

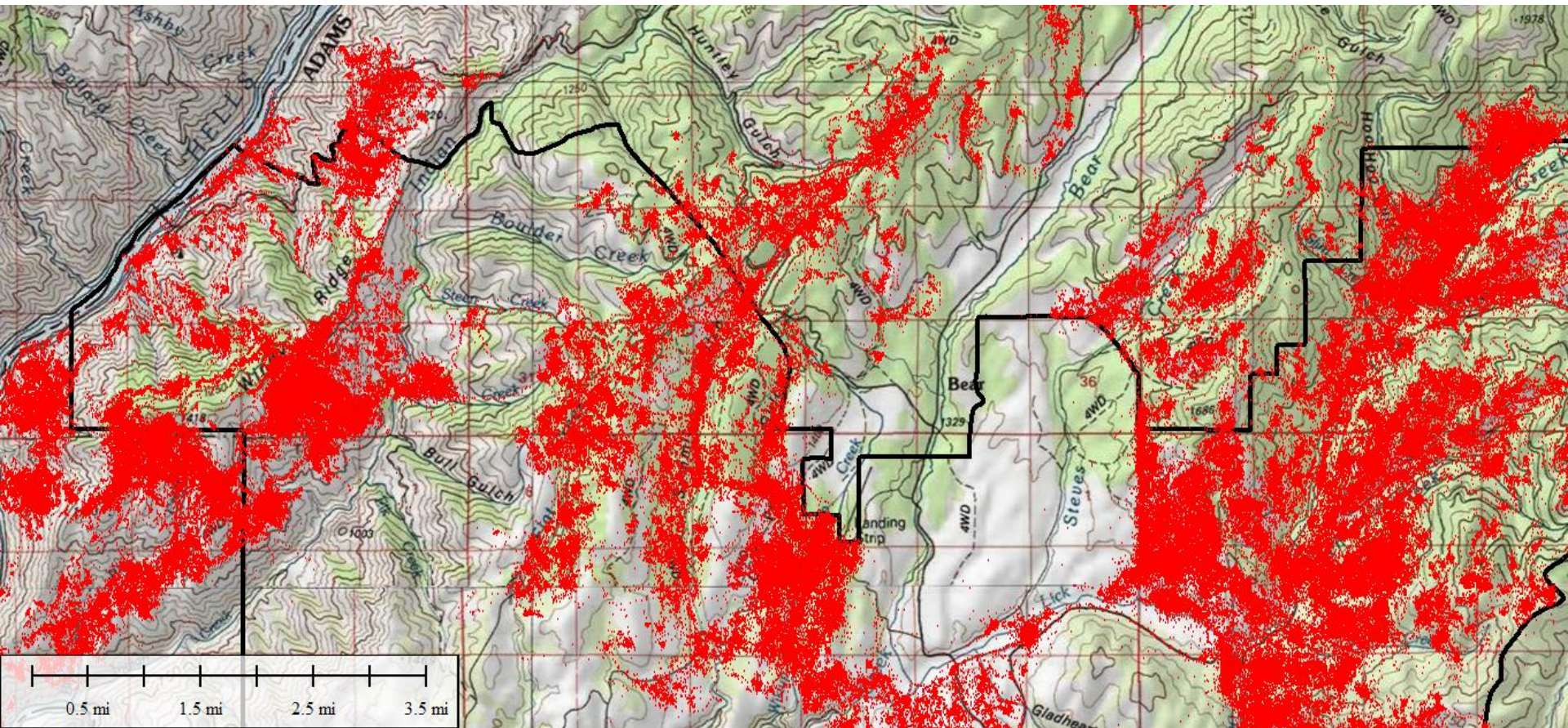
# Wolf Cattle Interaction Study

Douglas E. Johnson<sup>1</sup>, Patrick Clark<sup>2</sup>, Larry Larson<sup>1</sup>,  
John Williams<sup>1</sup>, and Neil Rimbey<sup>3</sup>

<sup>1</sup>Oregon State University, <sup>2</sup>USDA/Agricultural  
Research Service Boise, <sup>3</sup>University of Idaho

# GPS Cow Collar Data (5 minute)

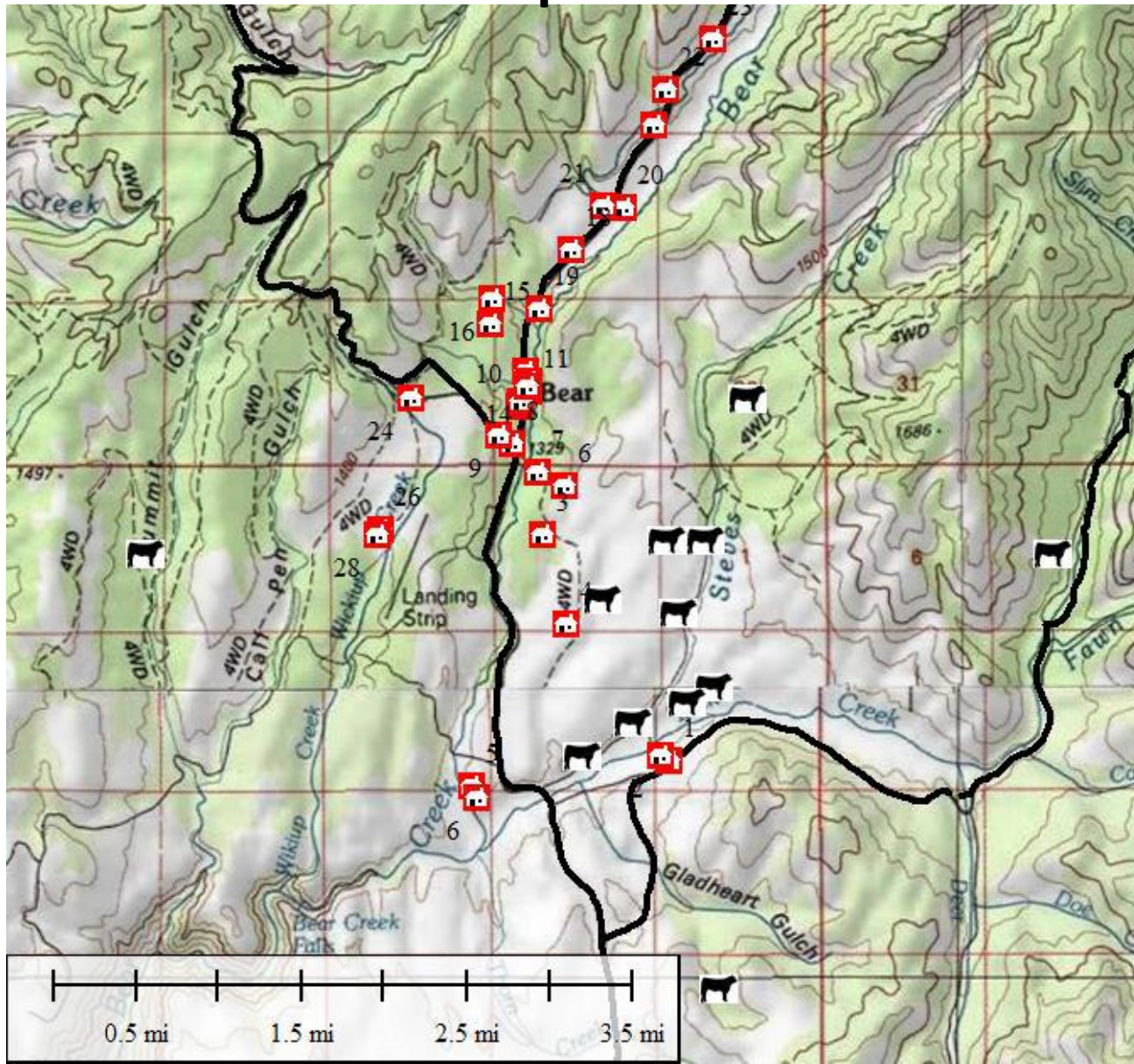
Each position is a red dot





# Cow Depredations in Calving Pasture

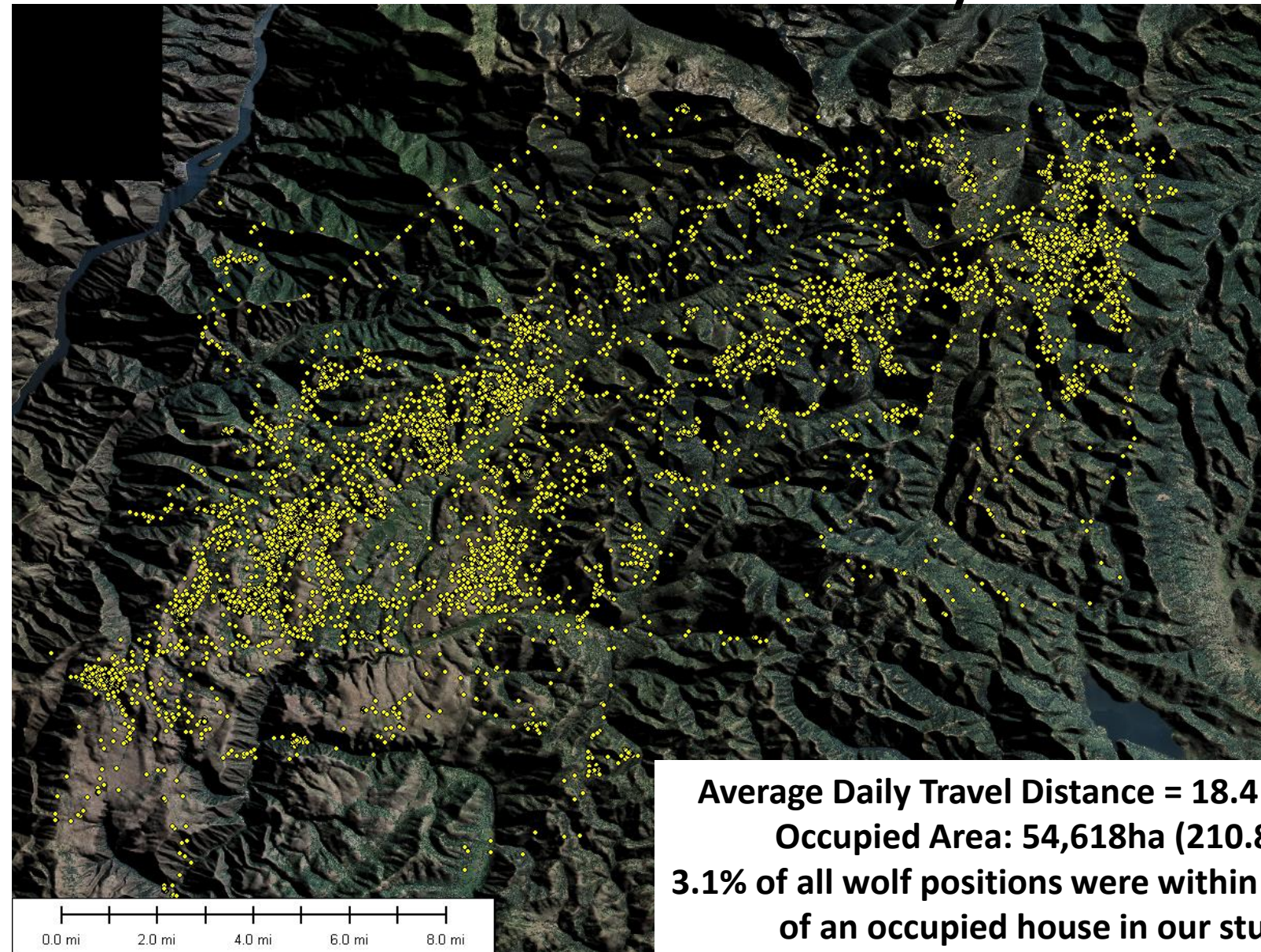
## March to September 2009



Main  
Roads  
are in  
Black



# Wolf B446 Locations 22 May - Nov 30, 2009



**Average Daily Travel Distance = 18.4 km (11.4 mi)**  
**Occupied Area: 54,618ha (210.8 sq. mi)**  
**3.1% of all wolf positions were within 500m (547 yd)**  
**of an occupied house in our study area**

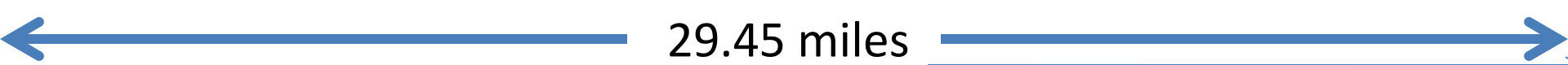
**Maximum distance covered in 1 hour was 6.29 mi and in a 2 hours 8.39 mi.**

# Wolf B446 –Collared Cow Interactions

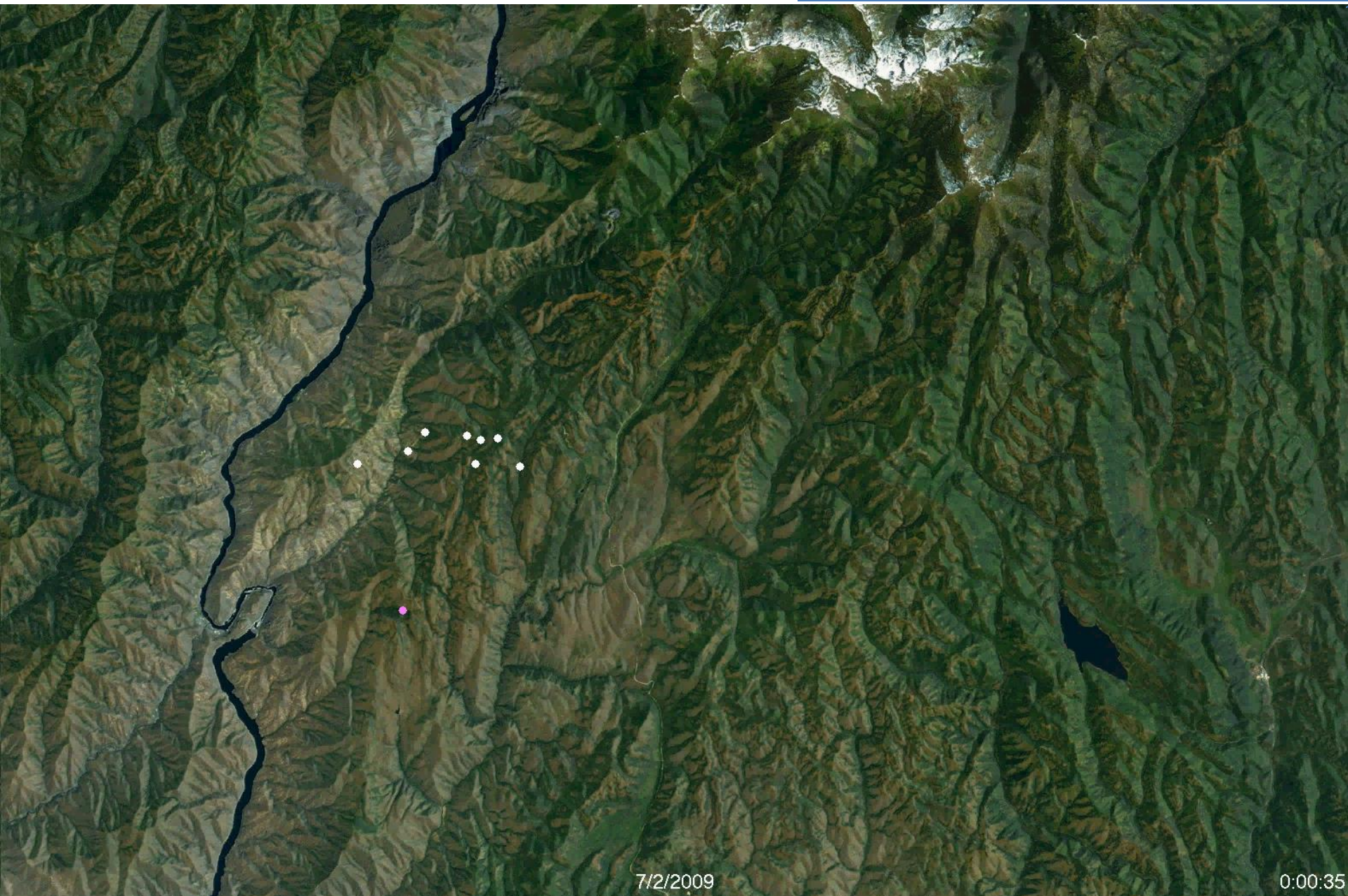
Animal	Cow/Wolf B446 Interactions (Count)		
	547 yd. (500 m)	273 yd. (250 m)	109 yd. (100 m)
Cow Collar 003	73	24	3
Cow Collar 005	121	43	5
Cow Collar 008*	41	14	3
Cow Collar 018	61	10	0
Cow Collar 019	99	36	7
Cow Collar 020	140	37	12
Cow Collar 021	93	20	5
Cow Collar 022*	23	4	1
Cow Collar 023	52	15	2
Cow Collar 024	80	41	15
<b>Total</b>	<b>783</b>	<b>244</b>	<b>53</b>

\* Animals marked with a star lost calves during the summer grazing season.





29.45 miles

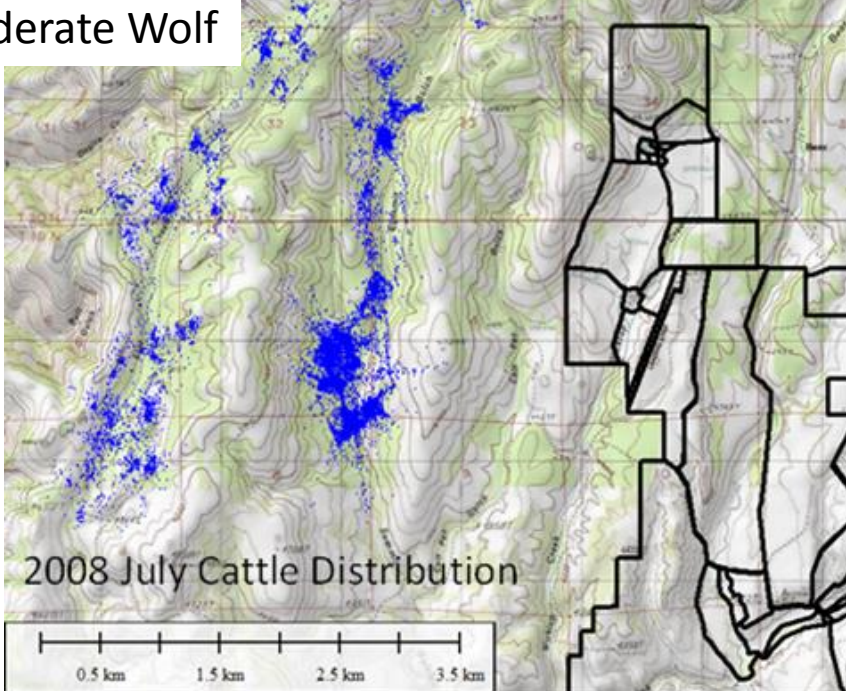


7/2/2009

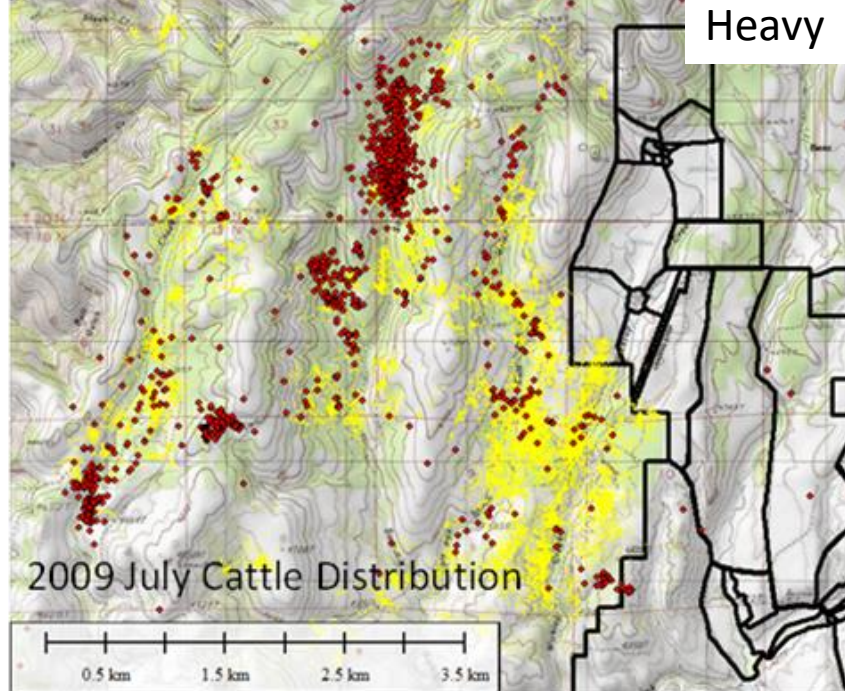
0:00:35



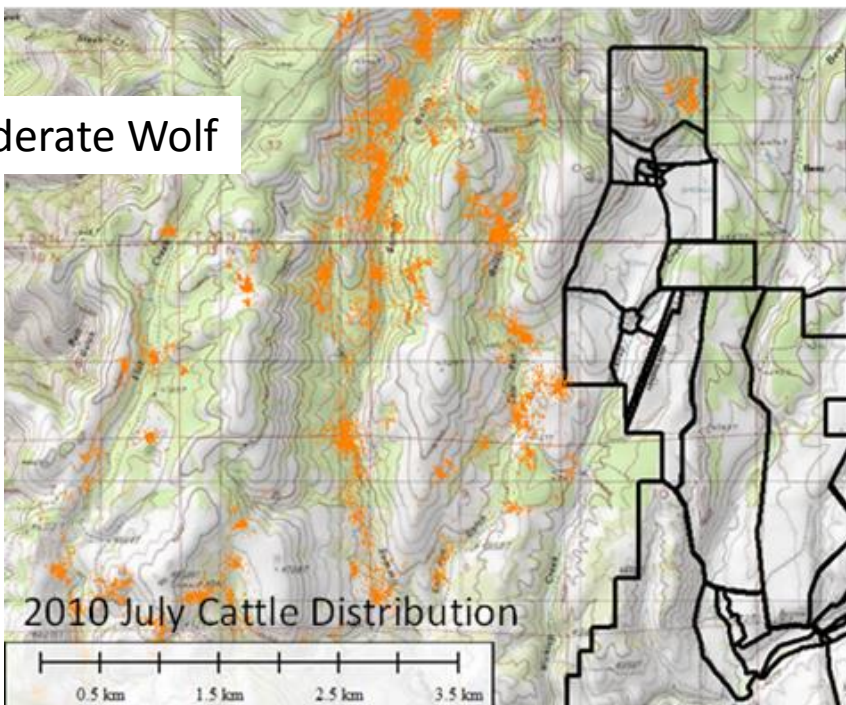
Moderate Wolf



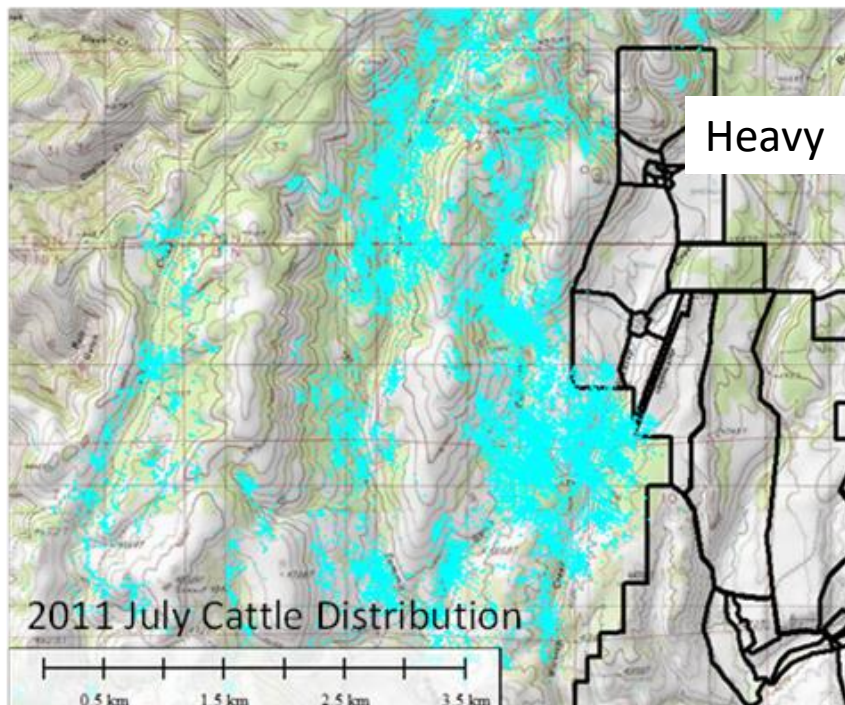
Heavy Wolf



Moderate Wolf

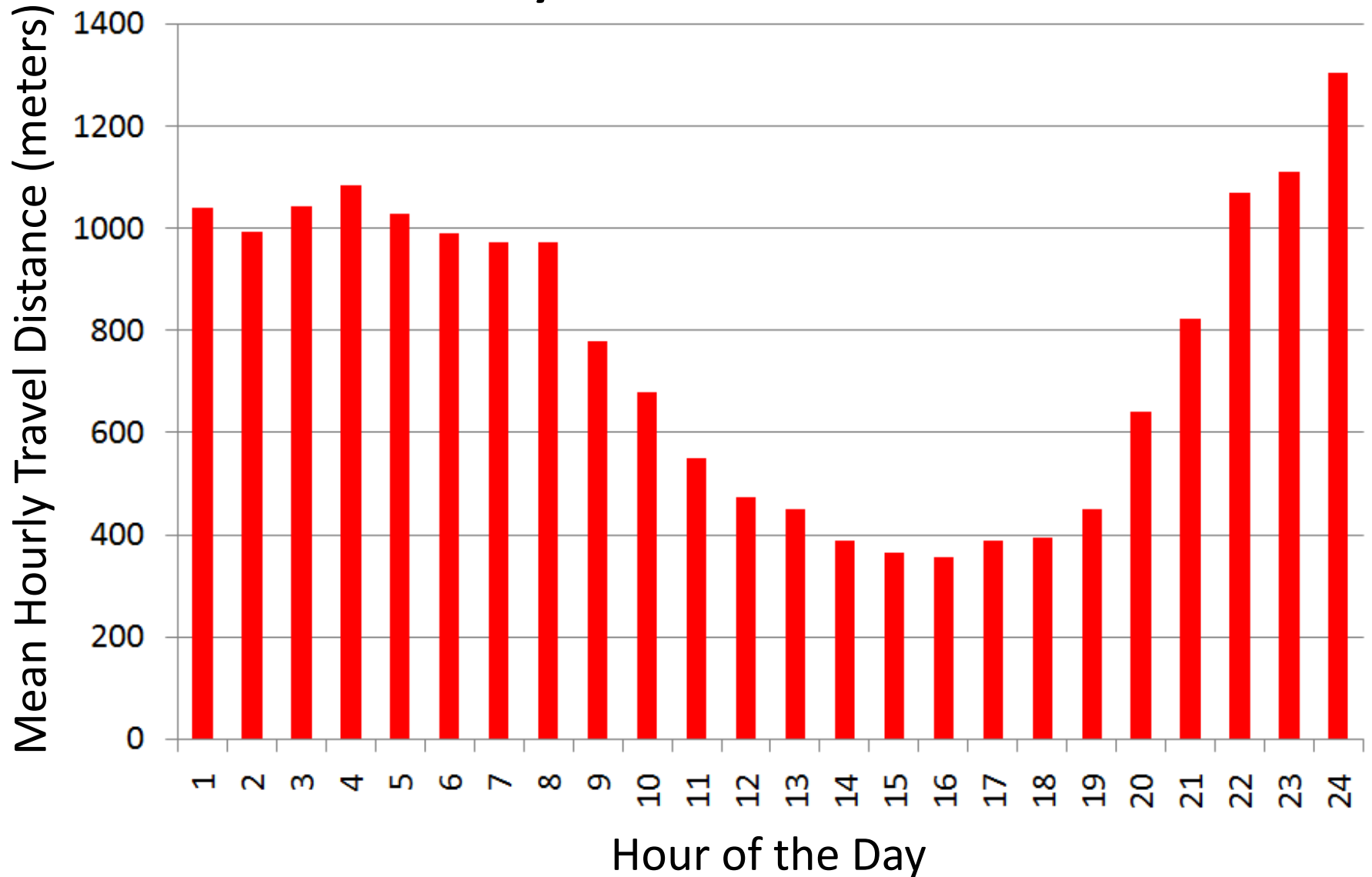


Heavy Wolf



# Wolf B446 Mean Hourly Travel Distance

## 22 May - Nov 30, 2009





# What we have found

- Wolves can frequently interact with livestock, mostly at night,
- Wolves alter livestock behavior
  - Spatial
  - Temperament
- Wolves increase the cost of livestock rearing on extensive rangelands
- No easy fixes
- With different ranching/agricultural systems methods of protecting livestock change
- We have to have solid data to make rational decisions



# Collaborative Project

## Using an Adaptive Management Approach

- USDA Agricultural Research Service Boise - Dr. Pat Clark
- Oregon State University – Dr. Douglas Johnson & Mr. John Williams
- University of Idaho – Dr. Neil Rimbey
- Funding Provided By:
  - USDA ARS
  - OSU & Oregon Experiment Station
  - Oregon Beef Council
  - Idaho National Laboratory (Engineering Grant)
- Other Collaborators
  - Boise State University College of Engineering
  - Oregon State University College of Engineering
  - Other Universities & Consultants