accordance with Arkansas state law. According to Arkansas Game and Fish Commission, some recipients depend on these dollars for conservation education. Therefore, the recommendation is that feral hog education becomes eligible for funding but dollars are not earmarked solely for this effort.