#### Ranch:

ranch\_id, producer\_id, state, start\_date, end\_date, cameras, interviews, cortisol, VHF, rider\_sheets, rider\_gps, head, preg\_2022, preg\_2023, preg\_2024, breed\_id, salt, mineral, supp\_id, AI, vac\_id, date\_rider, 2022\_nonlethal, 2023\_nonlethal, 2024\_nonlethal, 2022\_sig\_id, 2023\_sig\_id, 2024\_sig\_id

#### Riders:

rider\_id, ranch\_id, start, age, move, doc, type, freq, travel\_id, experience, ranch experience, LSH

## Cattle:

date, ranch\_id, rider\_id, observer\_id, camera\_id, weather\_id, temp, time, lat, long, time\_to, num\_calves, num\_cows, num\_bulls, num\_other, event\_start, event\_end, stress\_id vigilant\_id

#### Cameras:

ranch\_id, camera\_serial,
station\_id, camera\_id,
date\_deployed,
person\_deployed, date\_pulled,
pasture\_id, person\_pulled, lat,
long, dist\_target, height, width,
cover, direction, habitat,
lock\_deployed, S/B\_date,
date\_checked,
person\_checked,
total\_pics\_use,
total\_pics\_deleted, date\_dead,
date\_full

# Pastures:

pasture\_id, ranch\_id, acres, stocking, 2022\_head, 2023\_head, 2024\_head, 2022\_comp, 2023\_comp, 2024\_comp, 2022\_date\_out, 2023\_date\_out, 2024\_date\_in, 2023\_date\_in, 2022\_NDVI, 2023\_NDVI, 2024\_NDVI, 2022\_NPP, 2023\_NPP, 2024\_NPP

# GPS:

date, gps\_id, ranch\_id, rider\_id, start\_time, end\_time, pasture\_id, ride\_id

#### VHF:

unit\_id, freq,
date\_deployed, cow\_id
person\_deployed,
date\_removed,
person\_removed,
ranch\_id, type, missing

#### Conflict:

date, ranch\_id,
observer\_id, time, lat,
long, type\_id, species\_id,
cattle\_id, num

# Cortisol/BCS:

date, ranch\_id,
person\_deployed, cow\_id,
cow\_BCS, tag\_color, cortisol,
thyroid

# All connected by "ranch id"

#### Historical:

ranch\_id, year, preg, head, comp,
pasture\_id, breed\_id, salt, mineral,
supp\_id, Al, vac\_id, date\_rider, nonlethal,
wolf\_deps, griz\_deps, other\_deps,
wolf\_injuries, griz\_injuries, other\_injuries,
illness, illness\_type, sig\_id, return\_rate,
weights\_turnout, weights/turnin,
rider\_freq, rep\_heifers, rider\_direct,
rider\_indirect, rider\_trust, rider monitoring

## Rides:

ride\_id, rider\_id, date\_in, date\_out, time\_in,
 time\_out, time\_ride\_start, time\_ride\_end,
 pasture, travel\_id, herds, VHF, GPS, weather\_id,
 ordinary\_id, pred\_response\_id, management\_id,
 dogs\_id, nonlethal\_id, unit\_id

## Predator:

date, ranch\_id, camera\_id, weather\_id, temp, observer\_id, time, lat, long, type\_id, species\_id, num, kill