# Wolf Ecology Concepts

We often use simple concepts to help explain the natural history of a species, but the underlying story is always more complex.

# Wolf Ecology

## Basic Concepts

- One line descriptions
- Easy and useful
- Can be misleading

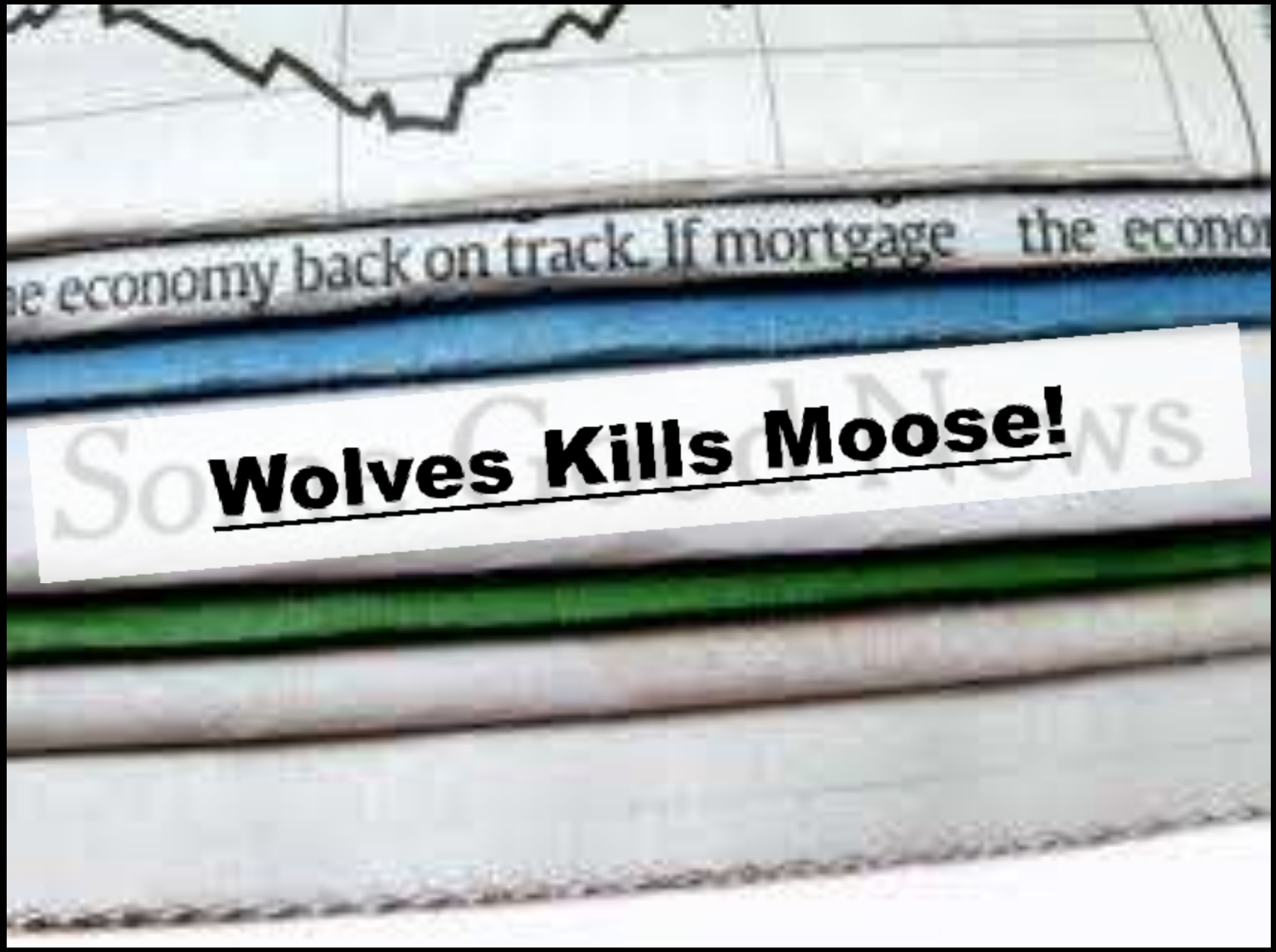
## The whole story

- Based on observations and data
- Hard to get all the facts
- Constantly changing and developing

# Outline

- Review 3 wolf natural history concepts and reveal the rest of the story

- Wolves kill moose
- Wolf packs defend territories
- Alphas lead the pack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Wolves Kills Moose!

# Predation: Wolves don't always win

Known wolf mortality causes

Denali: 1986-2012

- 1 porcupine
- 1 moose
- 1 moose or wolf
- Many more unknown causes

Yellowstone: 1995-2000

- 5 elk
- 1 bison

# Predation: Look before you leap

Search

Watch

Approach

Attack

Success

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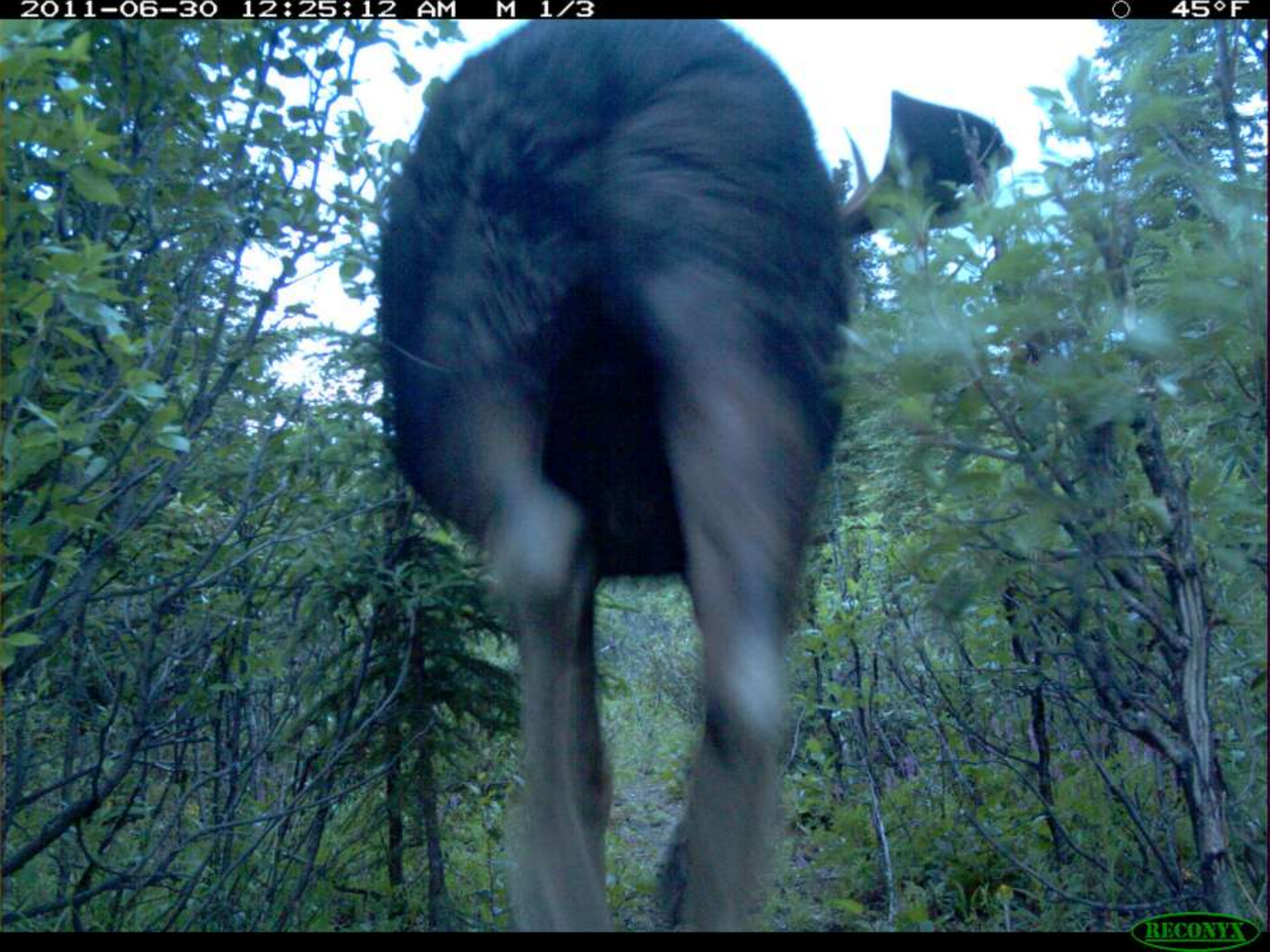
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Me, prey?
Not today.
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Wolf packs defend territory

# Wolf Territories

Territoriality: Implies defense of an area

- Area defended is not as clearly defined as a map may indicate
  - Territory shifts can occur seasonally or year to year
  - Constantly shifting mosaic of pack territories seen especially in exploited populations

# Wolf Territories

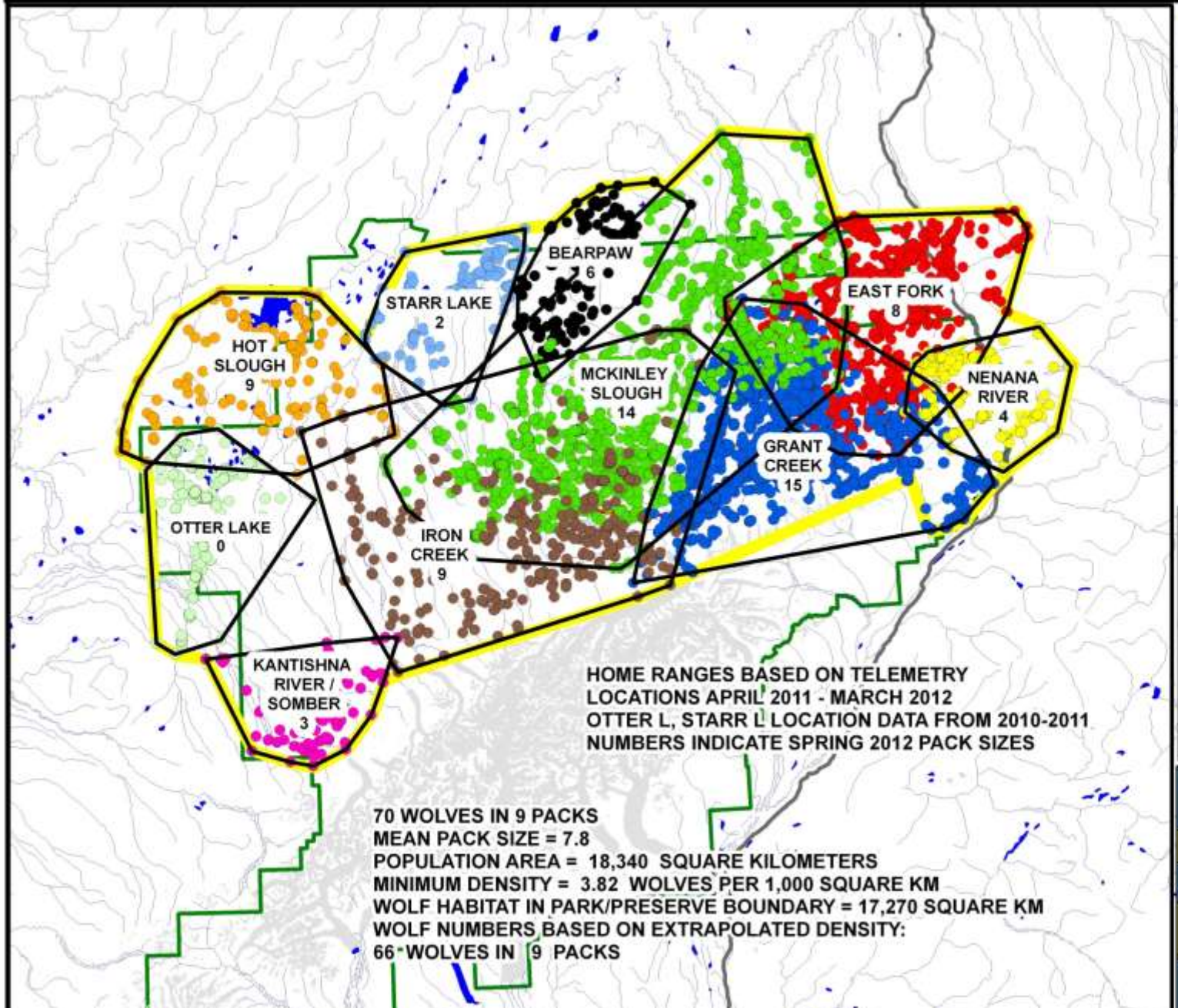
Territoriality: Implies defense of an area

- Areas of overlap
  - Neighboring territories may overlap
  - The same area may be used by several packs but not at the same time

# Spring 2012 Wolf Population Estimate

DENALI NATIONAL PARK AND PRESERVE

Alaska Region
National Park Service
U. S. Department of the Interior




**Legend**

packs

**Wolf_Locations**

**Pack**

- BEARPAW
- EAST FORK
- GRANT CREEK
- HOT SLOUGH
- IRON CREEK
- KANTISHNA-SOMBER
- MCK SLOUGH
- NENANA RIVER
- OTTER LAKE
- STARR LAKE

Population Area
Park Road
George Parks Highway
Rivers
Lake
Park Outline- DENA
Glaciers

National Park Service
Denali National Park and Preserve
March 15, 2012

0 5 10 20 30 40 Kilometers

N W E S

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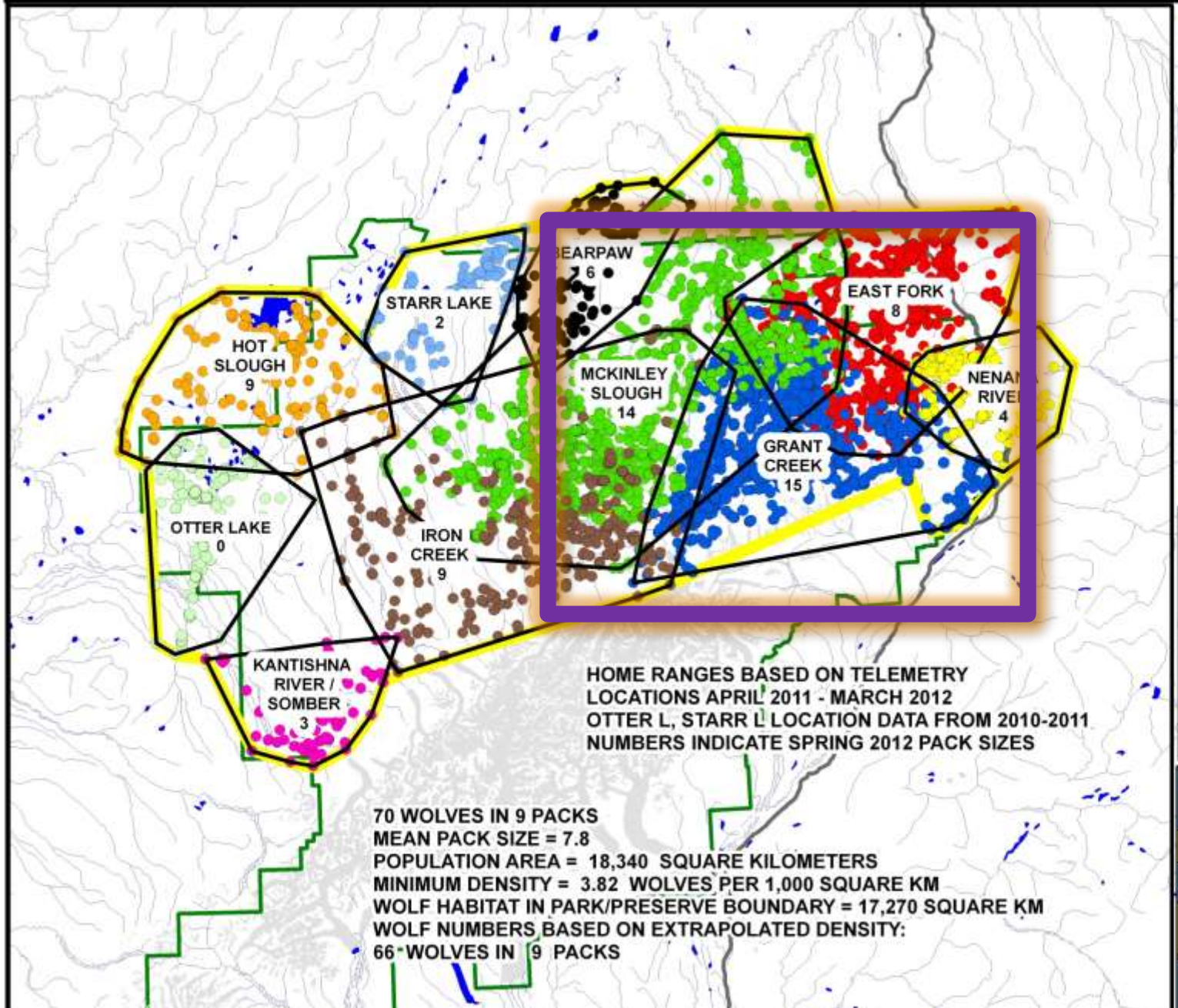


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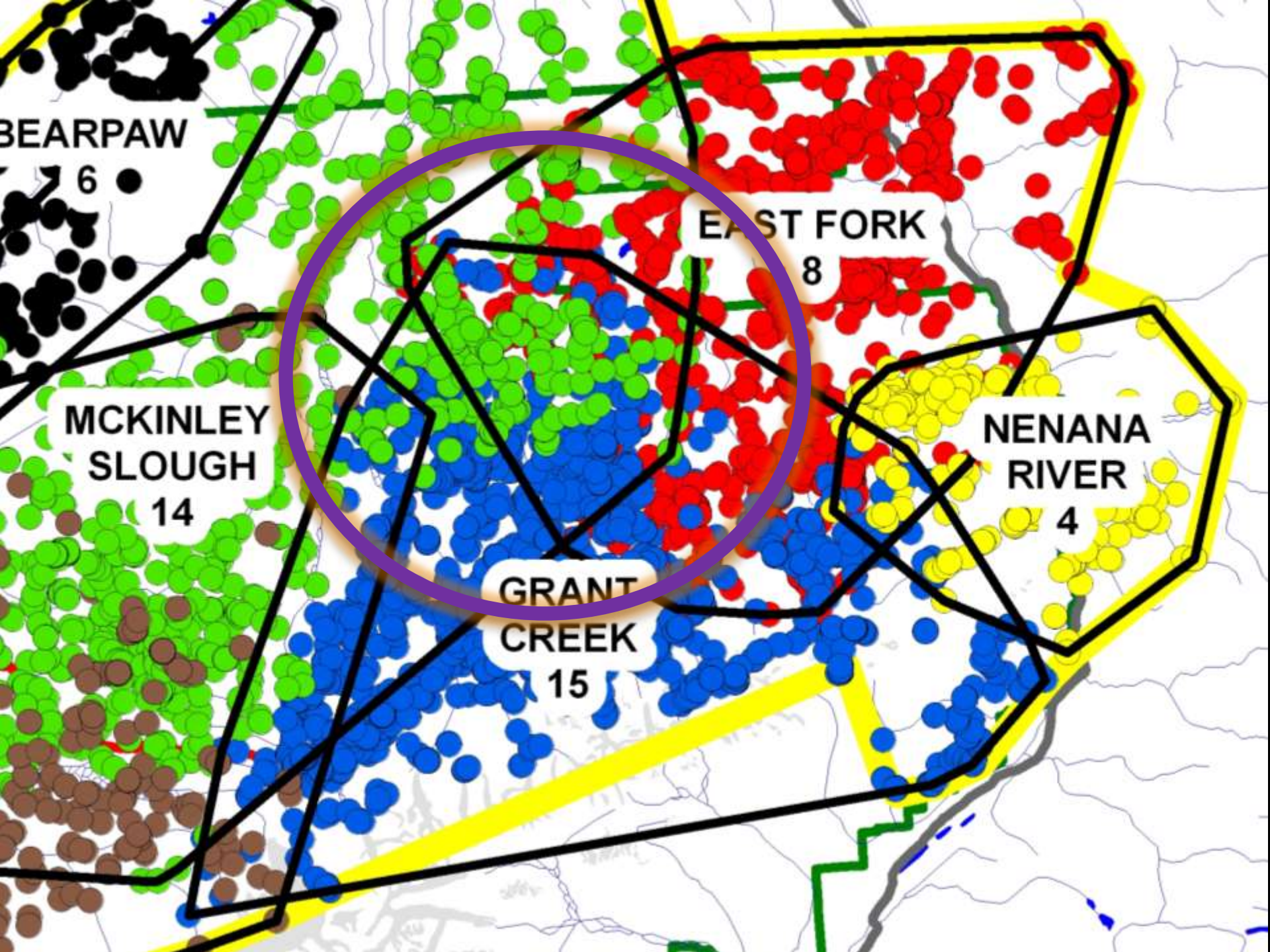
BEARPAW
6
EAST FORK
8
MCKINLEY
SLOUGH
14
NENANA
RIVER
4
GRANT
CREEK
15

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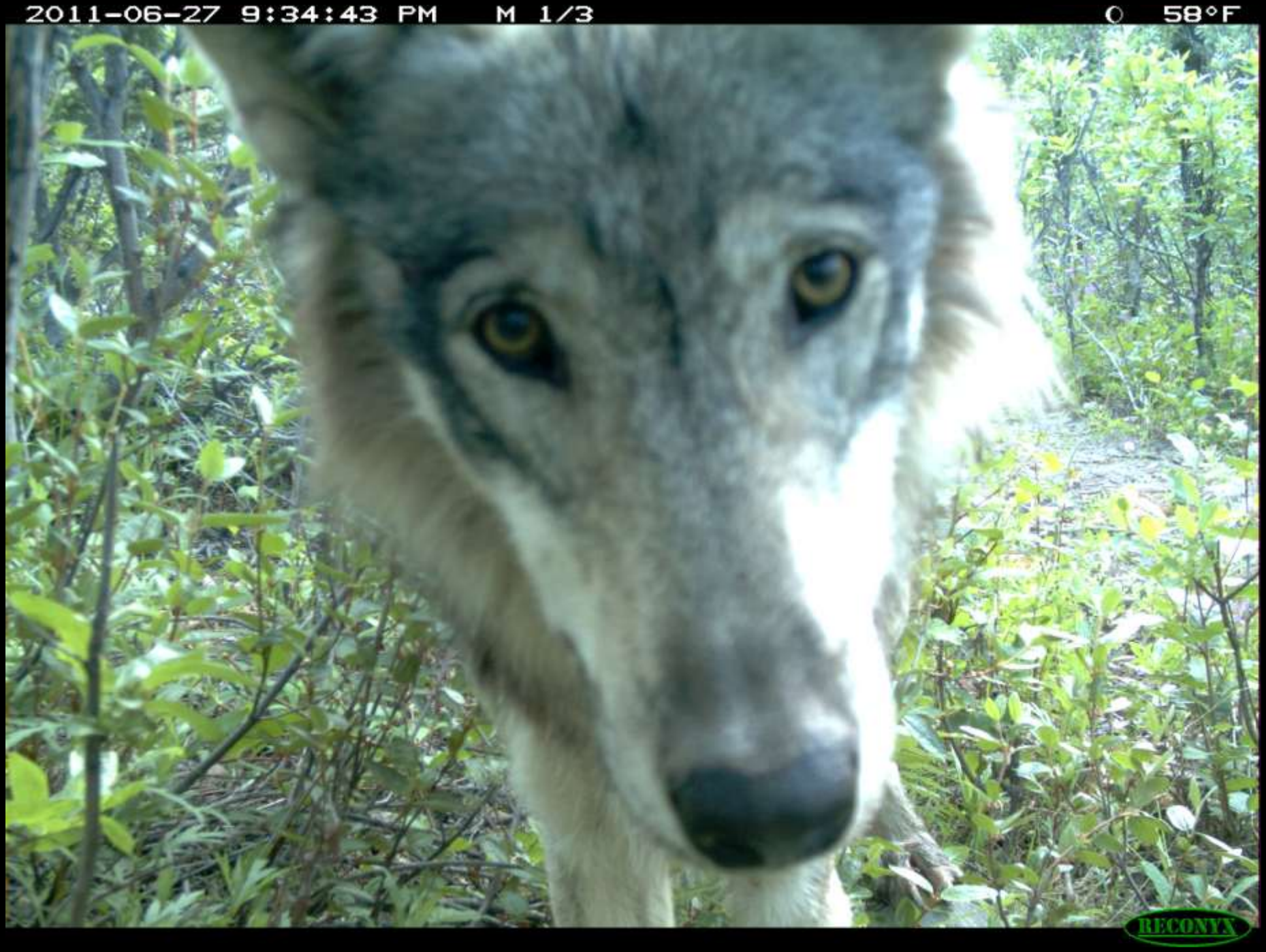
Alphas lead the pack

# “Breeder” versus “alpha”

- The term “alpha” originates from studies of wolf social dynamics in captive wolf packs
- In nature, wolf packs are a family unit, consisting of a mated pair and their offspring
- Occasionally variations to this pack structure exist

# “Breeder” versus “alpha”

- In a wolf pack, the parents (breeders) are naturally dominant to their offspring
- Dominance cues include
  - Leading pack travel
  - Posturing
  - Scent marking
  - Food ownership
- “Alpha” term may be useful to distinguish between multiple breeders in a pack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# If you have any additional questions, contact:

Bridget Borg

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# Selected References


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