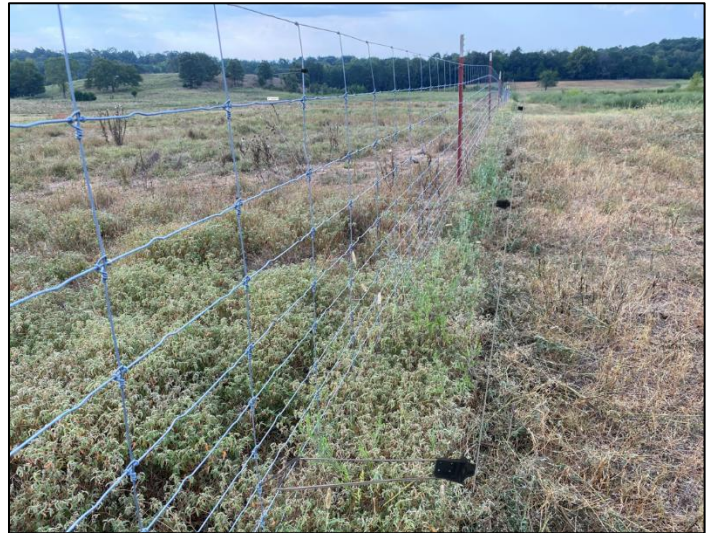


Arkansas Association of Conservation Districts

Feral Swine Exclusion Fence

Purpose:

To provide extra measures to deter feral swine access to property for specific objectives. This project is led by the Arkansas Association of Conservation Districts.



Specifications:

All fence bracing, designs and materials must meet the following recommendations for financial assistance.

Construction Requirements Specific to Feral Swine Exclusion Fence:

A combination of woven wire (fixed knot) and an electric fence must be used together. The two-tier barrier will provide both a physical and psychological deterrent.

The woven wire must be fixed knot – not s-knot or hinge knot.

An electric fence offset will be attached to the woven wire fence that supports a 12.5 gauge galvanized high tensile wire. This 12.5 gauge galvanized high tensile wire will be connected to an electric fence charger and it will serve as the psychological deterrent.

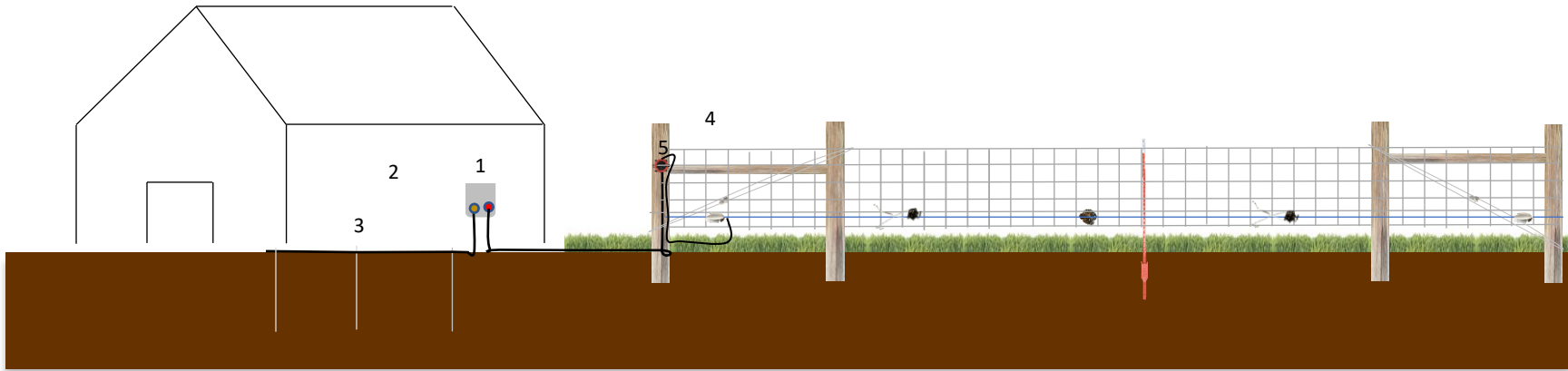
The height of the electric fence wire will be between 10 and 24 inches.

The electrical offsets will be placed no greater than 30 feet from each other.

The electrical output on the single wire electric fence should be at least 3,000 volts. Rule of thumb – one joule will power one mile of fence. Voltage greater than 3,000 volts will assist during times of high resistance due to excessive vegetation load.

Electric fence insulators to attach to pull post should be "bull nose" insulators with 10-year manufacturers warranty.

AACD Feral Swine Exclusion Fence

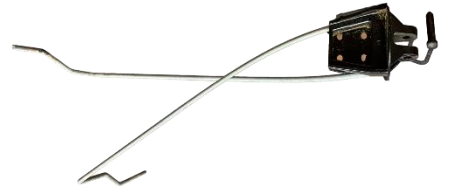
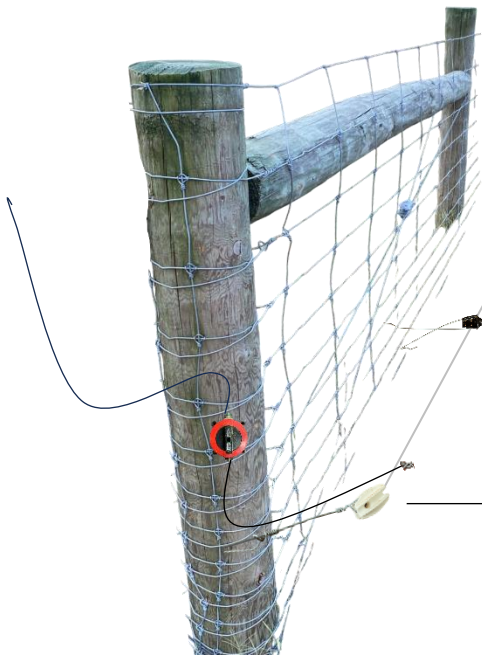


Energizers and Components

1. Energizers for permanent electric fencing must be high voltage/low impedance, short pulse units which can produce at least 3,000 volts output with all livestock containment fences charged (on) when under maximum anticipated load. Fence voltage should be monitored with a digital voltmeter.
2. Install a surge protector at the 110-volt connection to provide protection from power surges. A lightning arrester or lightning choke is suggested following manufacturer recommendations. When installing a ground system for the arrester/choke system, install one more ground rod than was used on the charger ground system.
3. A minimum of three (1/2" diameter) ground rods must be installed at least 10 feet apart near the energizer. Six-foot ground rods are recommended, driven to ground level or refusal, with a minimum depth of 3 feet. In the case of refusal, additional ground rods must be added to provide a minimum of 18 feet of ground contact. The rods will be connected together with one continuous wire and clamps back to the charger terminal. Locate ground rods in moist, deep soil. Either galvanized or copper ground rods are acceptable. Rod connecting wires and clamps must be the same material as the ground rods. Avoid mixing dissimilar metals to prevent electrolysis. For large energizer systems (15 or more joules), add one additional ground rod for every 5 joules.
4. Insulators for steel and other conductive material posts must be high-density polyethylene or polypropylene with ultra-violet (UV) stabilizer, porcelain or other insulators, which can withstand a minimum of 10,000 volts or more in current leakage. Only insulators with a 10-year warranty are of sufficient quality.
- 5) Cutoff switches are recommended at each secondary fence feeding off the main fence.

Energizer Size	Minimum Number of Ground Rods
1	3
5	3
15	3
20	4
25	5
35	7
65	13

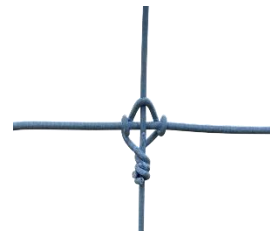
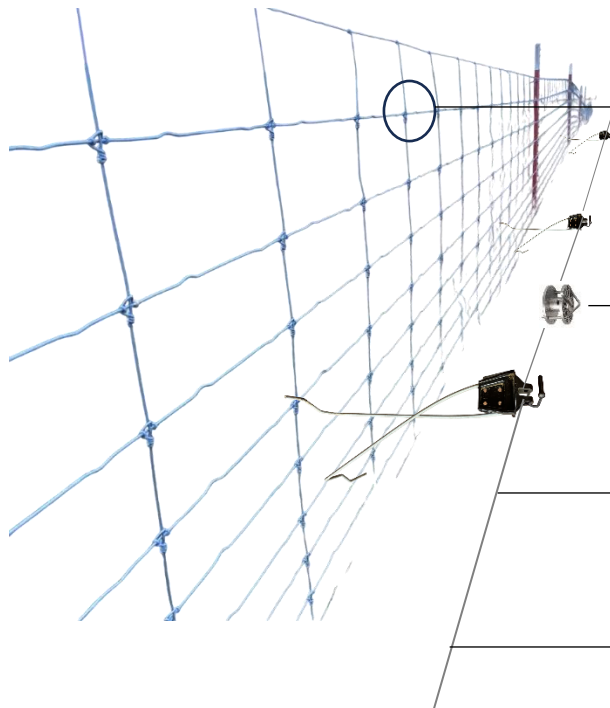
AACD Feral Swine Exclusion Fence



Electric Fence Offset with Wire Bracket that extends 12-16 inches from woven wire fence. These offset brackets will be spaced no greater than 30 feet from each other.



Bull nose insulator with a 10-year manufacturer's warranty.



Woven wire fence will be "fixed knot."

An inline wire strainer or daisy wheel tightener will be used to tighten the wire.

Electric fence wire will be 12.5-gauge high tensile galvanized wire.

The height of the electric fence wire will be 10 to 24 inches.

AACD Feral Swine Exclusion Fence

Set post into the ground at a minimum of 36 inches without concrete. →

OR

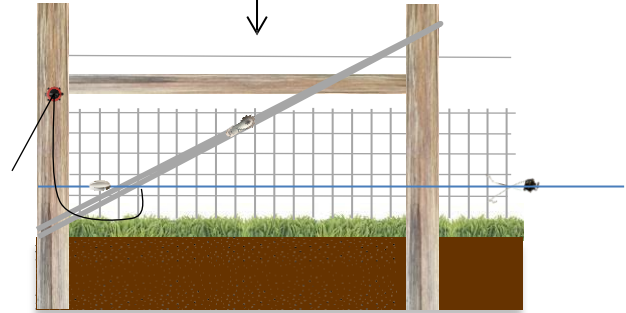
← Set post into the ground at a minimum of 24 inches with concrete.



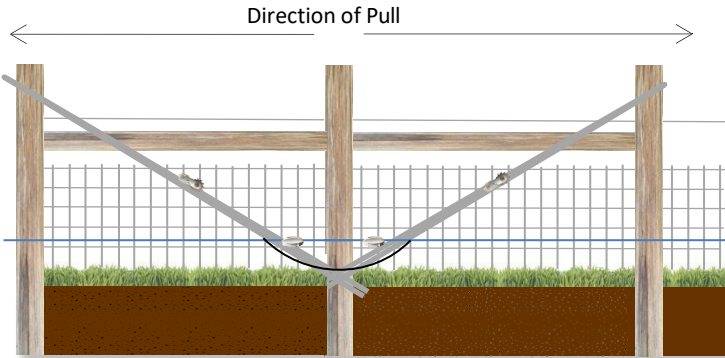
Minimum 5" pull and brace. →

Only treated posts labeled as specified in AWPA standard UC4A and utility post in excellent condition will be allowed. No railroad ties or landscape are allowed.

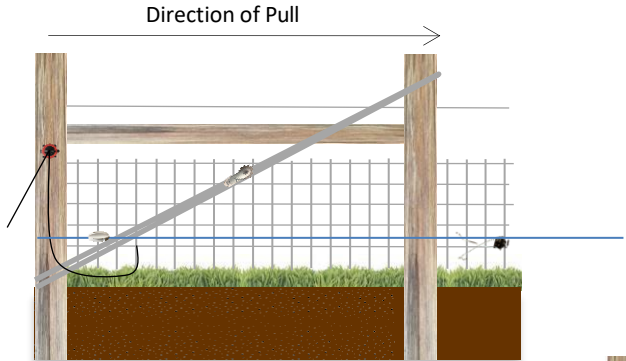
7-10 feet horizontal brace with a minimum 3" diameter cross member.



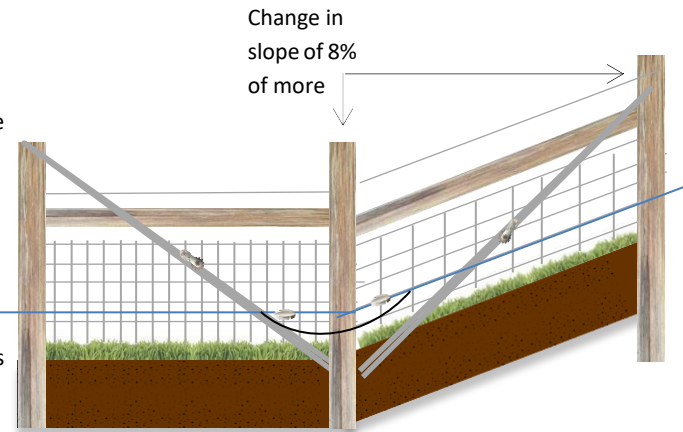
Double H Brace in-line assemblies are required in straight sections of the fence line where the distance between pull posts of corner brace assemblies and/or end panel brace assemblies exceeds 660 feet for standard fences.



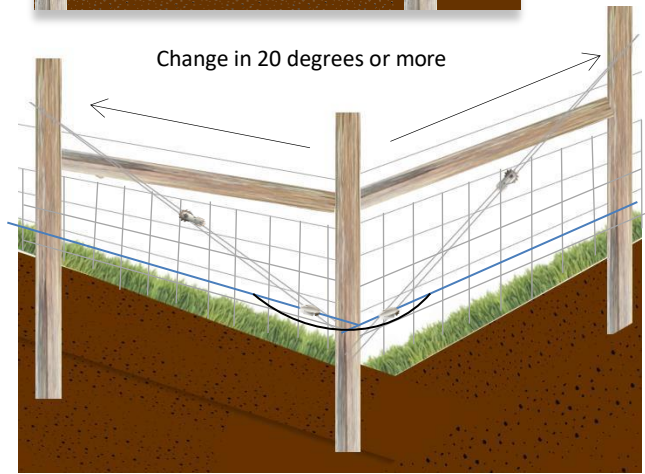
Single H brace end panel assemblies are required where fences end and on both sides of gate opening where the pull is only one direction.



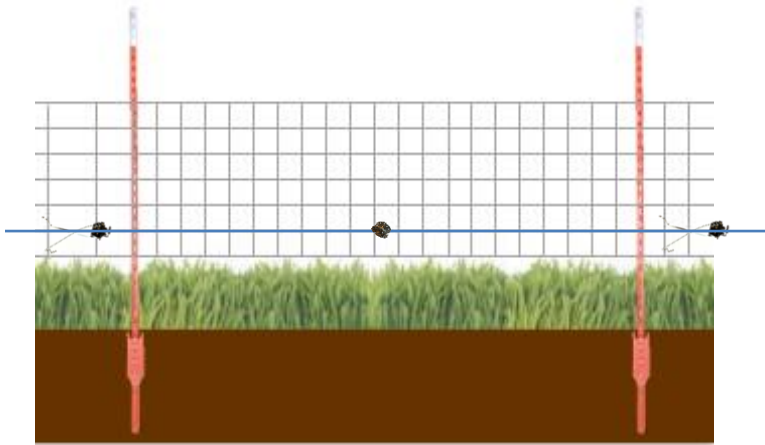
Double H brace in-line assemblies are also required where changes in slope exceeding 8% are present. The center post of this brace assembly will be set as near the point where the slope breaks as possible.



Double H brace corner assemblies are required at tall points where the fence alignment has a change of 20 degrees or more and the pull is from two directions.



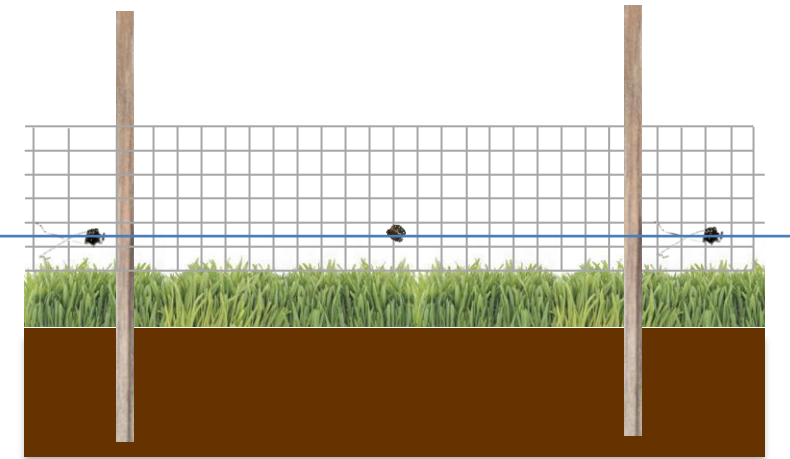
AACD Feral Swine Exclusion Fence



Line post will have no greater than 20 ft line spacing.

The top and bottom strands shall be 12 1/2 gauge or heavier with intermediate strands 14 1/2 gauge or heavier.

The base of the woven wire shall be placed near ground level.



Steel T posts weighing not less than 1 1/4 lbs/ft of length may be used if driven to at least the top of the anchor plate. Posts shall be galvanized or painted with one or more coats of high-grade, weather-resistant steel paint or enameled and baked and should not be rusted or bent.

Wood line posts shall have a 3-inch diameter and set or driven to a minimum depth of 24 inches. All wooden posts shall be treated with pentachlorophenol, creosote, or chromated copper arsenate (CCA) by a method to ensure complete penetration of the sapwood.



Square Knot – Not Eligible



Hinge Knot – Not Eligible



Fixed Knot – Eligible