

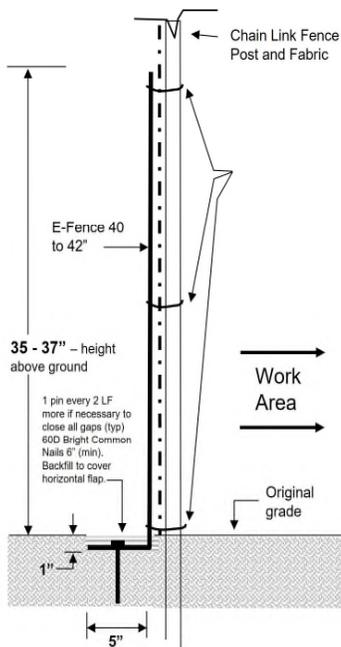
# ERTEC Environmental Systems

Protecting Global Lands and Waterways™

## Case Study E-Fence™ Rattlesnake Exclusion



- > Highly Reliable
- > Lower Costs
- > ZERO WASTE
  - ✓ Reusable
  - ✓ Recyclable



**E-Fence Configuration**



<b>Application:</b>	<b>Rattlesnake Exclusion</b>
<b>Product:</b>	E-Fence™ 42 & Gate Exclusion Panels with sweeps (attached to chain link fence and gates)
<b>Customer:</b>	Gas & Oil Operations Service Center
<b>Project:</b>	<b>Personnel Protection at 3 Compressor Stations</b>
<b>Location:</b>	<b>North Pennsylvania</b>

ERTEC E-Fence™ is a highly reliable and low cost exclusion and control barrier designed for reptiles, amphibians and small mammals. The fence is typically used to exclude small vertebrate species from active construction areas, control movement within fragmented habitat and for keeping animals out of work areas. In this application it was utilized to keep rattlesnakes out of three separate facilities where they have posed a danger to personnel.

- E-Fence cuts total costs significantly.
- Highly configurable for different situations
- Allows wind and water flow-through and significantly reduces knock-downs, and washouts for long term reliable performance.

**Species:** Timber rattlesnake (*Crotalus horridus*)

**Configuration:** E-Fence Black, 42" width with a 5" horizontal foot nailed down and entrenched 1". Exclusion panels with sweeps were installed for all swing gates and emergency personnel exits. One-way escape funnels were positioned on 100 foot centers to allow rattlesnakes inside the enclosure to escape to the outside. E-Fence was attached to existing chain link fences and gates. There are three work-sites with total perimeter close to 8,000 Linear Feet. Each site had a swing gate at least 20 feet wide, and several personnel gates.

**Benefits of Use:** E-Fence cuts project costs significantly, is highly configurable for different species and habitat, and most important for permanent installations, E-Fence allows wind and water flow-through which significantly reduces knock-downs, and washouts, providing excellent functional longevity.

**E-Fence Anti-Climb Features:** In live testing, snakes which are excellent climbers were not able to climb E-Fence (note: timber rattlers are not good climbers). The surface of E-Fence has a very low friction coefficient by design. The snakes were not able to establish suitable contact with the fence in order to climb. They were observed to rise to a certain point but then collapse to the right or to the left. Unlike mesh fences (such as metal mesh or geotextile mesh) on which the snakes could apply their scutes to the high friction ladder structure of the mesh, E-Fence *Rigid Polymer Matrix™* presents itself at sharp strand angles which tend to drive climbers to the right or to the left and down. Snakes can not find leverage to climb.

**Reliability, Durability in High Wind and Storm Flows:** The very high reliability (high functional longevity) of E-Fence (almost no stormwater washouts, or wind knock-downs) as compared to traditional systems leaves significantly less opportunity for a snake to find a gap in the perimeter barrier and migrate onto a work site.

**The Challenge:** Its common to see metal mesh fence used to exclude snakes. Unfortunately, it is also common to see metal mesh deteriorate quickly at the base due to corrosion.

**Results:** "As someone who strives for Rattlesnake safety for people and snakes alike, I highly recommend this product. It is very effective. It does not allow the animals to become entangled in the fencing. Great product!" - Fred Tamaski—Safety & Environmental



**Timber rattler seen here moving quickly outside the E-Fence™ exclusion barrier**

