Alabama Conservation Incentive Program Program Year 2025

Alabama Agricultural & Conservation Development Commission

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CONSERVATION INCENTIVE PROGRAM (CIP) 2025



ALABAMA AGRICULTURAL AND CONSERVATION DEVELOPMENT COMMISSION EFFECTIVE OCTOBER 1, 2024

ALABAMA AGRICULTURAL AND CONSERVATION DEVELOPMENT COMMISSION IN COOPERATION WITH ALABAMA SOIL AND WATER CONSERVATION COMMITTEE ALABAMA'S 67 SOIL AND WATER CONSERVATION DISTRICTS

> (Approved by the Commission on September 18, 2024) (With Advice and Consent from the Committee on September 18, 2024)

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I. INTRODUCTION

The Alabama Agricultural Conservation and Development Commission (AACDC) was created in 1985 to provide rebates for the conservation and development of private lands to benefit all Alabamians. Together with the state's 67 Soil and Water Conservation Districts and the Alabama Soil and Water Conservation Committee, AACDC provides funds through the Alabama Conservation Incentive Program (CIP) to assist with important natural resource projects across the state.

The CIP offers more than 35 conservation practices that support four primary resource concerns: erosion control, water quality, forestry, and wildlife. The practices are grouped into ten separate systems to allow landowners to address their individual conservation needs. The CIP helps landowners offset the cost of installing conservation practices by providing a rebate on the cost of the practice. These efforts improve and conserve the natural resources that make "Alabama the Beautiful" for all Alabamians.

RESOURCE CONCERNS

<u>Erosion Control</u>: Erosion control on private lands preserves soil productivity, water quality, and biodiversity. It ensures sustainable agriculture, protects water bodies, supports wildlife, and enhances community resilience. Private landowners play a vital role in maintaining a balanced and healthy environment in Alabama.

<u>Water Quality:</u> Improving water quality on private lands is crucial as it prevents pollutants from entering water bodies and preserves aquatic ecosystems. It ensures safe drinking water, supports wildlife habitats, and enhances overall environmental health thereby benefitting both local communities and the broader ecosystem in Alabama.

Forestry: Enhancing forestry on private lands is vital for sustaining clean air, wildlife habitats, and biodiversity. It also supports carbon storage, mitigates climate impacts, and promotes responsible resource management for a healthier environment in Alabama.

<u>Wildlife:</u> Addressing wildlife concerns on private lands preserves biodiversity, ensures a balanced ecosystem, and maintains the beauty of natural spaces. It enriches outdoor experiences and safeguards the coexistence of various species to preserve the uniqueness of Alabama.

ACRONYMS

AACDC

Alabama Agricultural & Conservation Development Commission

AFC Alabama Forestry Commission

AFO Animal Feeding Operation

ALSWCC Alabama Soil & Water Conservation Committee

ADA Alabama Department of Agriculture

> **BMP** Best Management Practice

CAFO Concentrated Animal Feeding Operation

CIP Conservation Incentive Program

CNMP Comprehensive Nutrient Management Plan **EPA** Environmental Protection Agency

EQIP Environmental Quality Incentives Program

> **FOTG** Field Office Technical Guide

IPM Integrated Pest Management

NMP Nutrient Management Plan

NPS Nonpoint Source Pollution

SWCD Soil & Water Conservation District

USDA NRCS Natural Resources Conservation Service

CONSERVATION PRACTICES INDEX

Below is a list of the conservation practices included in this manual by the corresponding NRCS Conservation Practice Number or CIP Practice Number.

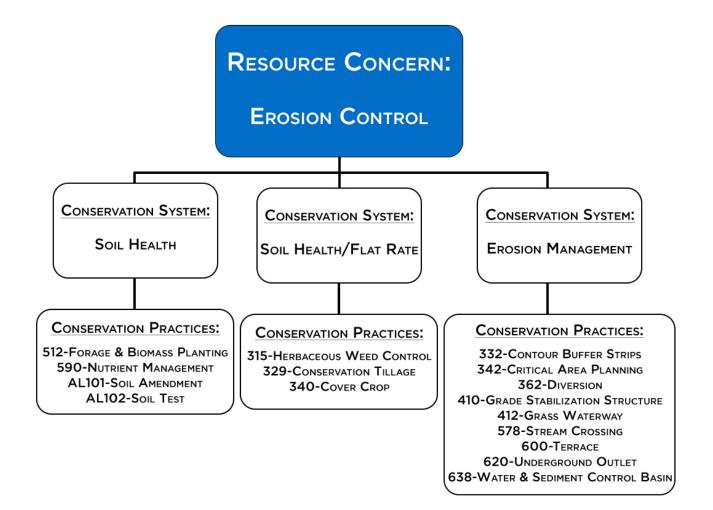
Details for NRCS Conservation Practices can be found in the NRCS FOTG for Alabama. Details for CIP Practices can be found herein.

ALABAMA Augusta and a second and a second a sec	General Conservation Incentive Program Program Year 2025							
WITON D.	List of Program Systems & Practices							
Practice Numb	per Practice Name	UOM	Life Span					
Resource Concern: Erosion Control								
System: Soil Health								
512	Forage and Biomass Planting	Ac.	5 years					
590	Nutrient Management	Ac.	1 year					
AL101	Soil Amendment	Ac.	1 year					
AL102	Soil Test	Ea.	1 year					
System: Soil Healt	h/Flat Rate							
315	Herbaceous Weed Control	Ac.	5 years					
329	Conservation Tillage	Ac.	1 year					
340	Cover Crop	Ac.	1 year					
System: Erosion N	lanagement							
332	Contour Buffer Strips	Ac.	5 years					
342	Critical Area Planting	Ac.	10 years					
362	Diversion	Ft	10 years					
410	Grade Stabilization Structure	Ea.	15 years					
412	Grass Waterway	Ac.	10 years					
578	Stream Crossing	SqFt.	10 years					
600	Terrace	Ft.	10 years					
620	Underground Outlet	Ea.	10 years					
638	Water & Sediment Control Basin	Ea.	10 years					
Resource Concern: Fores	itry							
System: Forest Im	provement							
314	Brush Management	Ac.	5 years					
338	Prescribed Burning	Ac.	3 years					
394	Firebreak	Ft.	10 years					
490	Site Preparation	Ac.	3 years					
612	Tree and Shrub Planting	Ac.	5 years					
666	Forest Stand Improvement	Ac.	5 years					

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Practice Numb	er Practice Name	UOM	Life Span
Resource Concern: Wate	r Quality		
System: Watering	Facility		
516	Pipeline - Livestock	Ft.	10 years
561	Heavy Use Area Protection	Ac.	5 years
614	Watering Facility	Ea.	5 years
642	Water Well	Ea.	10 years
System: Fencing			
382	Fence	Ft.	10 years
472	Access Control	Ac.	10 years
System: Animal M	ortality		
313	Waste Storage Facility	Ea.	10 years
316	Animal Mortality Facility	Ea.	15 years
317	Composter	SqFt.	15 years
367	Roof and Covers	Ea.	11 years
System: Herd Heal	th		
AL301	Corral	Ea.	10 years
AL302	Feed Trough	Ea.	5 years
AL304	Squeeze Chute (for Corral)	Ea.	10 years
System: Irrigation	Water Management		
430	Irrigation - Pipeline	Ft.	10 years
441	Irrigation System - Micro-irrigation - Plasticulture	Ac.	10 years
442	Irrigation System - Sprinkler - Traveling Gun	Ac.	10 years
AL303	Irrigation Water Management	Ea.	3 year
Resource Concern: Wildl	ife		
System: Feral Swin	ne Management		
AL401	Pre-Fabricated Feral Swine Trap	Ea.	5 years
AL402	Self-Assembled Feral Swine Trap	Ea.	5 years
AL403	Net-Feral Swine Trap	Ea.	5 years
System: Feral Swin	e Management/Flat Rate		
AL404	Trapping Assistance	Ea.	1 year
AL405	Exclusion Fencing for Feral Swine (Electric)	Ft.	20 years
AL405	Exclusion Fencing for Feral Swine (Electric)	Ft.	20 yea

II. RESOURCE CONCERN: EROSION CONTROL



CONSERVATION SYSTEM: SOIL HEALTH

 To reduce erosion, maximize water infiltration, improve nutrient cycling, save money on inputs, and ultimately improve the resiliency of working lands.

APPLICABLE PRACTICES:

SOIL AMENDMENT (AL101) Develop a plan that will assist producers in improving management and nutrient use by matching needs more efficiently and reducing excess nutrients in runoff.

SOIL TESTING (AL102) Collect and analyze soil parameters based on soil health resource concerns and planning objective.

FORAGE & BIOMASS PLANTING (512) Prevent soil erosion and improve water quality by establishing native or introduced forages in fields or pastures.

NUTRIENT MANAGEMENT (590) Managing the amount (rate), source, placement (method of application), and timing of plant nutrients and soil amendments.

POLICIES:

Applicant may complete one or more practice to improve soil health. Practice will be estimated on a per unit basis and paid on an actual cost basis. Applicant must provide proof of payment documenting actual cost incurred. Applicant will be paid 75% of actual cost. Designated technicians must observe and confirm completed practice. Local SWCD will set a cap for practice.

When implementing Conservation Practice 512, Conservation Practices AL102 and 590 are required. Additionally, Conservation Practice AL101 is eligible as a supporting practice. When implementing AL101 independently, AL102 is required.

SPECIFICATIONS:

Refer to Alabama Soil and Water Conservation Practice Standard for AL101, AL102. Refer to NRCS Field Office Technical Guide for Conservation Practice Standard for 512, 590.

AL101 / SOIL AMENDMENT PRACTICE STANDARD

PURPOSE - Soil amendments shall be applied, as needed, to adjust soil pH to the specific range of the crop for optimum availability and utilization of nutrients according to a current soil test.

RESOURCE CONCERN - Improving soil health and reducing erosion through the application of soil amendments is a critical practice in sustainable agriculture and land management. Soil amendments can enhance soil structure, fertility, and water-holding capacity, thereby mitigating erosion and promoting healthier plant growth.

MANAGEMENT - Regularly monitor the soil health, erosion control measures, and plant growth to assess the effectiveness of your amendments. Adjust your practices as needed over time. Application of all nutrients must correspond as closely as practical with plant nutrient uptake. Regular soil testing and ongoing maintenance are crucial for achieving and maintaining healthy soil and erosion control.

REQUIREMENTS - This practice applies to all lands where plant nutrients and soil amendments are applied. Adjust the soil's pH by adding lime (to raise pH) or sulfur (to lower pH) if necessary. Soil test analyses shall be conducted by Auburn University Soil Testing Laboratory or other laboratories that are accredited soil testing laboratories that are accepted in The North American Proficiency Testing Program (Soil Science Society of America) http://www.naptprogram.org/ program and accepted by ACES.

Lime applications must be within 90% of recommendations of soil test analysis. Limestone must contain at least 90% calcium carbonate equivalent and must be fine enough that no less than 90% will pass through a U.S. Standard No. 10 – Mesh Sieve, nor less than 50% will pass through a Standard No. 60 – Mesh Sieve.

Revised 11/21/2023

AL 102 / SOIL TESTING PRACTICE STANDARD

PURPOSE - Soil testing is a crucial process used for assessing the physical, chemical, and biological properties of soil. It assists in land use planning by providing insights into the suitability of soil for different purposes. Soil testing is a soil-management tool used to determine the fertility of soil as well as the optimum lime and fertilizer requirements for crops.

The goal of soil testing is to determine the nutrient content, pH level and other chemical properties of soil. This information provides an accurate assessment to farmers to make informed decisions about fertilization and soil amendment strategies, ensuring optimal crop growth and yield.

Overall, soil testing plays a critical role in understanding soil properties, ensuring environmental sustainability, promoting agricultural productivity, and supporting safe and sustainable development across the landscape.

RESOURCE CONCERN - To improve soil health by applying required nutrients per soil test results.

APPLICABLE LAND USES - Crop, Forest, Range, Pasture, Farmstead, Associated Agriculture Lands, Other Rural Land, and Developed Land.

BASIC SOIL TESTING REQUIREMENTS - Basic soil testing involves collecting soil samples and analyzing them to determine important soil properties. Please reference the Alabama Cooperative Extension System website (https://aaes.auburn.edu/soil-forage-water-testing-lab/) for information on how to soil test for the desired crop or forage. It is recommended that soil tests are submitted to accredited soil testing laboratories.

WHAT DOES A SOIL TEST PROVIDE? - A soil test provides valuable information about the physical, chemical, and sometimes biological properties of the soil. This is crucial in providing a comprehensive understanding of the soil's characteristics, thereby allowing individuals, farmers, researchers, and land planners to make well-informed decisions that promote productivity, sustainability, and environmental stewardship.

Laboratory tests often check for three major plant nutrients: nitrogen (N), phosphorus (P), and potassium (K). Soil samples may be taken any time of the year. Soil tests can provide pH level, nutrient content, organic matter content, cation exchange capacity, texture, electrical conductivity, soil fertility, microbial activity, toxic elements and contaminants, recommendations, land use stability, and environmental insights.

RECOMMENDATIONS - Review results for each parameter tested. Compare the results based on your intended land use, crop, or purpose. Follow the recommended practices to optimize your soil conditions.

CONSERVATION SYSTEM: SOIL HEALTH/FLAT RATE

 To reduce erosion, maximize water infiltration, improve nutrient cycling, save money on inputs, and ultimately improve the resiliency of working lands.

APPLICABLE PRACTICES:

HERBACEOUS WEED CONTROL (315) Enhance accessibility, quantity, and/or quality of forage and/or browse • Restore and release native plant communities or create desired plant communities and wildlife habitats.

CONSERVATION TILLAGE (329) (residue management), Reduce erosion, maintain and improve soil organic matter and conserve soil moisture by managing plant residue on the soil surface year-round.

COVER CROPS (340) Plant close-growing grasses, legumes and forages as a temporary cover to reduce soil erosion, capture and use excess nutrients, and improve soil quality.

POLICIES:

Applicant may complete one or more practice to improve soil health. Practice will be estimated and paid on a per acre basis at the current CIP rate. Applicant must provide receipt for materials and/or have designated technicians observe and confirm completed practice. Local SWCD will set a cap for practice.

SPECIFICATIONS:

Refer to NRCS Field Office Technical Guide for Conservation Practice Standard for 315, 329, 340.

CONSERVATION SYSTEM: EROSION MANAGEMENT

- The practice of preventing or controlling water erosion in agriculture.

APPLICABLE PRACTICES:

CONTOUR STRIPS (332) Construct strips to reduce soil erosion, slow sediment transport and reduce runoff entering into water sources.

CRITICAL AREA PLANTING (342) Plant permanent vegetation in highly erodible areas to prevent soil erosion and sediment transport in water.

DIVERSIONS (362) Create permanently vegetated strips established across a slope to redirect water to areas of need.

GRADE STABILIZATION STRUCTURES (410) Construct structures allowing water to move to a lower elevation without causing soil erosion.

GRASSED WATERWAYS (412) Establish a shaped or graded channel with suitable vegetation to convey surface water to a stable outlet at a nonerosive velocity using a broad and shallow cross section.

STREAM CROSSINGS (578) Construct crossing designed to protect water quality and reduce erosion by creating stable access points and crossings.

TERRACES (600) Create terraces across field slopes to capture runoff water from fields and to safely convey it to stable outlets.

UNDERGROUND OUTLETS (620) Create structures to detain surface water and convey it to safe outlets.

WATER & SEDIMENT CONTROL BASINS (638) Create basins to detain runoff leaving agricultural fields, trap sediment, reduce soil erosion and improve water quality.

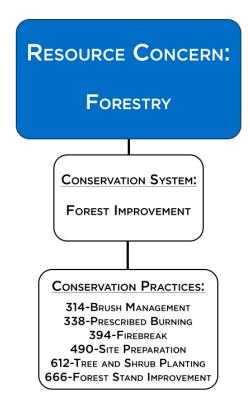
POLICIES:

Applicant may complete one or more practice to improve erosion management. Practice will be estimated on a per unit basis and paid on an actual cost basis. Applicant must provide proof of payment documenting actual cost incurred. Applicant will be paid 75% of actual cost. Designated technicians must observe and confirm completed practice. Local SWCD will set a cap for practice.

SPECIFICATIONS:

Refer to NRCS Field Office Technical Guide for Conservation Practice Standard for 332, 342, 362, 410, 412, 578, 600, 620, 638.

III. RESOURCE CONCERN: FORESTRY



CONSERVATION SYSTEM: FOREST IMPROVEMENT

– Improve forest stand to meet a particular objective, such as improving habitat for various wildlife species, changing plant species composition, or influencing the structure and visibility within a stand to meet aesthetic objectives.

APPLICABLE PRACTICES:

BRUSH MANAGEMENT (314) Manage or remove woody plants including those that are invasive and noxious.

PRESCRIBED BURNING (338) Apply controlled fire to a predetermined area.

FIREBREAK (394) A permanent or temporary strip of bare or vegetation land planned to retard fire.

SITE PREPARATION (490) Chemically or mechanically treat areas to improve site conditions for establishing trees and/or shrubs.

TREE/SHRUB ESTABLISHMENT (612) Establish vegetation for long-term erosion control by slowing runoff and allowing more time for nutrient absorption.

FOREST STAND IMPROVEMENT (666) Manipulate species composition, stand structure, or density by cutting or killing selected trees and understory vegetation to achieve desired forest conditions or obtain ecosystem services.

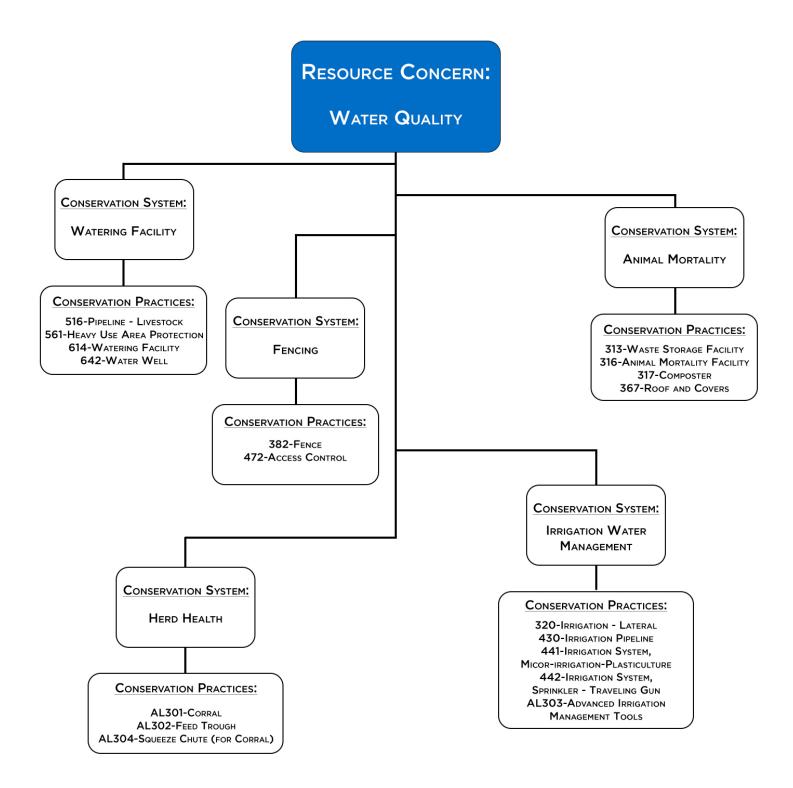
POLICIES:

Applicant may complete one or more practice to improve forest. Practice will be estimated on a per unit basis and paid on an actual cost basis. Applicant must provide proof of payment documenting actual cost incurred. Applicant will be paid 75% of actual cost. Designated technicians must observe and confirm completed practice. Local SWCD will set a cap for practice.

SPECIFICATIONS:

Refer to NRCS Field Office Technical Guide for Conservation Practice Standard for 314, 338, 394, 490, 612, 666.

IV. RESOURCE CONCERN: WATER QUALITY



CONSERVATION SYSTEM: WATERING FACILITY

An alternative watering source used to provide livestock with adequate water and to protect water quality.

APPLICABLE PRACTICES:

PIPELINE (516) Transport water via a pipeline to a watering facility for use by livestock for watering purposes.

HEAVY USE AREA PROTECTION (561) Establish vegetation and/or install erosion prevention materials that protect areas where heavy traffic is expected.

WATERING FACILITY (614) Provide designated access to drinking water for livestock or wildlife to supply daily water requirements, improve animal distribution and provide a water source that is an alternative to a sensitive resource.

WATER WELL (642) Drill well to provide access to a groundwater supply suitable for livestock watering.

POLICIES:

Applicant may complete one or more practice to improve watering facility. Practice will be estimated on a per unit basis and paid on an actual cost basis. Applicant must provide proof of payment documenting actual cost incurred. Applicant will be paid 75% of actual cost. Designated technicians must observe and confirm completed practice. Local SWCD will set a cap for practice.

When implementing Conservation Practice 614, Conservation Practice 561 is required.

SPECIFICATIONS:

Refer to NRCS Field Office Technical Guide for Conservation Practice Standard for 516, 561, 614, 642.

CONSERVATION SYSTEM: FENCING

- Protect water quality by providing a barrier for livestock.

APPLICABLE PRACTICES:

FENCING AND ACCESS CONTROL (382 & 472) Provide barriers that limit animal, human and wildlife entry into specific areas to protect natural resources.

POLICIES:

Applicant may complete one or more practice to improve fencing. Practice will be estimated on a per unit basis and paid on an actual cost basis. Applicant must provide proof of payment documenting actual cost incurred. Applicant will be paid 75% of actual cost. Designated technicians must observe and confirm completed practice. Local SWCD will set a cap for practice.

SPECIFICATIONS:

Refer to NRCS Field Office Technical Guide for Conservation Practice Standard for 382, 472.

CONSERVATION SYSTEM: ANIMAL MORTALITY

– Protect water quality by ensuring adequate storage of litter including procedures to ensure proper operation and maintenance of the storage facilities. Ensure proper management of animal mortalities (i.e. dead animals) to prevent disposal in any liquid manure, storm water, or process wastewater storage or treatment system that is not specifically designed to treat animal mortalities.

APPLICABLE PRACTICES:

WASTE STORAGE FACILITIES (313) Temporarily store animal manure, wastewater and contaminated runoff as part of an agricultural waste management system.

ANIMAL MORTALITY FACILITIES (316) Construct permanent structures used to dispose of carcasses and include burial pits, mortality composting facilities, incinerators and freezers.

COMPOSTING FACILITIES (317) Use animal manure or other waste products (not including animal carcasses) in a sanitary method that results in a product that can be used on farms to improve soil organic matter.

ROOF AND COVERS (367) A rigid, semirigid, or flexible manufactured membrane, composite material, or roof structure placed over a waste management facility, agrichemical handling facility, or an on-farm secondary containment facility.

POLICIES:

Applicant may complete one or more practice to improve animal mortality. Practice will be estimated on a per unit basis and paid on an actual cost basis. Applicant must proof of payment documenting actual cost incurred. Applicant will be paid 75% of actual cost. Designated technicians must observe and confirm completed practice. Local SWCD will set a cap for practice.

SPECIFICATIONS:

Refer to NRCS Field Office Technical Guide for Conservation Practice Standard for 313, 316, 317, 367.

CONSERVATION SYSTEM: HERD HEALTH

- Protect water quality by improving the health and well-being of livestock.

APPLICABLE PRACTICES:

CORRAL (AL301) A livestock pen that is a designated area where livestock are gathered, contained, and managed.

FEED TROUGH (AL302) Concrete or metal feed troughs to hold and dispense feed, such as hay, grains, pellets, or other types of animal feed, in a controlled and accessible manner.

SQUEEZE CHUTE (for Corral) (AL304) A specialized piece of equipment used in livestock handling that is designed to restrain a single animal securely while allowing for safe handling, examination, and treatment.

POLICIES:

Applicant may complete one or more practices to improve herd health. Practice will be estimated on a per unit basis and paid on an actual cost basis. Applicant must provide proof of payment documenting actual cost incurred. Applicant will be paid 75% of actual cost. Designated technicians must observe and confirm completed practice. Local SWCD will set a cap for practice.

When implementing Conservation Practice AL302, Conservation Practice 561 is required.

SPECIFICATIONS:

Refer to Alabama Soil and Water Conservation Practice Standard for AL301, AL302, AL304

AL 301 / CORRAL PRACTICE STANDARD

PURPOSE - A corral, also known as a livestock pen or enclosure, is a designated area where livestock animals are gathered, contained, and managed. This system is designed for containment and control, handling and management, sorting and separation, breeding and reproduction, feeding and watering, herding, transportation and loading, safety and security, data collection and research, training, and behavioral conditioning.

Overall, corrals play a crucial role in efficient and humane livestock management by providing a controlled environment for various tasks and activities that contribute to the well-being and productivity of the animals. The design and layout of a corral can vary based on the specific needs of the livestock being managed, the management goals, and the available resources.

RESOURCE CONCERN - Ensuring the well-being of your cattle is not only important for their health and quality of life but also for the success of your operation. A herd health protocol involves a set of practices designed to monitor and maintain the health of your cattle. By implementing a well-defined herd health protocol, you can minimize the risk of sickness and death within your herd. Regular health assessments can help identify potential health issues early on, allowing for prompt intervention and treatment. Stress reduction and providing a comfortable environment also play a crucial role. Stressed cattle are more susceptible to diseases, so minimizing stress through good management practices can have a positive impact on the health of your herd. Healthy cattle are more productive, have better growth rates, and produce higher-quality products. Preventing diseases through effective management can also reduce veterinary expenses and losses due to illness or death.

MANAGEMENT - An efficient cattle-handling facility includes several critical factors that should be evaluated. One of the keys to maximizing returns from a commercial cow-calf enterprise is the timely application of basic management practices. Many of these practices require that the cattle be worked several times a year. Without adequate cattle-handling facilities, these practices are either delayed or completely neglected.

REQUIREMENTS - The minimum number of single type head of livestock, regardless of sex or age, at one time during the last 12 months is 20 head. There are general considerations and basic requirements for small herds. The containment area should be designed for safe and low-stress handling of animals. Space requirements will depend on the specific livestock, but it is recommended to provide enough space for animals to move around comfortably and avoid overcrowding. The materials needed for a corral will depend on the size of the corral, the type of livestock you are managing, your specific goals, and your budget. Selecting appropriate materials based on cost, durability, and functionality is key to the longevity of this system. The corral will include a holding pen, sweep tub, and ally. Here is a general list of required materials that are commonly used in building a corral system:

Please know that all material must be New.

All material must be Pre-Manufactured. Minimum 1 3/4 inch – 16-gauge tubes Minimum Length 8 foot Minimum Height 60 inches Minimum of 10 panels Sweep Tub

Cost Estimate - The applicant will provide the District Administrative Coordinator with a detailed cost estimate for the proposed conservation practice.

AL 302 / FEED TROUGH PRACTICE STANDARD

PURPOSE - The primary purpose of a feed trough is to hold and dispense feed, such as hay, grains, pellets, or other types of animal feed, in a controlled and accessible manner. This helps ensure that animals receive the necessary nutrition and supplemental for their growth, health, and overall well-being.

RESOURCE CONCERN - To assist cattle producers in evaluating their current feeding practices and their impact on water quality, you should begin by understanding the types of feed used, feeding methods, feeding frequency, and overall management of feeding. You need to research and identify the potential pollutants that can result from cattle feeding operation such as nutrient runoff (nitrogen and phosphorus), sediment, pathogens, and chemicals from feed additives. The goal is to strike a balance between sustainable cattle production and maintaining water quality to ensure the long-term health of both the operation and the surrounding environment.

MANAGEMENT - Properly designed and managed feed troughs are essential for ensuring that animals receive the appropriate nutrition without unnecessary waste or contamination. Cleanliness, accessibility, and the type of feed being provided are important factors to consider when using feed troughs to maintain the health and productivity of livestock.

Beef cattle spend much of their lives grazing forage that is available for grazing most of the year. However, there are times when cattle may need to be supplemented or fed, specifically when there is a forage or nutrient deficit or when greater animal performance is desired. Supplementation and feeding programs are not the same for every cattle operation.

Feed costs represent the majority of expenses incurred in any production segment of the beef cattle industry. While forages are utilized as the major source of nutrients for beef cattle in Alabama, forages often do not contain adequate nutrients to support a desired level of production. In these situations, supplementation is often required to achieve production goals.

REQUIREMENTS - The minimum number of single type head of livestock, regardless of sex or age, at one time during the last 12 months is 20 head. Bunk feeders are longer, open troughs designed to hold larger quantities of feed. They allow multiple animals to feed side by side. Bunk feeders should be placed in an accessible area that allows animals to approach the trough comfortably. Proper drainage is important to prevent water from accumulating in the trough and spoiling the feed. Consideration of anchoring to the ground might be needed to prevent tipping or movement, especially if larger animals are using them. Specifications and considerations for a bunk feeder trough are:

System setup must include minimum purchase of:

- Pre-cast concrete bunk feeder or metal feed trough new equipment only.
- Heavy Use Area Protection must extend the length of the troughs. Refer to NRCS practice code 561 Heavy Use Area Protections for specifications.

It is recommended that a system be built within a fence-line (new or existing) with access from a road or a farm lot.

Cost Estimate - The applicant will provide the District Administrative Coordinator with a detailed cost estimate for the proposed conservation practice.

AL 304 / SQUEEZE CHUTE (FOR CORRAL) PRACTICE STANDARD

PURPOSE - A cattle squeeze chute is a device used in cattle handling and veterinary care to securely restrain the head of a cow or bull. Its primary purposes include ensuring safety, facilitating medical treatment, enabling thorough inspection, increasing efficiency, and reducing stress. By minimizing the risk of injury, it protects both the animal and the handler. It also allows veterinarians and handlers to perform necessary procedures more easily and safely such as vaccinations, deworming, tagging, and other medical treatments. Furthermore, it aids in the close inspection of the animal for signs of illness, injury, or parasites, which is crucial for maintaining the health and well-being of the herd. Additionally, the squeeze chute speeds up the process of handling multiple animals, making routine tasks more efficient, which is important for large herds where time and labor are significant considerations. By providing a secure and controlled environment, it helps reduce stress on the animal during handling, benefiting the animal's overall health and well-being. Overall, a cattle squeeze chute is a vital tool in livestock management, contributing to safer, more efficient, and humane handling of cattle.

RESOURCE CONCERN – A cattle squeeze chute primarily revolves around efficient and humane handling of livestock. This involves designing and maintaining facilities that safely and effectively manage cattle during various husbandry activities such as sorting, branding, or veterinary care. Key considerations include ensuring the safety of both cattle and handlers, optimizing the flow of operations to minimize stress on animals, and maintaining the infrastructure to prevent injuries or escapes. Effective management of cattle squeeze chute facilities aims to promote animal welfare, operational efficiency, and environmental stewardship in livestock management practices.

Additionally, proper handling and containment can significantly reduce the runoff of contaminants such as manure and urine into nearby water sources, thereby improving water quality. By confining cattle within the squeeze chute during procedures, the concentration of waste in specific areas is reduced, which helps in managing and disposing of manure more effectively. This containment minimizes the risk of pathogens and nutrients from manure entering water bodies, which can lead to eutrophication and harmful algal blooms. Furthermore, reducing the stress on cattle decreases the likelihood of excessive defecation, which can also contribute to runoff. Implementing proper drainage and waste management systems within the facilities ensures that any potential contaminants are captured and treated before they can reach natural water systems. These measures collectively help in maintaining cleaner water sources, supporting healthier ecosystems, and providing safer water for agricultural and community use.

MANAGEMENT – To implement management practices, such as vaccinating, castrating, dehorning, and implanting, cattle must be safely and effectively restrained. Treating cattle for the control of external and internal parasites may also require limited confinement and restraint. Herd health practices, such as treating sick or injured animals or helping at calving, are also easier if adequate handling facilities are available.

REQUIREMENTS - The minimum number of single type head of livestock, regardless of sex or age, at one time during the last 12 months is 20 head. A cattle squeeze chute, used for handling cattle safely during procedures like vaccinations or examinations, typically has the following specifications:

- 1. Construction: Made from heavy-duty material to withstand the strength of cattle.
- 2. Size: Accommodates one animal at a time, designed to restrain and position the animal securely.
- 3. Features:
 - Headgate: Adjustable mechanism to secure the animal's head without harming it.
 - Sides: Adjustable or fixed sides to prevent the animal from moving sideways.
 - Rear Access: Often has a rear gate to control the animal's movement and allow access for procedures.
 - Flooring: Non-slip flooring to ensure the animal stays steady.
- 4. **Dimensions:** Can vary widely, but typically designed to comfortably hold adult cattle without causing stress or harm.
- 5. All material must be New.

Cost Estimate - The applicant will provide the District Administrative Coordinator with a detailed cost estimate for the proposed conservation practice.

CONSERVATION SYSTEM: IRRIGATION WATER MANAGEMENT

 Protect water quality by improving plant health & vigor to prevent crop failure, reduce quantity of water use to irrigate crops by using efficient irrigation practices.

APPLICABLE PRACTICES:

IRRIGATION PIPELINE (430) A pipeline and appurtenances installed to convey water for storage or application, as part of an irrigation water system.

IRRIGATION SYSTEM, MICRO-IRRIGATION-PLASTICULTURE (441) An irrigation system for frequent application of small quantities of water on or below the soil surface: as drops, tiny streams or miniature spray through emitters or applicators placed along a water delivery line.

IRRIGATION SYSTEM, SPRINKLER – TRAVELING GUN (442) A distribution system that applies water by means of nozzles operated under pressure.

ADVANCED IRRIGATION MANAGEMENT TOOLS – (AL303) Install flowmeter, soil moisture sensor probe and weather station to reduce irrigation water runoff by monitoring the rate, amount and timing of irrigation water into efficient water use.

POLICIES:

Applicant may complete one or more practices to improve Irrigation. Water Management Practice will be estimated on a per unit basis and paid on an actual cost basis. Applicant must provide receipts, invoices and canceled checks documenting actual cost incurred. Applicant will be paid 75% of actual cost. Designated technicians must observe and confirm completed practice. Local SWCD will set a cap for practice.

SPECIFICATIONS:

Refer to NRCS Field Office Technical Guide for Conservation Practice Standard for 430, 441, 442 Refer to Alabama Soil and Water Conservation Practice Standard for AL303

AL303 / ADVANCED IRRIGATION MANAGEMENT TOOLS PRACTICE STANDARD

PURPOSE - To protect water resources by improving plant health and reducing the likelihood of total crop failure which typically causes erosion and water quality degradation in receiving water bodies. And to promote efficient use of water through installation of on-farm technology including flowmeters, soil moisture sensors, and weather stations which assist producers in making wise decisions on rate, amount and timing of watering for agricultural crops.

RESOURCE CONCERN - To protect water resources by reducing the likelihood of total crop failure and the associated soil erosion and water quality degradation that occurs from runoff on bare field and to improve irrigation water use efficiency.

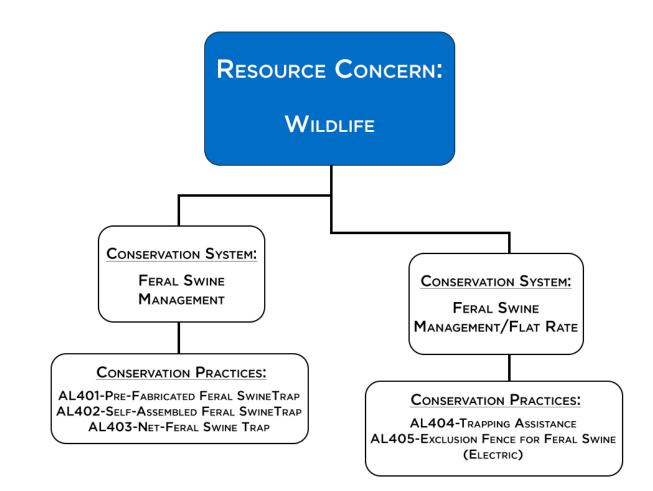
MANAGEMENT - An Irrigation Water Management Plan (IWM) will be developed by a Professional Engineer (PE) or a Certified Irrigation Designer (CID) for the proper management and application of irrigation water. The IWM will include the method for determining the timing and amount of each irrigation event using the soil moisture sensor monitoring method. Base the volume of water needed for each irrigation event on the current crop growth stage, the available water holding capacity of the soil, and the soil moisture status. Plan irrigation application rates as to minimize irrigation induced erosion.

To better manage water resources, the following tools are included in this practice:

- One soil moisture sensor per pivot.
- One flow meter per water source.
- Three years of scheduling assistance per pivot.
- One weather station per farm (i.e. multiple fields located in the same area may share stations.)
- Telemetry necessary to automate the suite of practices.

REQUIREMENTS - The designated technician will observe the completed installation of the flow meter, weather station, and soil moisture probe. The producer will provide documentation of a three-year, third-party scheduling subscription. The producer must submit a Certificate of Beneficial Use to the ADECA Office of Water Resources.

V. RESOURCE CONCERN: WILDLIFE



CONSERVATION SYSTEM: FERAL SWINE MANAGEMENT

 Remove invasive feral swine to prevent erosion, water quality degradation, forestry damage and wildlife habitat damage.

APPLICABLE PRACTICES:

PRE-FABRICATED FERAL SWINE TRAP (AL401) Provide means to trap and dispatch invasive feral swine.

SELF-ASSEMBLED FERAL SWINE TRAP (AL402) Provide means to trap and dispatch invasive feral swine.

NET-FERAL SWINE TRAP (AL403) Provie means to trap and dispatch invasive feral swine.

TRAPPING ASSISTANCE (AL404) Provide assistance to producers to trap and dispatch invasive feral swine.

EXCLUSION FENCING FOR FERAL SWINE (AL405) Provide assistance to producers to construct high tensile electric fencing around high value crops, orchards, grazing lands and row crop areas to deter intrusion from feral swine and prevent crop destruction and damage to the land caused by them.

POLICIES AL401-404:

Applicant may complete one or more practice to improve soil health. Practice will be estimated on a per unit basis and paid on an actual cost basis. Applicant must provide proof of payment documenting actual cost incurred. Applicant will be paid 75% of actual cost. Designated technicians must observe and confirm completed practice. Practices are capped at \$2,500 per producer statewide.

POLICIES AL405:

Applicant completes one practice to manage wildlife. Practice will be paid on a linear per foot basis upon completion, as specified under Alabama NRCS 382 rates for Fence Permanent Electric.

SPECIFICATIONS:

Refer to Alabama Soil and Water Conservation practice standard for AL401, AL402, AL403, AL404 and AL405.

AL401 / PRE-FABRICATED TRAP PRACTICE STANDARD

The Feral Swine population and range has made a dramatic impact in Alabama. They vary in color, shape, and size. Feral Swine can reproduce and populate an area very quickly. They have become a nuisance in Alabama by consuming agricultural crops, trampling agricultural land, preying on newborn livestock, causing timber damage by rubbing intensely on the bark layer making the trees more vulnerable to harmful insects, destroying native plants and causing water quality and erosion issues. They are known to carry diseases that can be transmitted to livestock and humans. Trapping has become the preferred method of reducing the Feral Swine population.

Scouting and Identifying

After identifying that feral swine are located on your property causing damage, spend time scouting the property for their activity areas. Locate the heavy use areas where the feral swine travel, are rooting, wallowing or trampling and locate their bedding areas. Mount a game camera in the area to help determine how many groups and the number of feral swine that will need to be removed from the property. Monitoring the site daily is important for success.

Conditioning and Trapping

Once the feral swine area has been identified, select the best site to build, bait and attract the feral swine. It is important to consider several factors when choosing a trap site including:

Level ground, Partial or full shaded area, Easily accessible by vehicle or UTV.

Before building or placing the trap, the next step is pre-baiting. Actual pre-baiting time will depend on whether the entire sounder is entering the area. Be patient: this could take up to 2 weeks. If pre-baiting after the trap is placed, the gate will need to be wired or locked to stay open. This will allow the feral swine to get comfortable with coming into and leaving the trap area. One or two panels can also be pulled open and left open a few feet on one end to facilitate quick bait access by pigs. Open panels can gradually be closed over several days after all pigs begin to access the bait in the trap. Do not place the bait close to the trap entrance. Instead spread the bait near the back of the trap. The object is to allow as many feral swine to enter the trap as possible and give time for the trap door to close.

Monitoring

If the entire sounder was not trapped and dispatched or if other sounders are on adjacent land, the feral swine population will begin to grow damaging land or crops.

Therefore, it is important to monitor targeted locations for any sign of feral swine activity. Upon noticing any new activity repeat the removal steps.

Eligible Element Components

Trap door and door frame Prefabricated Trap panels Trigger Mechanism Steel T-post Trailer Solar panel Rechargeable battery Directional Antenna Mounting or Telescoping pole for directional antenna Game Camera with cellular data service



Example: Big Pig Trap

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<u>Trap Panels</u>

The prefabricated trap consists of panels and drop trap door. The number of panels and gates may vary depending on length of panel but should allow for the assembly of a trap with a circumference of at least 60 feet. The trap panel frame material should be built with 14 gauge, 1" steel tubular members and 60" total height. The trap panel should be made from at least 6-gauge galvanized wire. In the first 24 inches from the ground the wire openings should be no larger than 8 inches wide and 3 inches tall. Panels should be joined to each other via thick pins and sleeves or other acceptable manner.

Trap Gate

The prefabricated trap shall have at least one minimum 6' wide guillotine trap gate. The gate shall open to a height of 36" minimum and shall be at least 60" total height. Minimum gate panel frame material:14-gauge, 1-1/4" steel tubular members. The wire openings and gauge are the same as the trap panels.



Example: Boar Buster Trap

Trap Trailer

The prefabricated trap may come with an integrated trailer. The trailer shall be a maximum length of 12' and maximum width of 6'. The trailer shall be DOT certified with highway rated 12" radial tires or equal, 2" ball system that allows any vehicle, ATV or UTV to transport trap.

Round Drop Trap Option

Several manufacturers make round drop style traps that can be very effective for catching pigs. Larger diameter round traps can catch even the largest sounders. The smallest of this trap style, however, has a diameter of only 12 feet. This is too small to catch large sounders but can be an effective tool for catching trap shy pigs and small to medium sized sounders.

Specifications for this style of trap are a minimum of 57 inches in height and minimum of 12 feet in diameter. Wire openings and gauge are the same as with the panel traps.

Trap Camera, Antenna, Solar Panel and Battery

The trap shall have a control system that provides remote monitoring of the trap in rural areas. The control system shall include a game camera to detect motion at the trap and shall provide video or photo notifications of activity inside the trap through a mobile phone app. The control system shall provide operation of the gate through alternative methods or a mobile phone app.

The camera shall be provided with a cellular data package for a minimum of one year. It is important to get a camera with cellular data service that works well in the location you plan to run the trap.

The camera must be suitable for outdoor operation and provide video or still photos in low light conditions. The camera must provide a detection range of a minimum of 50' and a field of view of 40 degrees. The trigger speed for the camera must be a maximum of 1.2 seconds. Cellular components must be enterprise class and designated for long term use in extreme conditions.

The antenna may be either a directional antenna in the case of poor or limited cell service or omnidirectional. The antenna should have a minimum of 10' of cable to connect to the camera.

The solar panel shall be a minimum of 120 W with charge controller to power the camera. The rechargeable battery shall have a 20-hour rating minimum with >200-minute reserve capacity.

The camera, solar panel and antenna shall all easily mount to a single T-post.

State Laws, Permits and Carcass Disposal

It is important to contact your local conservation officer before trapping during hunting season if hunting will take place on the property. Since food type baits are placed to attract pigs, this action has potential to violate Section 9- 11-244, Code of Alabama, which prohibits the baiting, feeding and simultaneous hunting of protected game animals and birds. Your local conservation officer with the Alabama Department of Conservation and Natural Resources can evaluate your situation, such as distance, terrain, visibility, species being hunted, etc.

Traps should be checked daily. Trapped pigs should be euthanized immediately. It is illegal to move live feral swine (wild hogs, wild pigs, feral hogs) in Alabama.

Contact your local Alabama Department of Conservation Law Enforcement Officer for details. *Under no circumstances should wild pigs be moved and released. This practice violates Alabama law.*

Pig carcasses should be disposed of properly. Wild pigs in Alabama carry many diseases that can be transmitted to humans and domestic animals. The State Veterinarian with the Alabama Department of Agriculture and Industries is responsible for approving methods of dead animal carcass disposal. Burial is an effective way of disposal.

REFERENCES

A Landowner's Guide for Wild Pig Management: Practical Methods for Wild Pig Control. Alabama Cooperative Extension System. Publication ANR-1397. <u>https://www.aces.edu/blog/topics/wildlife/landowners-guide-wild-pig-management/</u>

Georgia Department of Natural Resources. <u>https://gadnr.org/feralhogs</u> Texas A&M AgriLife Extension, <u>https://feralhogs.tamu.edu/</u>

<u>NOTE</u>:

It is illegal to move live feral hogs in Alabama. Contact your local Alabama Department of Conservation Law Enforcement Officer for details. Under no circumstances should feral hogs be released. This practice violates Alabama law.

AL402 / SELF-ASSEMBLED TRAP PRACTICE STANDARD

Overview

The Feral Swine population and range has made a dramatic impact in Alabama. They vary in color, shape, and size. Feral Swine can reproduce and populate an area very quickly. They have become a nuisance in Alabama by consuming agricultural crops, trampling agricultural land, preying on newborn livestock, causing timber damage by rubbing intensely on the bark layer making the trees more vulnerable to harmful insects, destroying native plants, and causing water quality and erosion issues. They are known to carry diseases that can be transmitted to livestock and humans. Trapping has become the preferred method of reducing the Feral Swine population.

Scouting and Identifying

After identifying that feral swine are located on your property causing damage, spend time scouting the property for their activity areas. Locate the heavy use areas where the feral swine travel, are rooting, wallowing, or trampling and locate their bedding areas. Mount a game camera in the area to help determine how many groups and the number of feral swine that will need to be removed from the property.

Before selecting a site to build the trap, pre-bait several likely trap areas with buckets that have been partially filled with corn and topped off with water. The area that gets the most use is where the trap should be built. Monitoring the area daily is important in being successful.

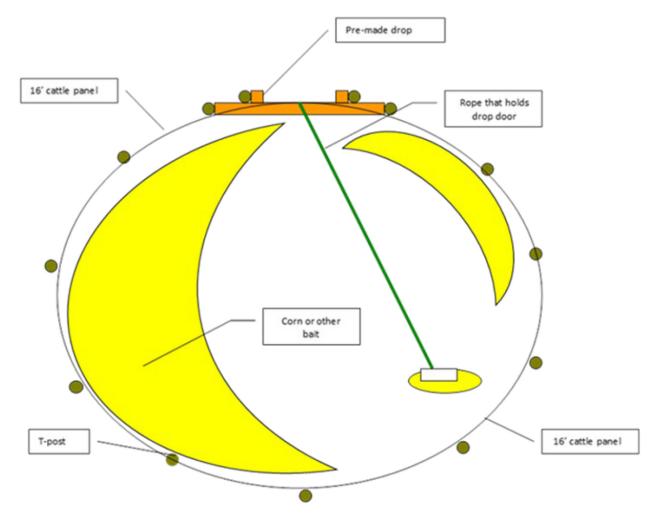
Conditioning and Trapping

Once the feral swine area has been identified, and the best area to build selected, it is important to consider several additional factors when choosing a trap site including:

- 1. Level ground,
- 2. Partial or full shaded area,
- 3. Easily accessible by vehicle or UTV.

After building or placing the trap, the next step is pre-baiting. Actual pre-baiting time will depend on whether the entire sounder is entering the trap. Be patient: this could take up to 2 weeks. During pre-baiting the gate will need to be wired or locked to stay open. This will allow the feral swine to get comfortable with coming into and leaving the trap area. Do not place the bait close to the trap entrance. Instead spread the bait near the back of the trap. The object is to allow as many feral swine to enter the trap as possible and give time for the trap door to close.

When using a pig triggered door, the baiting diagram herein should be followed to ensure that all feral swine are in the trap before the trigger is engaged. Additionally, during pre-baiting and trapping period, do NOT shoot at or otherwise harass pigs.



Baiting Diagram Courtesy of Dana Johnson, USDA-Wildlife Services

Monitoring

If the entire sounder was not trapped and dispatched or if other sounders are on adjacent land, the feral swine population will begin to grow again damaging land or crops. Therefore, it is important to monitor targeted locations for any sign of feral swine activity. Upon noticing any new activity repeat the removal steps.

Eligible Components

- Smart trap door and door frame
- Trigger Mechanism
- Steel T-post
- Pressure Treated Wood
- Screws/staples/bolts/U-bolts/nails
- Heavy Gauge wire panels
- Square or round metal tubing
- Game Camera with or without cellular data capability and service
- Solar panel
- Rechargeable battery
- Directional or omni-directional antenna
- Mounting or telescoping pole for antenna

Trap Material Details

The main body of the trap should be built using 16-foot feedlot panels. The panels should be 5 feet in height (60 inches) and have openings no larger than 4-inches by 2-inches. In order to maintain durability and strength, thickness of panel wire should be at least 6 gauge, with 4 gauge or .25 inch being preferred. Panels meeting these requirements are commonly referred to as "horse panels" or tall "goat panels". Note that goat panels also come in a 4-foot height and those do NOT meet specifications. Five-foot- tall goat panels may have to be special ordered. The door should have an opening at least 3 ft. high and 3 ft. wide. Total height of door area must be 5 feet to keep pigs from escaping over the door.

These doors should be fabricated out of metal or pressure treated plywood which is suitable for heavy use. The frame for the door must be constructed of similar metal or pressure treated lumber. Keep in mind that treated plywood left in the weather year-round can warp and cause catch failures. If treated plywood is used, be sure to store the doors under roof when not being used for trapping.

Solid steel T-posts will be used to support the panels and the door assembly. These must meet a minimum density of 1.25 pounds per linear foot and be at least 6 feet long.

Trap Door Designs



Root Gate Trap Door

Photo courtesy of Billy Higginbotham, Texas AgriLife Extension Service

Numerous door designs can be used. The simplest are falling door styles. They work well, but they are single catch only. No other pigs can enter the trap after they are tripped. The "root door" and the "saloon door" designs are both "continuous catch" designs. The smart door requires remote monitoring and engagement.

Continuous Catch Designs

The root door design uses gravity to hold the door closed and the saloon door design uses springs to hold it closed. Pigs on the outside can push through and enter the trap after it has been tripped. If there happens to be a pig on the outside of the trap when the door is tripped, it can push against the one-way door

and enter the trap. Recent research has shown that this only happens occasionally, but every pig that is caught is one less pig to replenish the population. With either design, a see-through "window" should be placed in the door, or an open designed door should be used that allows the animals to see into the trap.

Drop Door Designs

The two most common drop door designs are the guillotine design and the swinging drop door design. The guillotine design incorporates a door that fits in a frame which allows it to slide up and down. It is like the door design used in constructing rabbit boxes. The swinging door design functions like the root door design, except it is fully vertical when it is

closed, and it has a latch that holds it shut after it trips.



Drop Door

Note cattle panels shown here do not meet specs. Horse panels or similar should be used. Photo courtesy of Jason Harris, Clinton, LA



Saloon Trap Door

Photo courtesy of Mike Harris, Alabama NRCS

Smart Doors

The smart door design consists of a metal door and triggering mechanism that is operated remotely using a mobile phone app and a game camera to monitor activity. The smart door (or gate) should be a minimum of 6' wide with 4"x2" welded, minimum 6-gauge steel material. The frame of the gate shall be tubular metal. The opening shall be minimum of 36" with an overall The smart trap door or gate shall have a control system that provides remote monitoring of the trap in rural areas.

The control system shall include a game camera to detect motion at the trap and shall provide video or photo notifications of activity inside the trap through a mobile

phone app. The control system shall provide operation of the gate through alternative methods or a mobile phone app. The camera shall be provided with a cellular data package for a minimum of one year. It is important to get a camera with cellular data service that works well in the location you plan to run the trap. The camera must be suitable for outdoor operation and provide video or still photos in low light conditions. The camera must provide a detection range of a minimum of 50' and a field of view of 40 degrees. The trigger speed for the camera must be a maximum of 1.2 seconds. Cellular components must be enterprise class and designated for long term use in extreme conditions. The antenna may be either a directional antenna in the case of poor or limited cell service or omnidirectional.

The antenna should have a minimum of 10' of cable to connect to the camera. The solar panel shall be a minimum of 120 W with charge controller to power the camera. The rechargeable battery shall have a 20-hour rating minimum with >200-minute reserve capacity. The camera, solar panel and antenna shall all easily mount to a single T-post.

Trap Construction

Number of panels per trap really depends on the number of pigs in the sounder you are trying to catch. The larger the trap is, the more likely the entire sounder of hogs will be trapped at the same time. Four panels will handle most sounders but be flexible enough to add more panels for larger sounders where needed.

The panels should be formed into a circular shape. These panels are flexible and can be bent to form these shapes. Under no circumstances should there be corners in the trap. When trapped, pigs tend to bunch up in corners and some may escape. Make sure there are no gaps along the bottom of the panels where pigs might try to dig out.

Solid steel T-posts should be driven into the ground every 4 ft. to support the panels. Panels should be securely wired to posts and the panel ends should be wired together with a few inches of overlap.

The horse panels will be tied to the T-posts with 14 gauge or larger galvanized steel wire. They should be tied in four places: the bottom, about 1 ft. up from the bottom, 3 ft. from the bottom and at the top. T-posts will also be used to secure the prefabricated trap door to the ground. The door should also be secured to the trap panels with wire.

The trigger cord should be of a material that will be strong, but still light enough to release quickly, such as heavy nylon rope, aircraft cable or coated wire. The trigger design should incorporate pulleys or eye bolts at each turn to keep the trigger cord from binding. The root gate and other falling door designs work well with the standard root trigger. Two wooden or metal stakes are driven into the ground near the back of the trap at a 90-degree angle from the direction of the trigger line. The trigger cord is tied to the middle of the trigger (a wooden or metal rod). This trigger is set when the door is pulled open and the tightened cord is hooked over the trigger stakes.

Bait is scattered around the trap, with a concentration along the sides of the trap. The first pigs will go to the areas of high bait concentration. The intent is to give enough time for the entire sounder to enter the trap before one feeds near the trigger. Hogs feeding near the trigger eventually bump it and release the trap door.

The saloon door trigger is set as a simple trip cord. The cord is run from the trigger (a wooden or metal rod long enough to hold the saloon doors fully open) to the top of one side of the back of the trap, then down to a level of about 10 inches off the ground and then across to the opposite side of the trap. Bait is scattered around the trap with concentrations along each side. A little bait is placed on both sides of the trip cord. Again, the intent is to give enough time for the entire sounder to enter the trap and feed before the cord is tripped.

There are many other trigger designs being used to release pig trap doors. If one trigger system does not produce the results you want, then experiment with another design.

The traps should be in an area with all day shade covering most of the trap. Hogs do not have sweat glands and cannot regulate their temperature very well in full sun. They can die quickly and inhumanely without shade.

Trap Camera, Antenna, Solar Panel and Battery

A trail or game camera can be helpful whether a smart door is employed or not and is eligible in either case. The camera may be provided with a cellular data package for a minimum of one year. It is important to get a camera with cellular data service that works well in the location you plan to run the trap.

The camera must be suitable for outdoor operation and provide video or still photos in low light conditions. The camera must provide a detection range of a minimum of 50' and a field of view of 40 degrees. If outfitted with cellular service, the cellular components must be enterprise class and designated for long term use in extreme conditions.

The antenna may be either a directional antenna in the case of poor or limited cell service or omnidirectional. The antenna should have a minimum of 10' of cable to connect to the camera.

The solar panel shall be a minimum of 120 W with charge controller to power the camera. The rechargeable battery shall have a 20-hour rating minimum with >200-minute reserve capacity. Non- rechargeable batteries shall be lithium ion batteries.

The camera, solar panel and antenna shall all easily mount to a single T-post.

State Laws, Permits and Carcass Disposal

It is important to contact your local conservation officer before trapping during hunting season if hunting will take place on the property. Since food type baits are placed to attract pigs, this action has potential to violate Section 9-11-244, Code of Alabama, which prohibits the baiting, feeding and simultaneous hunting of protected game animals and birds. Your local conservation officer with the Alabama Department of Conservation and Natural Resources can evaluate your situation, such as distance, terrain, visibility, species being hunted, etc.

Traps should be checked daily. Trapped pigs should be euthanized immediately. It is illegal to move live feral swine (wild hogs, wild pigs, feral hogs) in Alabama. Contact your local Alabama Department of Conservation Law Enforcement Officer for details.

Pig carcasses should be disposed of properly. Wild pigs in Alabama carry many diseases that can be transmitted to humans and domestic animals. The State Veterinarian with the Alabama Department of Agriculture and Industries is responsible for approving methods of dead animal carcass disposal. Burial is an effective way of disposal.

REFERENCES

A Landowner's Guide for Wild Pig Management: Practical Methods for Wild Pig Control. Alabama Cooperative Extension System. Publication ANR-1397. <u>https://www.aces.edu/blog/topics/wildlife/landowners-guide-wild-pig-management/</u>

Georgia Department of Natural Resources. https://gadnr.org/feralhogs

Texas A&M AgriLife Extension, https://feralhogs.tamu.edu/

<u>NOTE</u>: Refer to the <u>Trap Construction</u> section and Check List contained within this Job Sheet to ensure your trap will meet specifications.

Feral Hog Trapping Checklist

Minimum Specifications

Minimum 6-gauge panel wire (must be 6 or 4 gauge or .25-inch wire)

Minimum 5-foot (60 inch) trap height at all points

Minimum of 4 panels per trap with 16-foot panels

Maximum 4-inch by 2-inch panel openings (commonly referred to as "horse" or tall "goat" panels)

Trap must be constructed in round shape without corners

Heavy, solid steel (1.25 pound/linear foot) construction 6-foot T-posts must be placed no more than 4 feet apart securing panels in place

Door and door frame can either be all metal or pressure treated wood construction

Trap must be constructed in location with shade covering trap

NOTE:

It is illegal to move live feral hogs in Alabama. Contact your local Alabama Department of Conservation Law Enforcement Officer for details. Under no circumstances should feral hogs be released. This practice violates Alabama law.

AL403 / NET TRAP PRACTICE STANDARD

Overview

The Feral Swine population and range has made a dramatic impact in Alabama. They vary in color, shape, and size. Feral Swine can reproduce and populate an area very quickly. They have become a nuisance in Alabama by consuming agricultural crops, trampling agricultural land, preying on newborn livestock, causing timber damage by rubbing intensely on the bark layer making the trees more vulnerable to harmful insects, destroying native plants and causing erosion and water quality issues. They are known to carry diseases that can be transmitted to livestock and humans. Trapping has become the preferred method of reducing the Feral Swine population.

Scouting and Identifying

After identifying that feral swine are located on your property causing damage, spend time scouting the property for their activity areas. Locate the heavy use areas where the feral swine travel, are rooting, wallowing, or trampling and locate their bedding areas. Mounting a game camera in the area will help determine how many groups and the number of feral swine that will need to be removed from the property.

Before selecting a site to build the trap, pre-bait several likely trap areas with buckets that have been partially filled with corn and topped off with water. The area that gets the most use is where the trap should be built. Monitoring the area daily is important for success.

Conditioning and Trapping

Once the feral swine area has been identified, and the best area to build selected, it is important to consider several additional factors when choosing a trap site including:

- 1. Level ground,
- 2. Partial or full shaded area,
- 3. Easily accessible by vehicle or UTV.

After building or placing the trap, the next step is pre-baiting. Actual pre-baiting time will depend on whether the entire sounder is entering the trap. Be patient: this could take up to 2 weeks. During pre-baiting the net will need to be wired or tied to stay completely up. After the feral swine get comfortable with the area then position the netting to a height that will touch the feral swine's backs as they enter and leave trap. Place the bait close to the trap center. The object is to allow as many feral swine to enter the trap as possible.

Once the feral swine are comfortable entering and leaving the trap, drop the netting to the trapping position. Additionally, during pre-baiting and trapping period, do NOT shoot at or otherwise harass pigs.

Monitoring

If the entire sounder was not trapped and dispatched or if other sounders are on adjacent land, the feral swine population will begin to grow again damaging land or crops. Therefore, it is important to monitor targeted locations for any sign of feral swine activity. Upon noticing any new activity repeat the removal steps.

Eligible Element Components

- Steel T-post
- High Quality Netting that follows the minimum specifications listed below.
- · Game Camera with or without cellular data capability and service
- Antenna, Solar Panel, and Rechargeable Battery

Trap Material Details

The main body of the trap should be built using a minimum 57 inches in height and a minimum of 20 feet in diameter. The netting openings should be no larger than 2-inches by 2-inches. To maintain durability and strength, netting should be made of high-quality material that meets minimum specifications listed below.



Solid steel T-posts can be used to support the netting. The T-posts should be a minimum density of 1.25 pounds per linear foot and be at least 6.5 feet long.

Trap Construction

Assemble net trap per manufacturer guidelines.

The traps should be in an area with all day shade covering most of the trap. Hogs do not have sweat glands and cannot regulate their temperature very well in full sun. They can die quickly and inhumanely without shade.

Pig Brig Net trap

Trap Camera, Antenna, Solar Panel and Battery

The trap does not require a control system, although a game camera should be used for remote monitoring of the trap.

The camera shall detect motion at the trap and shall provide video or photo notifications of activity inside the trap through a mobile phone app or other methods. If purchasing a game camera that requires cellular service, it is important to get a camera with cellular data service that works well in the location you plan to run the trap. The camera must be suitable for outdoor operation and provide video or still photos in low light conditions. The camera must provide a detection range of a minimum of 50' and a field of view of 40 degrees. The trigger speed for the camera must be a maximum of 1.2 seconds.

Cellular components must be enterprise class and designated for long term use in extreme conditions.

The antenna may be either a directional antenna in the case of poor or limited cell service or omnidirectional. The antenna should have a minimum of 10' of cable to connect to the camera. The solar panel shall be a minimum of 120 W with charge controller to power the camera. The rechargeable battery shall have a 20-hour rating minimum with >200-minute reserve capacity. The camera, solar panel and antenna shall all easily mount to a single T-post.

State Laws, Permits and Carcass Disposal

It is important to contact your local conservation officer before trapping during hunting season if hunting will take place on the property. Since food type baits are placed to attract pigs, this action has potential to violate Section 9-11-244, Code of Alabama, which prohibits the baiting, feeding and simultaneous hunting of protected game animals and birds. Your local conservation officer with the Alabama Department of Conservation and Natural Resources can evaluate your situation, such as distance, terrain, visibility, species being hunted, etc.

Traps should be checked daily. Trapped pigs should be euthanized immediately. It is illegal to move live feral swine (wild hogs, wild pigs, feral hogs) in Alabama. Contact your local Alabama Department of Conservation Law Enforcement Officer for details. Under no circumstances should wild pigs be moved and released. This practice violates Alabama law. Pig carcasses should be disposed of properly. Wild pigs in Alabama carry many diseases that can be transmitted to humans and domestic animals. The State Veterinarian with the Alabama Department of Agriculture and Industries is responsible for approving methods of dead animal carcass disposal. Burial is an effective way of disposal.

REFERENCES

A Landowner's Guide for Wild Pig Management: Practical Methods for Wild Pig Control. Alabama Cooperative Extension System. Publication ANR-1397. <u>https://www.aces.edu/blog/topics/wildlife/landowners-guide-wild-pig-management/</u>

Georgia Department of Natural Resources. <u>https://gadnr.org/feralhogs</u> Texas A&M AgriLife Extension, <u>https://feralhogs.tamu.edu/</u>

Feral Hog Trapping Checklist

Minimum Specifications

LOWER SKIRT: net style- twisted knot, fiber- high tenacity nylon, cord diameter- minimum #30 (2.5mm), mesh sizemaximum 1.5in, mesh brake- minimum 295lbf, UV- stabilized; AND BASE NET: net style- twisted knot, fiber- high tenacity nylon, cord diameter-minimum #30 (2.5mm), mesh size- maximum 1.5in, mesh brake- minimum 295lbf, UVstabilized.

BOAR SHIELD: net style- RASCHEL knot-less, fiber- high tenacity polypropylene, cord diameter-minimum 3/16in, mesh size- maximum 2.5in, mesh brake- minimum 719lbf, UV- 300KLY;

TRAP CAP: net style- twisted knot, fiber- high tenacity nylon, cord diameter- minimum #30 (2.5mm), mesh sizemaximum 1.5in, mesh brake- minimum 295lbf, UV- stabilized.

Trap diameter shall be a minimum of 20ft when fully constructed.

Minimum Trap Height 57in.

Trap must be constructed in round shape without corners.

Heavy, solid steel (1.25lb/linear ft) construction 6.5ft T-Post must be placed no more than 6ft apart securing net in place.

Net traps shall include a minimum 4-year limited warranty.

<u>NOTE</u>:

It is illegal to move live feral hogs in Alabama. Contact your local Alabama Department of Conservation Law Enforcement Officer for details. Under no circumstances should feral hogs be released. This practice violates Alabama law.

AL404 / TRAPPING ASSISTANCE PRACTICE STANDARD

Overview

The Feral Swine population and range has made a dramatic impact in Alabama. They vary in color, shape, and size. Feral Swine can reproduce and populate an area very quickly. They have become a nuisance in Alabama by consuming agricultural crops, trampling agricultural land, preying on newborn livestock, causing timber damage by rubbing intensely on the bark layer making the trees more vulnerable to harmful insects, destroying native plants, and causing erosion and water quality issues. They are known to carry diseases that can be transmitted to livestock and humans. Trapping has become the preferred method of reducing the Feral Swine population.

Scouting and Identifying

After identifying that feral swine are located on your property causing damage, spend time scouting the property for their activity areas. Locate the heavy use areas where the feral swine travel, are rooting, wallowing or trampling and locate their bedding areas. Mounting a game camera in the area will help determine how many groups and the number of feral swine that will need to be removed from the property.

Before selecting a site to build the trap, pre-bait several likely trap areas with buckets that have been partially filled with corn and topped off with water. The area that gets the most use is where the trap should be built. Monitoring the area daily is important for success.

Conditioning and Trapping

Once the feral swine area has been identified, and the best area to build selected, it is important to consider several additional factors when choosing a trap site including:

- 1. Level ground,
- 2. Partial or full shaded area,
- 3. Easily accessible by vehicle or UTV.

After building or placing the trap, the next step is pre-baiting. Actual pre-baiting time will depend on whether the entire sounder is entering the trap. Be patient: this could take up to 2 weeks. Trapping efforts can begin once the feral swine are comfortable entering and leaving the trap. Additionally, during pre-baiting and trapping period, do NOT shoot at or otherwise harass pigs. The goal of trapping is to trap the entire sounder of pigs.

<u>Monitoring</u>

If the entire sounder was not trapped and dispatched or if other sounders are on adjacent land, the feral swine population will begin to grow again damaging land or crops. Therefore, it is important to monitor targeted locations for any sign of feral swine activity. Upon noticing any new activity repeat the removal steps.

Eligible Activities

The feral swine trapping assistance practice allows producers to hire pre-approved trapping businesses (trappers) to assist in the trapping and euthanization of feral swine in traps. Eligible activities include:

- Scouting for pigs and pig damage.
- Establishing monitoring stations with cameras.
- Baiting pigs.
- Constructing traps and trapping pigs.
- Euthanizing pigs within the trap.
- Disposing of pigs.

Requirements for Payment

Trapper must conduct a minimum of three trapping events. A trapping event includes scouting, baiting, monitoring, and trapping an entire sounder of pigs. To verify that the trapping event has occurred, three photos of the sounder must be provided. The photos must include:

- Sounder during scouting
- Sounder in trap
- Sounder after being euthanized.

On occasion, a trap-shy pig or boar that is part of the targeted sounder may not be trapped in the trapping event. The trapper should use its professional judgement to either complete an additional trapping event to capture the swine or dispatch of the swine in another manner. In no circumstances shall the cost of stalking or night shooting of the trap shy pig or boar be including in the cost of this practice or as a part of the Conservation Incentive Program. All expense related to stalking or night shooting must be born by the property owner.

Additionally, the trapper shall provide a table for each trapping event to include following as a minimum:

Date	Location	Juveniles	Adults	Number in	Number
		Trapped	Trapped	Sounder	Euthanized

Pre-Approval Trapping Assistance Requirements

The following information shall be submitted to the Conservation District prior to engaging a trapper in trapping assistance for the Conservation Incentive Program:

- Business License of trapping company
- Proof of Liability insurance
- A summary of a minimum of one year's professional trapping experience
- Three professional references for trapping assistance
- Background check

The Conservation District will review this information and will provide notice of approval of the trapping company within 30 of receipt of information.

State Laws, Permits and Carcass Disposal

It is important to contact your local conservation officer before trapping during hunting season if hunting will take place on the property. Since food type baits are placed to attract pigs, this action has potential to violate Section 9-11-244, Code of Alabama, which prohibits the baiting, feeding and simultaneous hunting of protected game animals and birds. Your local conservation officer with the Alabama Department of Conservation and Natural Resources can evaluate your situation, such as distance, terrain, visibility, species being hunted, etc.

Traps should be checked daily. Trapped pigs should be euthanized immediately. It is illegal to move live feral swine (wild hogs, wild pigs, feral hogs) in Alabama. Contact your local Alabama Department of Conservation Law Enforcement Officer for details. Under no circumstances should wild pigs be moved and released. This practice violates Alabama law. Pig carcasses should be disposed of properly. Wild pigs in Alabama carry many diseases that can be transmitted to humans and domestic animals. The State Veterinarian with the Alabama Department of Agriculture and Industries is responsible for approving methods of dead animal carcass disposal. Burial is an effective way of disposal.

REFERENCES

A Landowner's Guide for Wild Pig Management: Practical Methods for Wild Pig Control. Alabama Cooperative Extension System. Publication ANR-1397. <u>https://www.aces.edu/blog/topics/wildlife/landowners-guide-wild-pig-management/</u>

Georgia Department of Natural Resources. https://gadnr.org/feralhogs

Texas A&M AgriLife Extension, https://feralhogs.tamu.edu/

<u>NOTE</u>:

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AL405 / EXCLUSION FENCE FOR FERAL SWINE (ELECTRIC)

Purpose:

The purpose of exclusionary fencing is to exclude or minimize access to high value crops, orchards, grazing lands and row crops to feral swine. This would reduce damage to vegetative cover, property damage, potential for erosion, and possible pathogen transmittal to humans and domestic animals.

Resource Concern:

To assist agricultural producers in reducing erosion, soil quality degradation, and water quality issues that can arise from damage to the land from feral swine. These problems can culminate from crop destruction, rooting, wallowing, and concentrations of E. Coli, Salmonella, and Giardia left behind in water sources. Water quality degradation can extend past field sediment and pathogen loss into deterioration of aquatic habitat for sensitive species.

5-wire high tensile electric fences with wire spacing fixed to keep feral swine out are required. Woven wire or multistrand barbed wire fencing will not be permissible for exclusion fencing under this practice. The goal will be to balance the necessary components to exclude the target species and reduce damage to natural resources while maintaining a viable cost structure and availability to historically underserved producers.

Management:

Properly designed and constructed fencing will reduce the frequency of repairs necessary to continue exclusion of feral swine. All fences require proper maintenance and should be checked on a regular basis. Power sources, solar panels, batteries, insulators, and grounding equipment should be inspected frequently. Tall grasses, shrubs and small trees proximal to the fence will require cutting and/or spraying to reduce short circuits, breaches, and loss of visibility when performing maintenance checks. Fallen limbs and trees must be removed quickly and any damage repaired to preserve restricted access.

Requirements:

Refer to the NRCS Conservation Practice Standard 382 for High Tensile Use Exclusion Electric Fence for Feral Swine for specifications.