Dear and Elk Automated Deterrent System

Specifications

Interface
1. User selected on time after animal detection, with 5 minute intervals from 0-20 minutes.
2. User selected operations mode, to include Night mode, Day mode and 24 hour mode.
3. Sensors must wirelessly communicate with cannons.

Operation
1. Battery life must be at least 2 weeks.
2. Detect Dear and Elk at least 500 feet away.
   a. Detection range exceeds commercially available sensors. However, an increased
      transmitter range will allow sensors with a smaller detection range to work, if placed
      closer to the game trails.
3. Sensors must be able to communicate with cannons 300 feet away.
4. All sensors must be able to communicate with all canons in range.
5. Cannon triggering after animal detection must remain random for the entire user selected interval.
6. Operate in a wide variety of terrains and vegetation.

All Weather
1. Withstand temperatures from -10°F to 120°F in direct sunlight.
2. Must be able to operate in snow and rain and continue to function after exposure to snow and rain.

Size
1. Sensor:
   a. Must weigh less than 2 lbs and be smaller than 5”x5”x5” (not including mast).
2. Control Unit:
   a. Weigh less than 5 lbs
   b. Smaller than 10”x10”x5”

Desirables

Interface
1. Network select option.
2. On/Off switch
   a. For controller and sensors.

Operation
1. Use existing gas valves.