

# Introduction to Virtual Fencing

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**ENGAGEMENT  
AND EXTENSION**  
COLORADO STATE UNIVERSITY

## Education

Animal Science

Ruminant Nutrition

## Past Experience

8 yrs Managed Large

TX Farm and Ranch

## Current

16 Years

Gunnison Ag Agent





# Communicating with Livestock

It's Easy!





How'd We Get Here



Animal Identification

Visible Tags  
Radio Frequency





Photo credit: herddog.com



Photo credit: herddog.com



# Animals Talk to Us

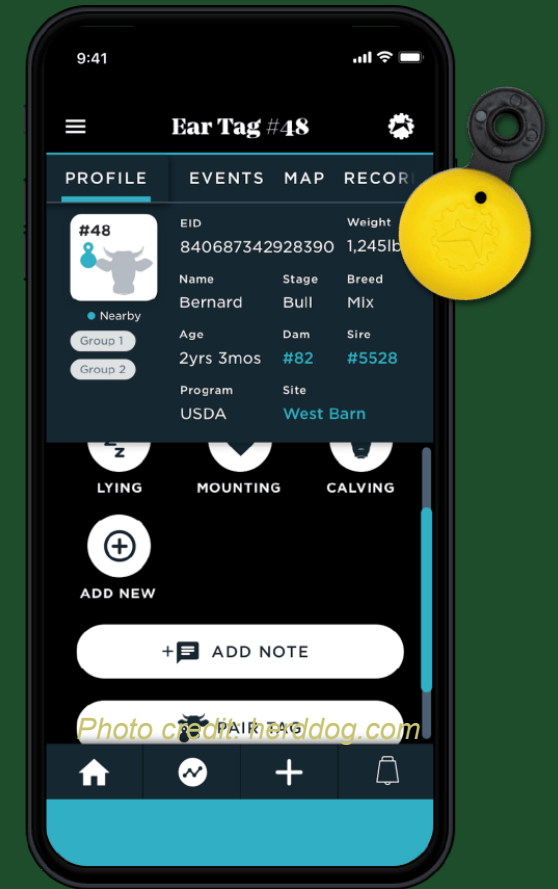


Photo credit: herddog.com

## Health, Reproduction, GPS

## Animal Monitoring



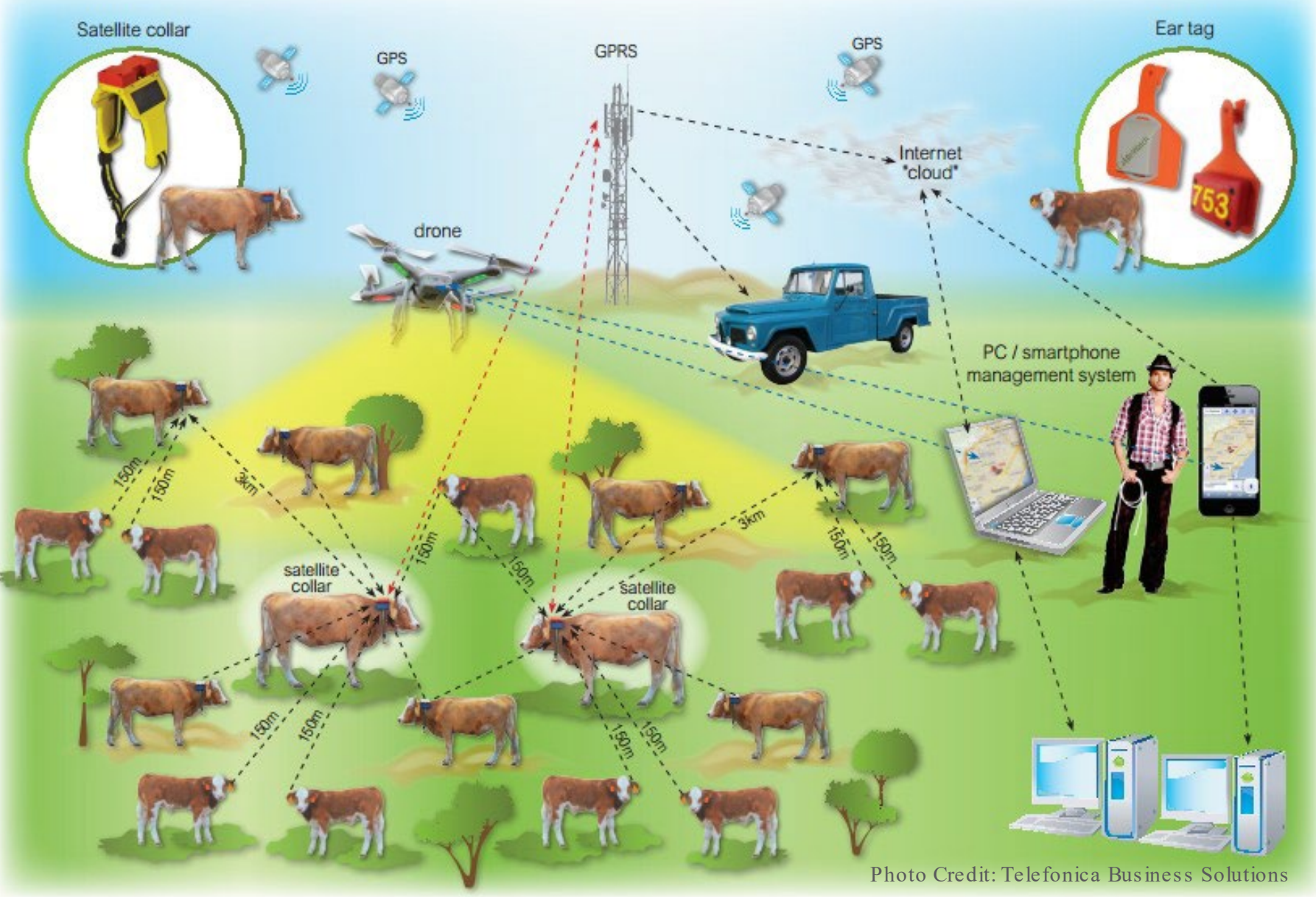


Photo Credit: Telefonica Business Solutions



Photo Credit: Cerestagg.com



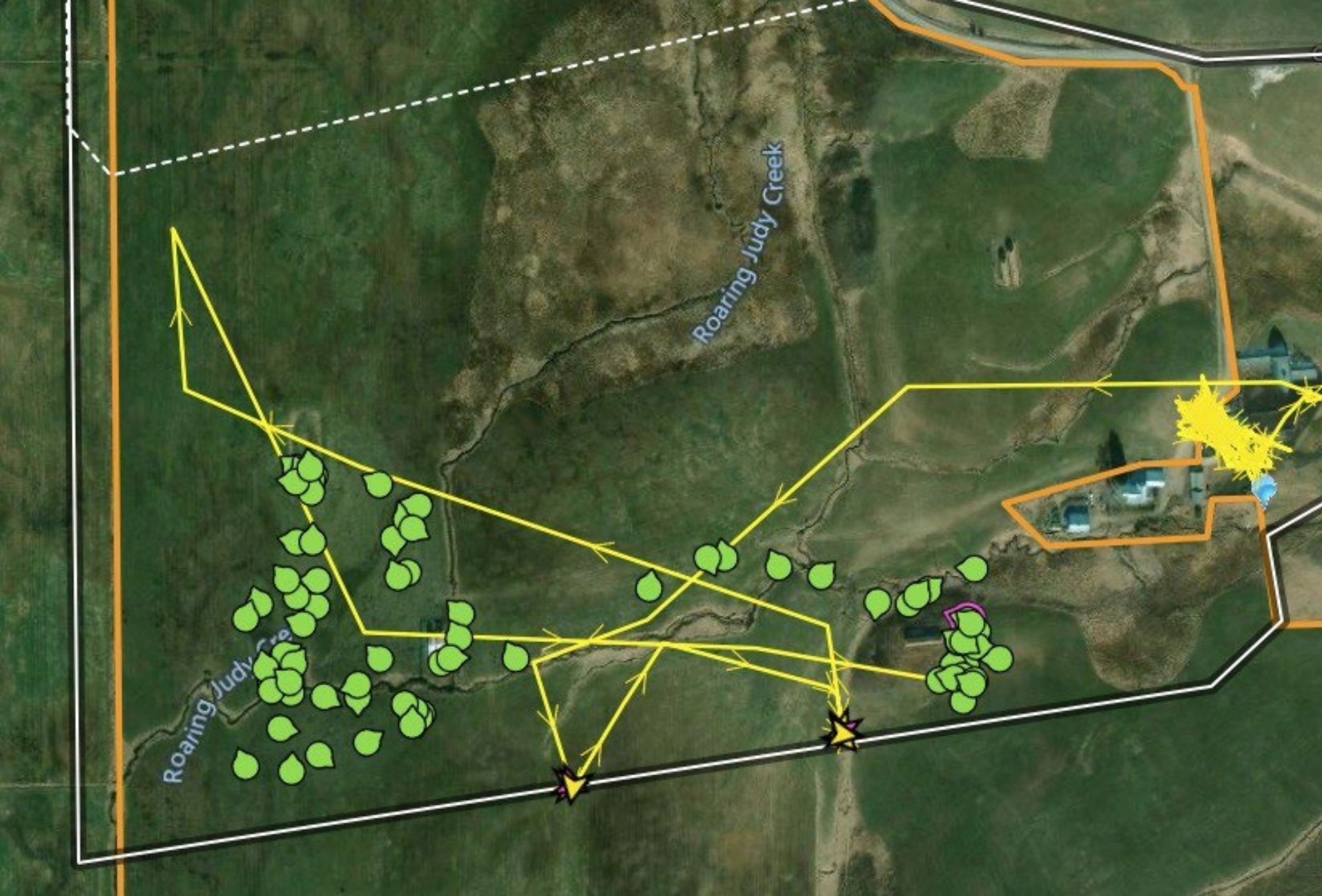
# Geofencing vs. Virtual Fencing

We Talk to the  
Animals

Virtual Fencing

Grazing Management





## Virtual Fencing

Satellites

Cell Towers

Google Earth

Smart Phone Apps

# Animal Behavior Control







# Gunnison Virtual Fencing Project eShepherd



# Gunnison Virtual Fencing Project Vence





# Precision Grazing in Sensitive Areas

Questions ?

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