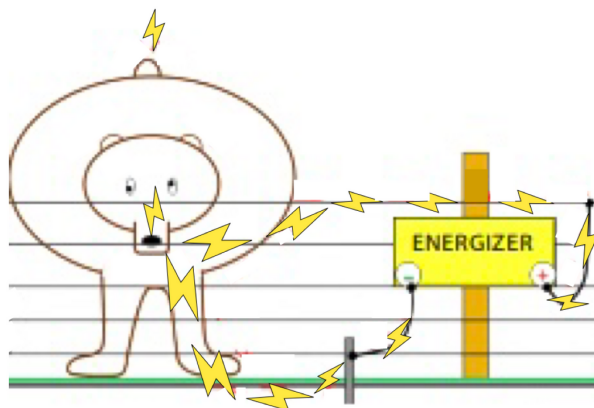


How Bear Sentries Work



The Basics

- * When an animal touches the hot wire of an electrified fence, it closes what was until then an open circuit. **Electrical energy** is allowed to travel from the energizer (along the wire), through its body, and back to the energizer (through the ground).
- * How easily that circuit can be closed is a function of the **voltage** established by the energizer. How large of a shock the animal feels is a function of how much **energy** the energizer delivers.



Higher Voltage – Better Connection

- * Voltage is a measure of the electrical “pull” created by the energizer from hot wire to ground. The higher the voltage, the easier it is for a predator to close the connection, and the less that dry conditions can affect that connection.

Energy is Everything

- * **Energizers** are rated by how much energy they store and by how much energy they can deliver under load i.e. “stored energy” is theoretical; “**delivered energy**” represents the real world.
- * Size does matter when you’re dealing with an apex predator. Research shows that **at least 0.5 Joules** of delivered energy is needed to turn away a bear. But if a motivated, hungry Grizzly comes round, you’ll want more than the **minimum** shock!

Bear Sentries Really Deliver

- * The amount of energy that a fence energizer can deliver is critical. The **Bear Sentry energizer** stores 1.8 Joules and **can deliver more than 1 Joule** when discharged. That’s **twice the minimum**.

12 Volts is More than Enough

- * How can eight small AA batteries deter a big bear? The energizer builds up and stores energy in a **capacitor**. When an animal closes the connection between hot wire and ground, the energizer releases all its stored energy into a pulse that lasts a split second.
- * The shock is extremely painful, but because the pulse is so short-lived the bear is deterred without being damaged.