



GPS Technology to Aide in LGD Management

Bill Costanzo – AgriLife LGD Research Specialist

GPS Trackers Terms

Pings/Locations - Refers to a GPS position taken by the tracker, generally every 15-30 minutes. Most trackers can store thousands of pings at a time before overwriting in the unit's memory. Pings generally do not use much battery life.

Uploads/Updates - Occur at set times during the day, usually every 2-4 hours. Refers to the ping/location data being sent to the tracking providers online computer system. Uploads generally use the most battery life in a tracker.

Geofence – Imaginary line drawn around property or pastures online. Allows for notifications if the LGDs leave or enter a location. Helpful for roaming dogs. Notifications via text or email.

GPS Tracker Types

- Passive – [iGot-U](#)
- Active – [Oyster](#), [Yabby](#), [Solarmax](#), [Smart One C-Satellite](#)

Passive Tracker Pros

- Small size
- Inexpensive, ~\$50
- Battery life, months to years
- No monthly fee
- Rechargeable

Passive Tracker Cons

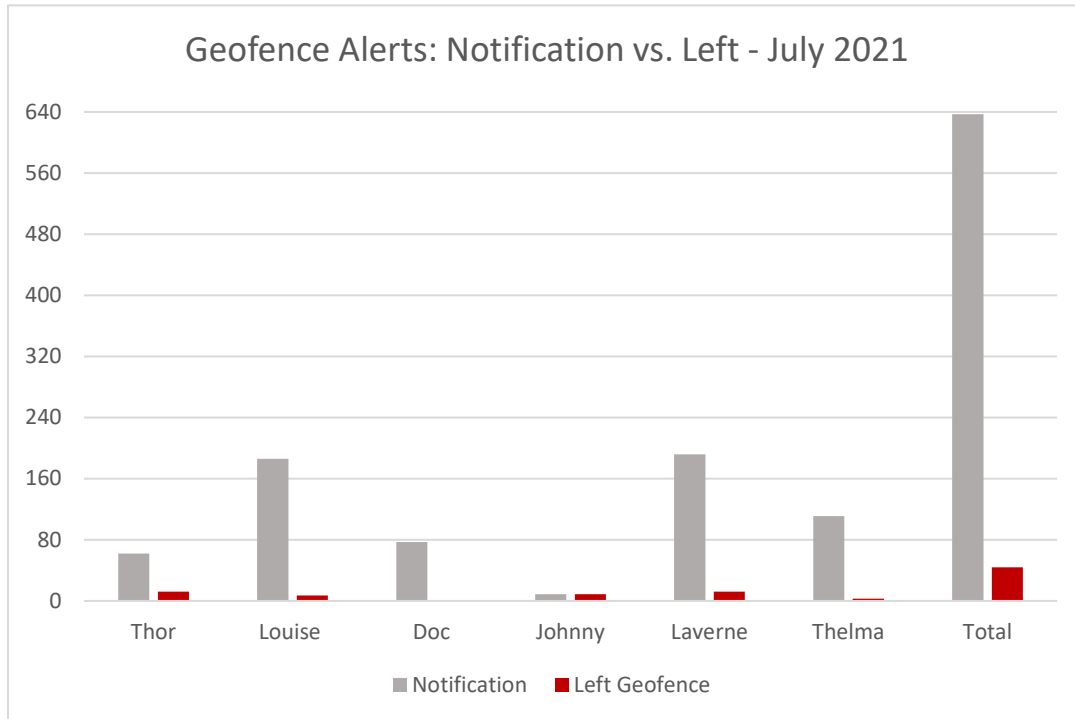
- Require manual download of information from the unit
- No live tracking of LGDs
- Waterproof case recommended

Active Tracker Pros

- Small to medium size
- Constant tracking, virtual data uploads
- New tech constantly coming out
- Decent battery life, weeks to months
- Several options for signal service – Cellular, LoRa, Satellite
- Waterproof case included
- Dogs & stock can be located for gathering

Active Tracker Cons

- Moderate initial expense, ~ \$150
- Monthly fees, \$4 - \$15
- Poor cell signal reduces battery life
- More expensive batteries, Lithium Ion recommended
- False alerts often when dogs are close to geofence



Tracker Take Home Points

- Pros
 - Helpful to locate LGDs and stock from your phone or computer
 - Relatively inexpensive
 - Battery life and technology is constantly improving
- Cons
 - Must be able catch dogs to replace or charge batteries
 - False alerts of geofence departures can be annoying
 - Need to purchase new trackers as technology updates

GPS Tracking Companies

- [Lone Star Tracking](#) - 877-777-8636
- [Optimus Tracking](#) - 855-893-0707
- [DPL Telematics](#) - 800-897-8093
- [Digital Matters](#) - 404-458-4184

Helpful Links

- [Heat Shrink](#) for attaching trackers to dog collars.
- [Dog Collars](#) we use for our trackers.