

AL 306 / VIRTUAL FENCING PRACTICE STANDARD

Purpose

The purpose of this practice is to provide a livestock management system utilizing GPS-enabled livestock collars and electronically established boundaries to improve livestock distribution, grazing management, forage utilization, and management flexibility.

Resource Concern

This practice addresses the following resource concerns:

- **Inadequate Management of Livestock Grazing:** Improves control of livestock movement, grazing timing, duration, frequency, and intensity to promote proper forage utilization and prevent overgrazing.
- **Water Quality Degradation:** Reduces livestock access to streams, ponds, wetlands, riparian areas, and other sensitive areas, thereby minimizing direct deposition of nutrients and pathogens, streambank trampling, and sediment delivery.
- **Soil Erosion and Compaction:** Reduces excessive livestock traffic and concentrated grazing in vulnerable areas, helping maintain vegetative cover, improve soil infiltration, and minimize soil disturbance and compaction.
- **Degraded Plant Condition and Productivity:** Provides forage plants with adequate rest and recovery periods by controlling livestock access and grazing intensity, improving plant vigor, forage production, and stand persistence.
- **Inefficient Livestock Distribution:** Improves distribution of livestock across available grazing areas by allowing producers to establish and modify virtual boundaries to better utilize forage and manage sensitive areas.

Management

The producer shall operate the virtual fencing system as part of an overall livestock grazing management system.

- Management shall include:
 - Establishing virtual boundaries appropriate for the conservation objective and site conditions.
 - Adjusting virtual boundaries as needed to accommodate grazing rotations, forage conditions, livestock needs, and conservation objectives.
 - Maintaining adequate livestock access to water, forage, shade, and other necessary resources.
 - Routinely monitoring livestock location and system operation.
 - Maintaining collars, batteries, communication equipment, software, and other system components in proper working condition.
 - Maintaining an adequate physical perimeter fence or other approved containment system.

- Responding promptly to equipment failures, communication failures, livestock escape alerts, or other system notifications.
- Operating the system in accordance with manufacturer recommendations and applicable animal-welfare requirements.

Requirements

- Producer shall own or have legal control of the land where the system will be used.
- **Existing perimeter fencing shall be in place and maintained** to contain livestock.
- Virtual fencing shall address an identified **conservation or grazing management concern**.
- Producer shall work with a **qualified professional**, such as an Alabama Cooperative Extension livestock specialist or other appropriately credentialed livestock professional, to develop or approve the grazing management approach.
- Producer shall have a **grazing management plan** identifying the purpose and use of the virtual fencing system.
- Livestock shall be properly trained to respond to the virtual fencing system.
- Producer shall maintain adequate access to **water, forage, shade, and other necessary resources**.
- Producer shall routinely monitor livestock, collars, boundaries, and system operation.
- Producer shall maintain the system in operational condition and make necessary repairs or replacements.
- Producer shall maintain required records and allow ALSWCC or the SWCD to inspect the system.
- The practice shall be **maintained and operated for a minimum of 7 years**.
- For FY 2027, this will be offered on a trial basis in the following counties: Colbert, Franklin, Lauderdale, Lawrence, and Limestone.
- A minimum of 5 head is required.

Eligible Equipment

Subject to CIP program eligibility and funding limitations, eligible equipment may include:

- GPS livestock collars.
- GPS monitoring software
- Virtual fencing software subscription

Cost Estimate - The applicant will provide the District Administrative Coordinator with a detailed cost estimate for the proposed conservation practice. The price per collar will be set at \$250 per collar for cattle and \$200 per collar for small ruminants.