

# Ranching & Conservation:

## *The Sandhills Task Force's Landscape Impact*



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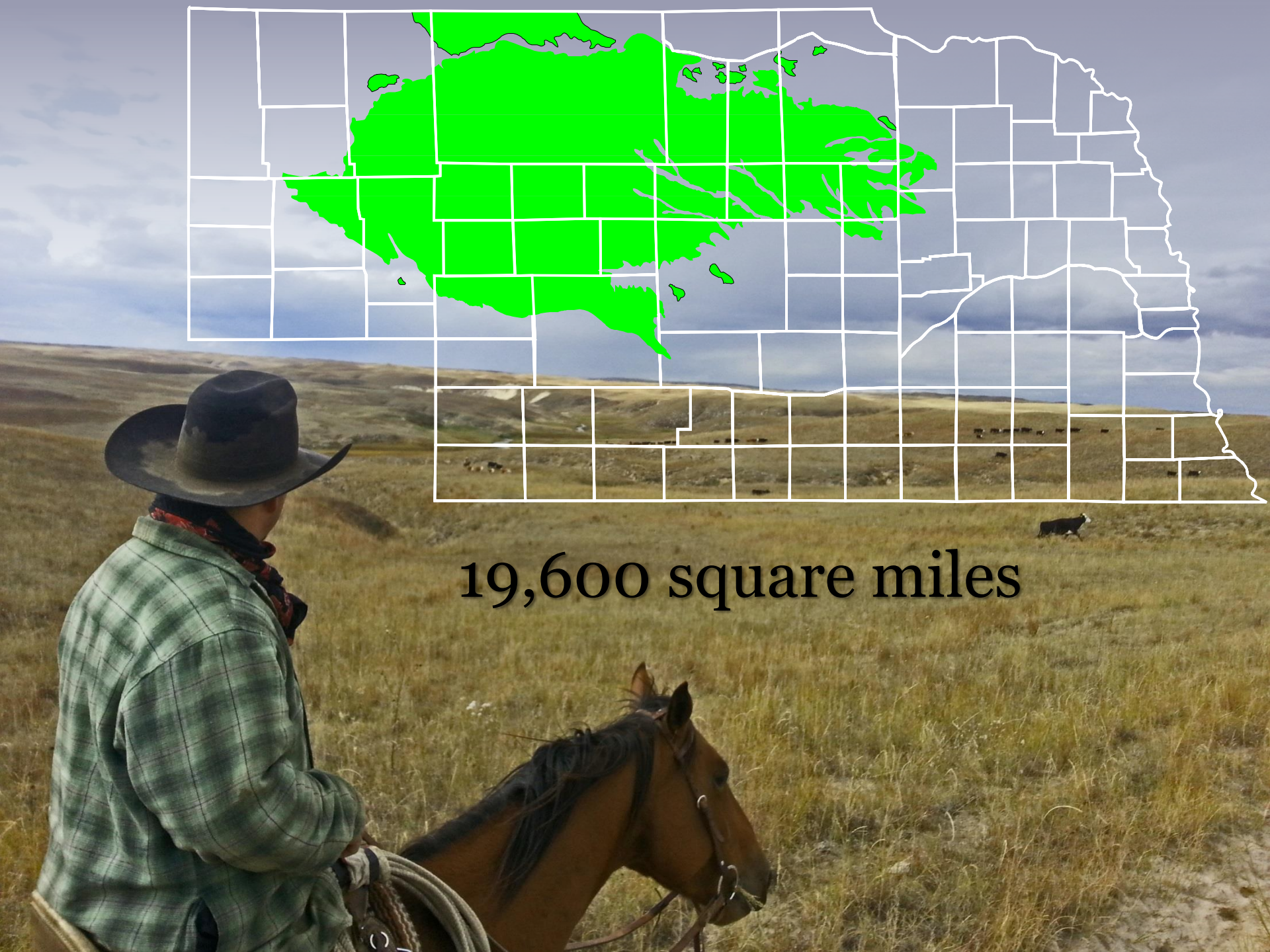


# Overview

- Information about the Nebraska Sandhills
- Sandhills Task Force
- Projects & Impacts







19,600 square miles





Tip Pile  
at Hyannis, Neb.



# Nebraska Sandhills

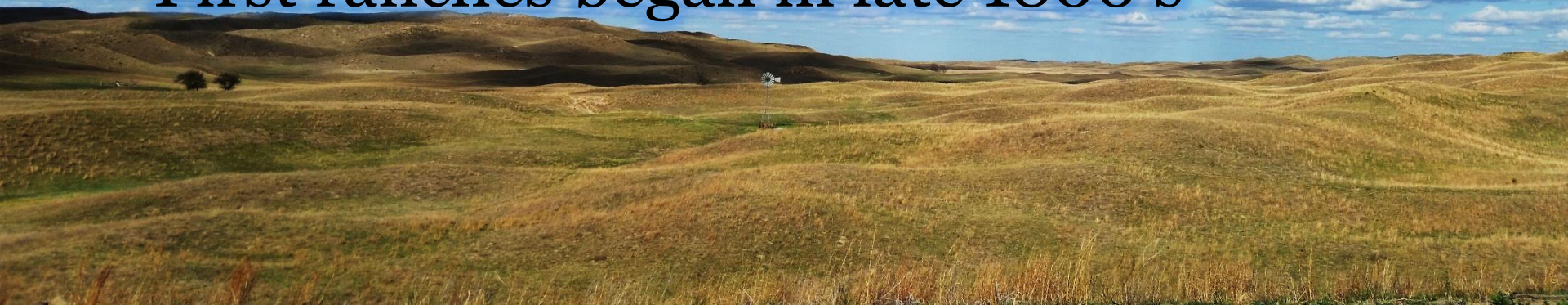
- Largest contiguous native grassland in North America.





# Nebraska Sandhills

- 19,600 square miles
- 90% private ownership
- 95% grassland
- About 1 billion acre feet of groundwater
- 1.3 million acres of wetlands
- 1,500 – 2,000 lakes
- First ranches began in late 1800's





# Nebraska Sandhills

- Geologically young formation.
- Once a spruce & aspen forest.
- Major droughts.
- Wind deposited sand.
- Stabilized in last 100 years.





# Water Resources

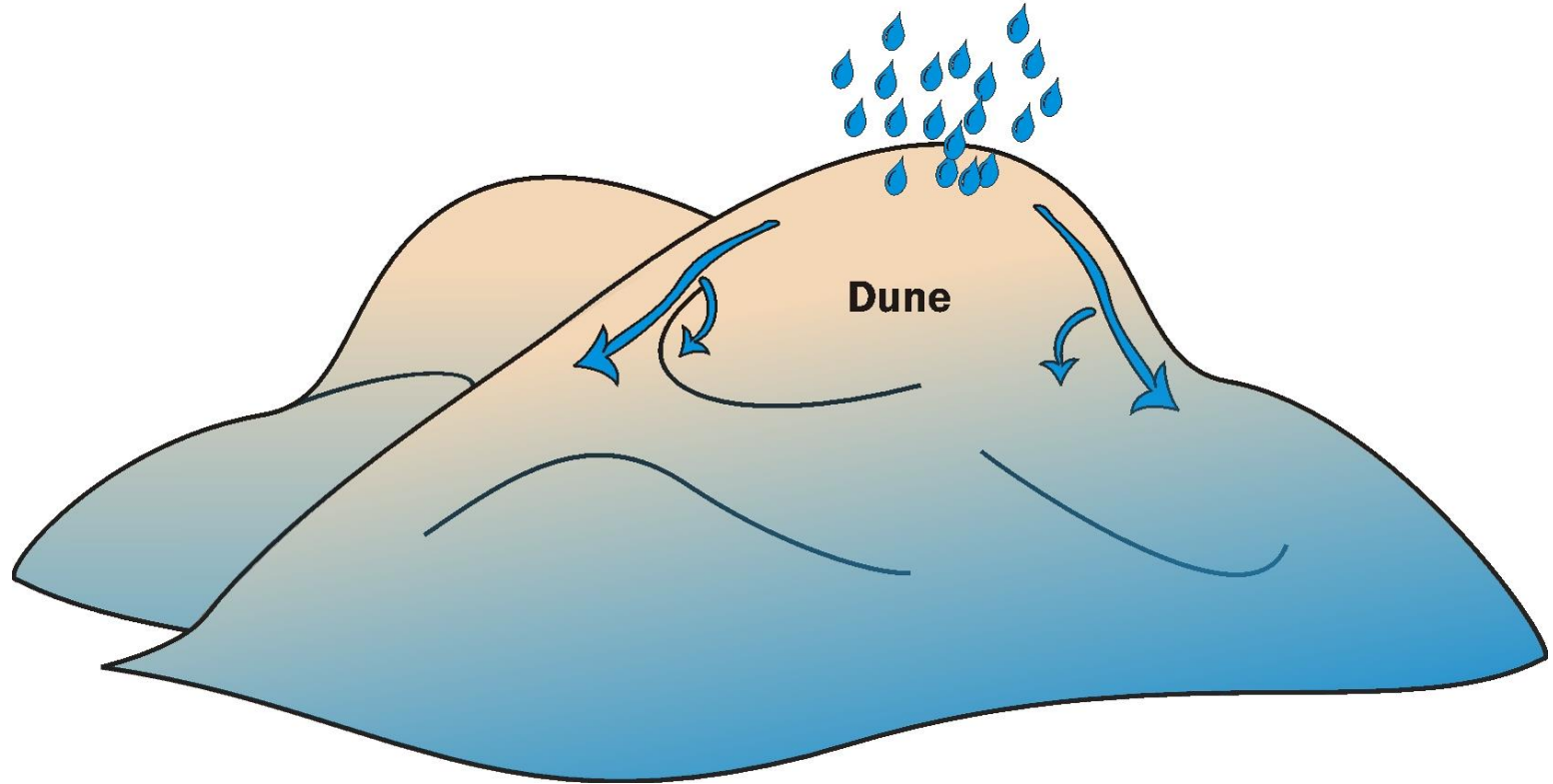






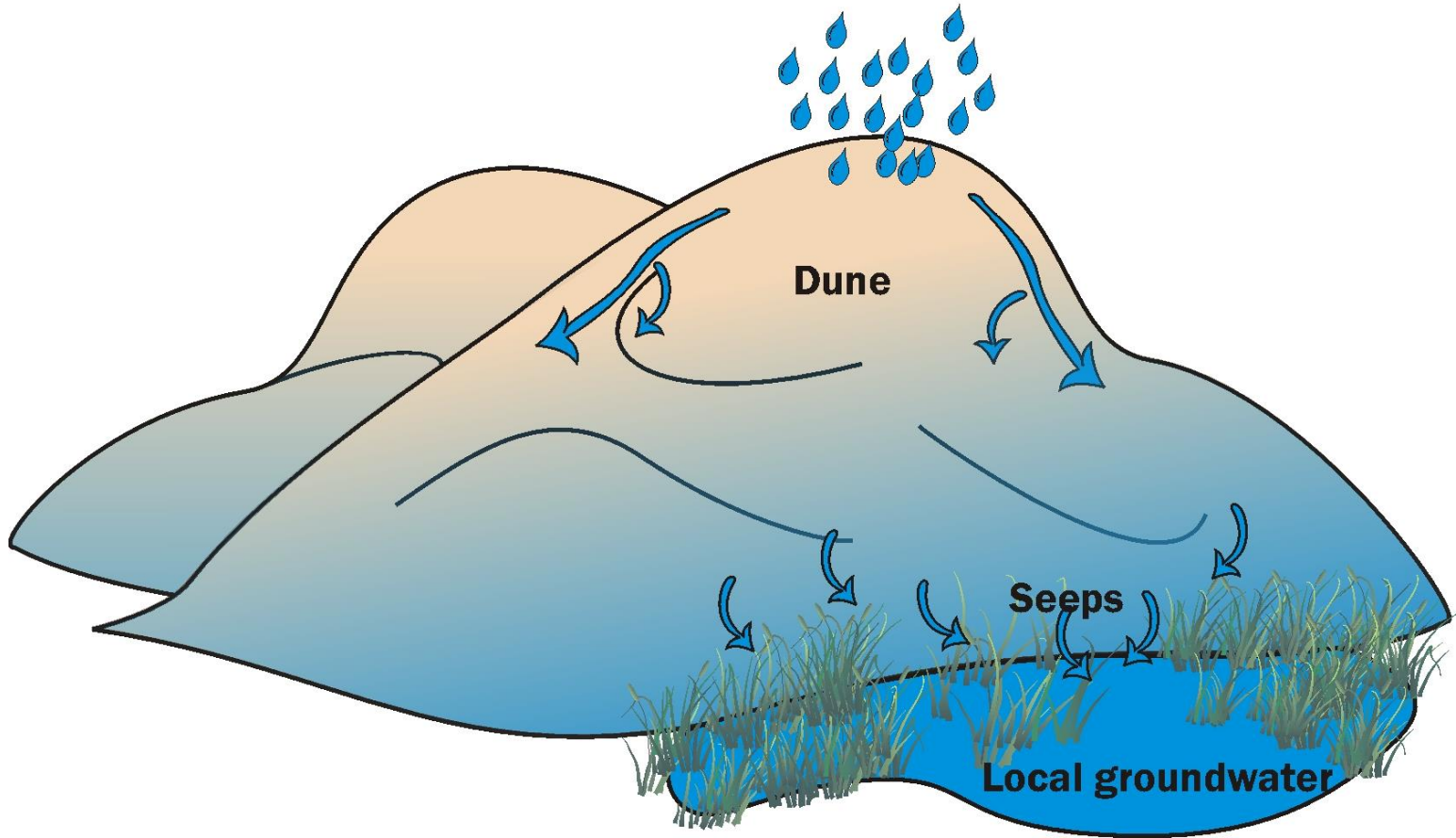


# Dune Hydrology



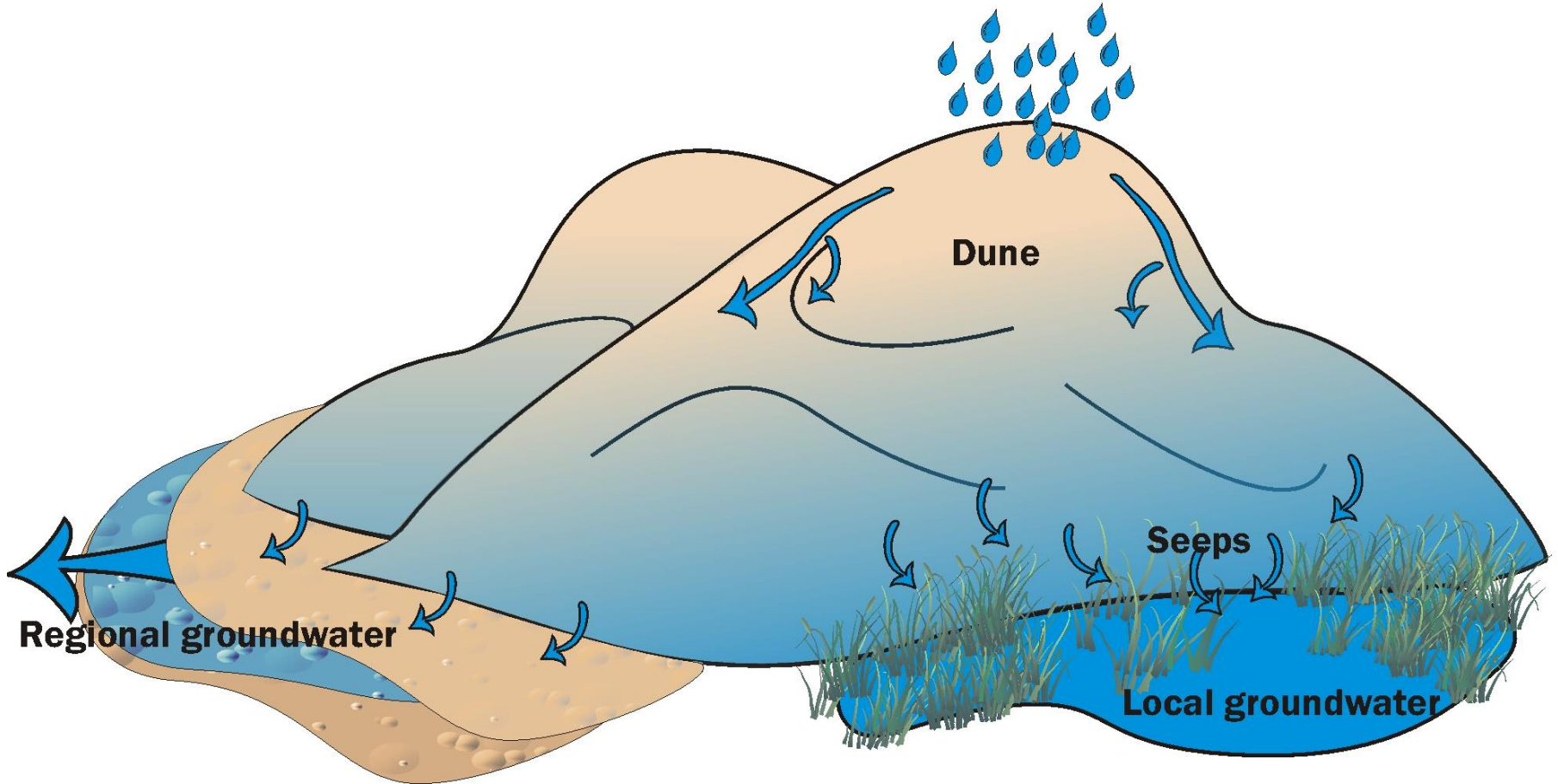


# Dune Hydrology





# Dune Hydrology











# *Sandhills Task Force*

*“Where People and Land are One”*

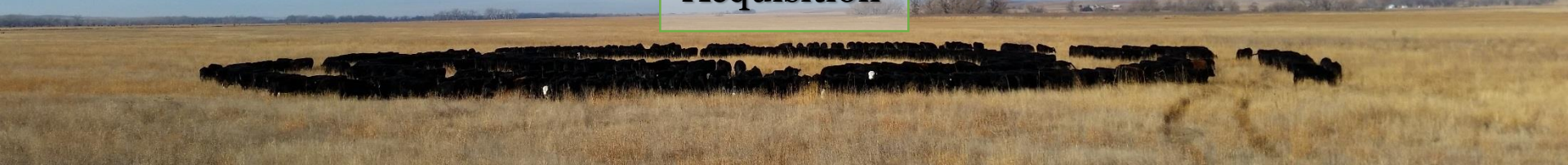
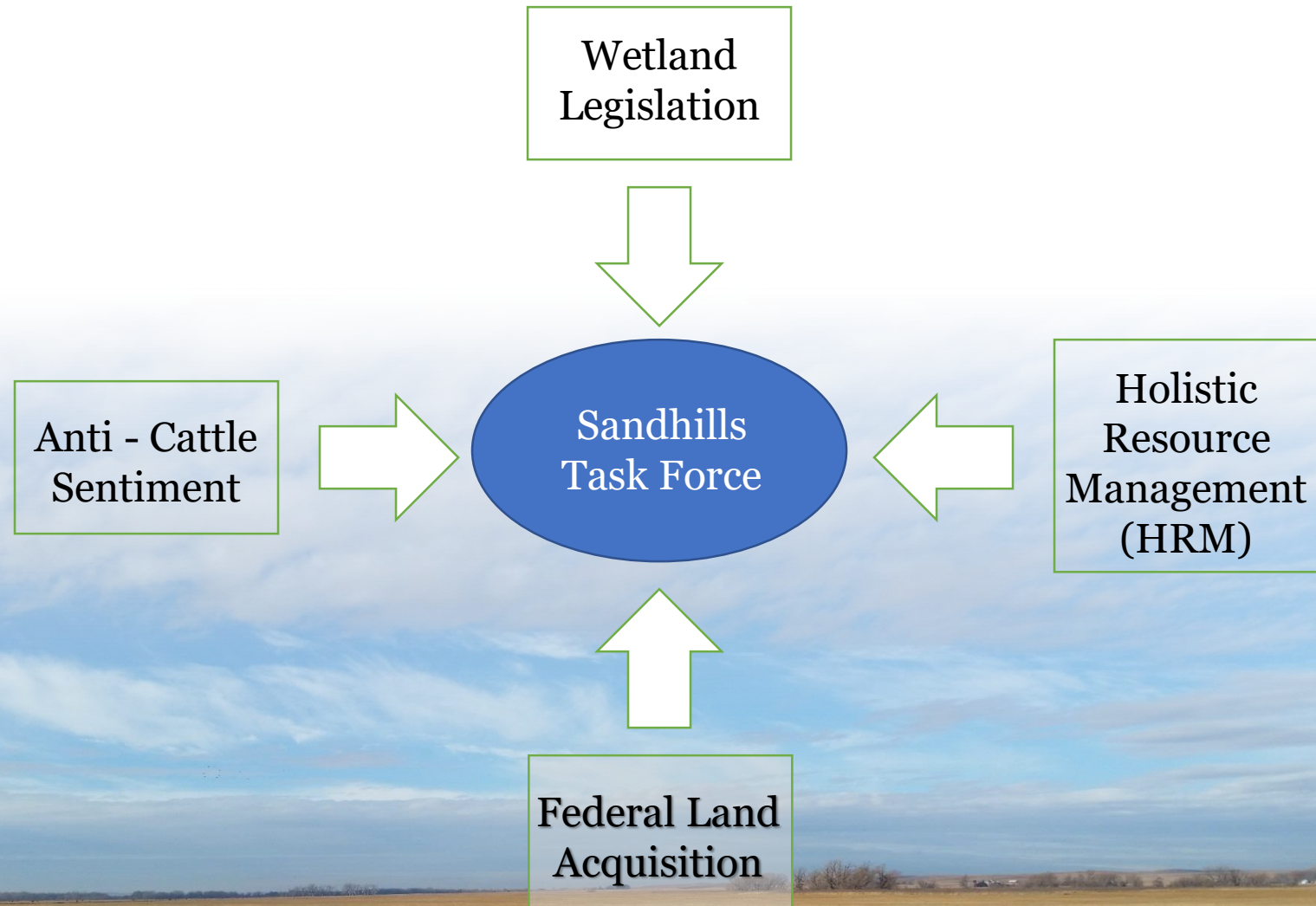
- Non-profit organization and land trust



Organized to enhance the Sandhill wetland-grassland ecosystem in a way that sustains profitable private ranching, wildlife and vegetative diversity, and associated water supplies.



# Formation of Sandhills Task Force





# Mission Statement

“To partner with ranchers; local communities, groups, and organizations; and local state and federal agencies to identify, prioritize, plan, and implement mutually acceptable projects that benefit private ranching, wildlife and vegetative diversity, and associated water supplies.”





*Sandhills Task Force*  
*“Where People and Land are One”*

- Established in early 1990s
- 16 board members
  - 9 ranchers
  - Representatives from Nebraska Cattlemen, NE Game and Parks Commission, US Fish and Wildlife Service, Natural Resources Conservation Service, The Nature Conservancy, Natural Resource District, County Commissioner



# Partnerships





# Landscape Strategies

- Restoring hydrology to streams and wetlands
- Designing grazing plans
- Eastern red cedar control
  - Mechanical treatment
  - Prescribed burn
- Invasive carp removal
  - Lake renovations
- Education/Outreach
  - Tours/meetings
  - Hands on burn training
- And more





# Grazing Management

- Economics & Tradition
  - One chance a year to get it right.
  - Profitability and wildlife habitat.
  - Peer Pressure
- Landscape view
  - Dynamic system



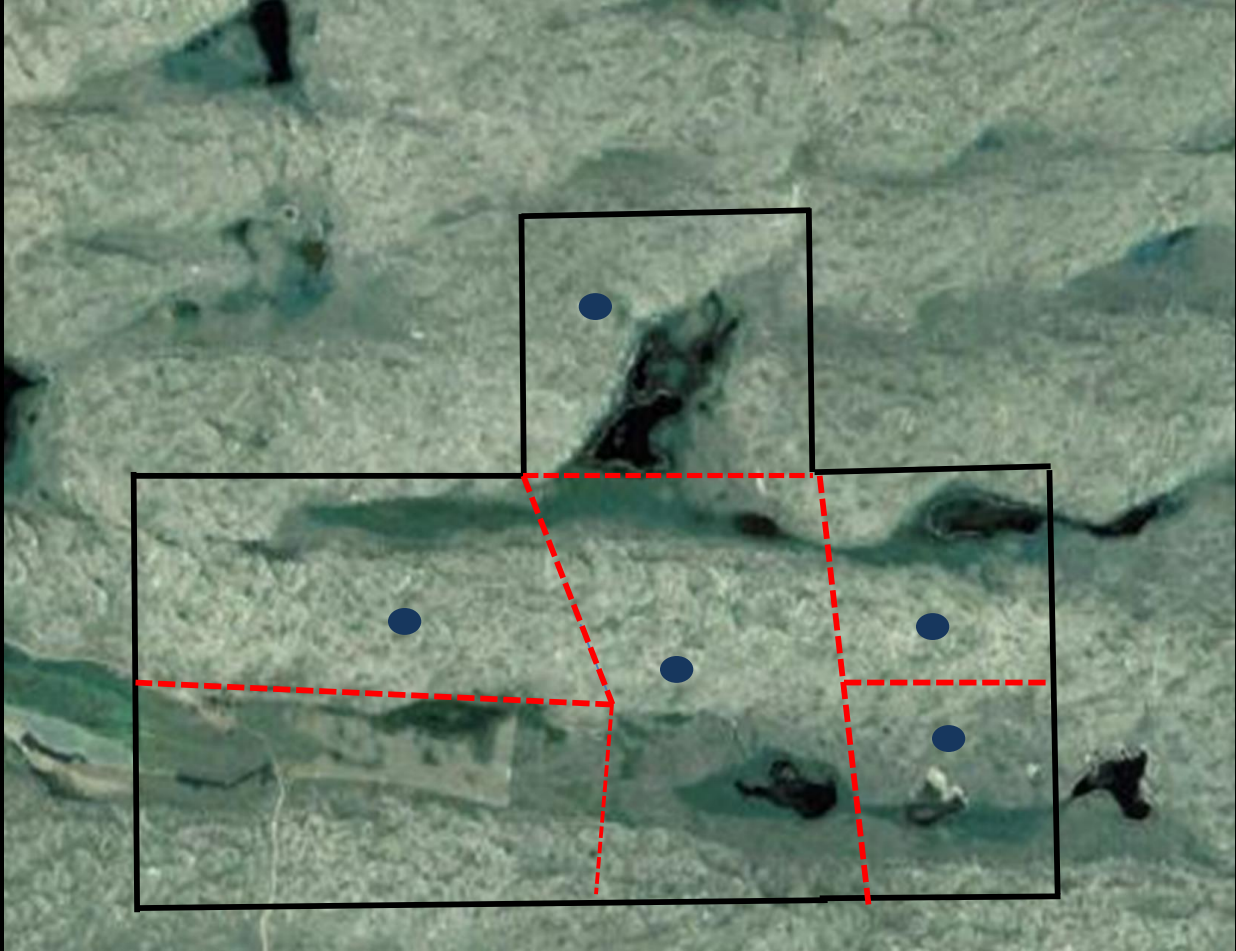


# Grazing Systems

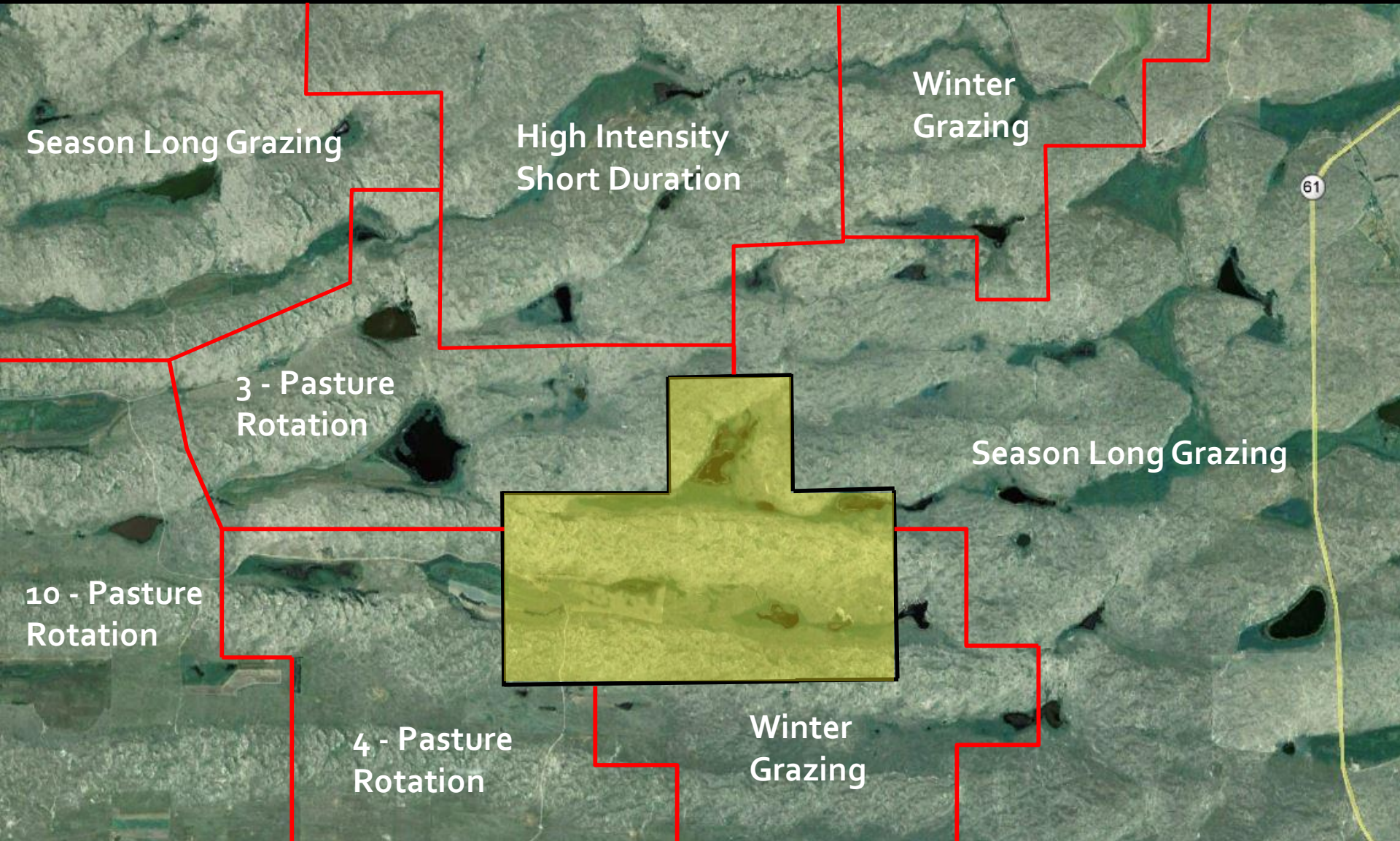
- Season long → Planned Grazing System
- Rotational Grazing
  - Provides opportunity for variable stocking rates
  - Restrict time of use (rest)
  - Manage invasive species
  - Fence wetland/riparian areas into units











Season Long Grazing

High Intensity  
Short Duration

Winter  
Grazing

3 - Pasture  
Rotation

Season Long Grazing

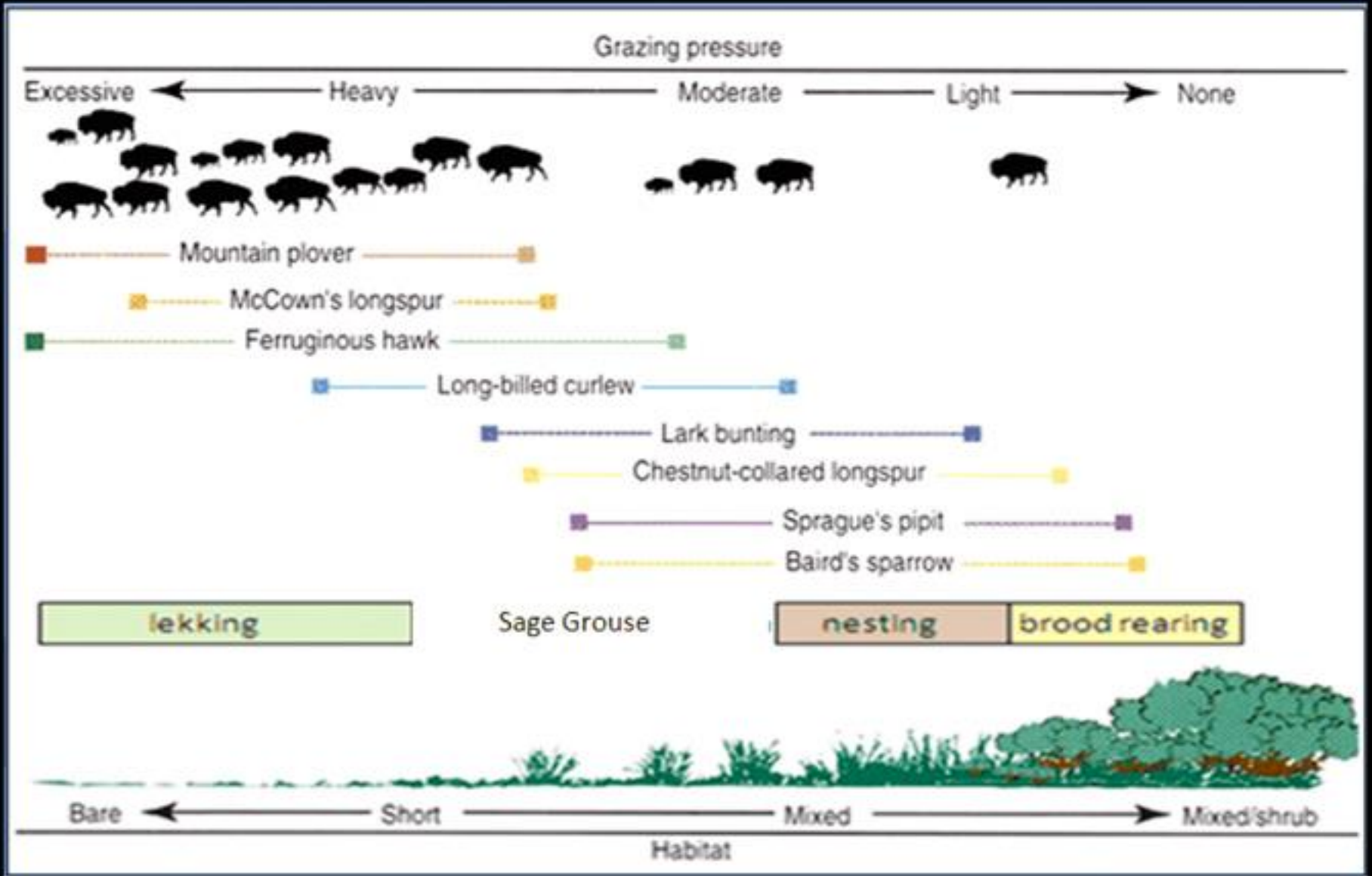
10 - Pasture  
Rotation

4 - Pasture  
Rotation

Winter  
Grazing

61









# Habitat Needs

- Ask wildlife ?
- Large tracts
- Umbrella Species
- Nesting -- Brooding --  
Foraging -- Roosting
- Residual cover from  
previous growing  
season





# Stream Restorations

- Down-cutting causes
  - Historic ditching
  - Road crossings
  - Connecting river/stream level lowered







































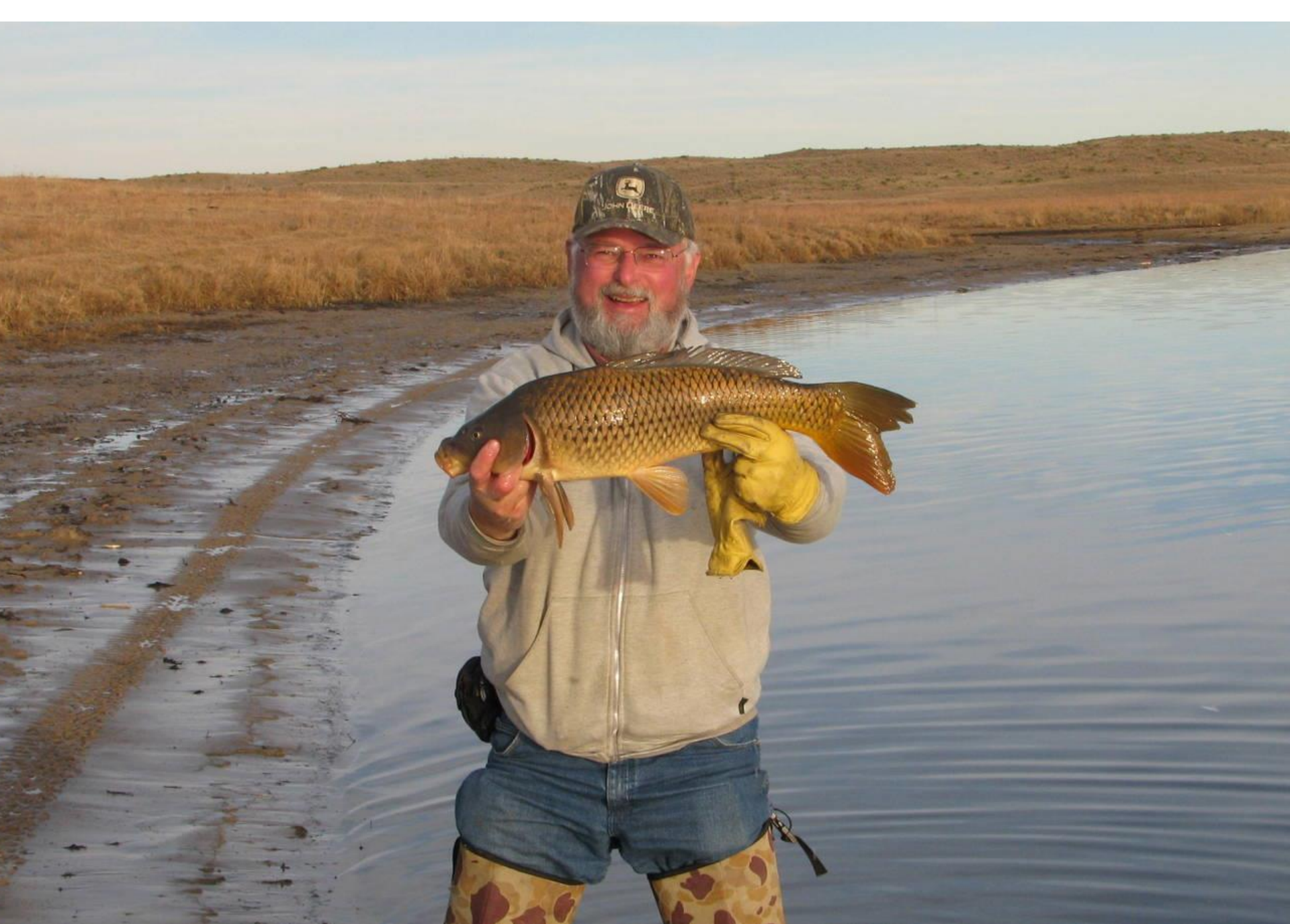






















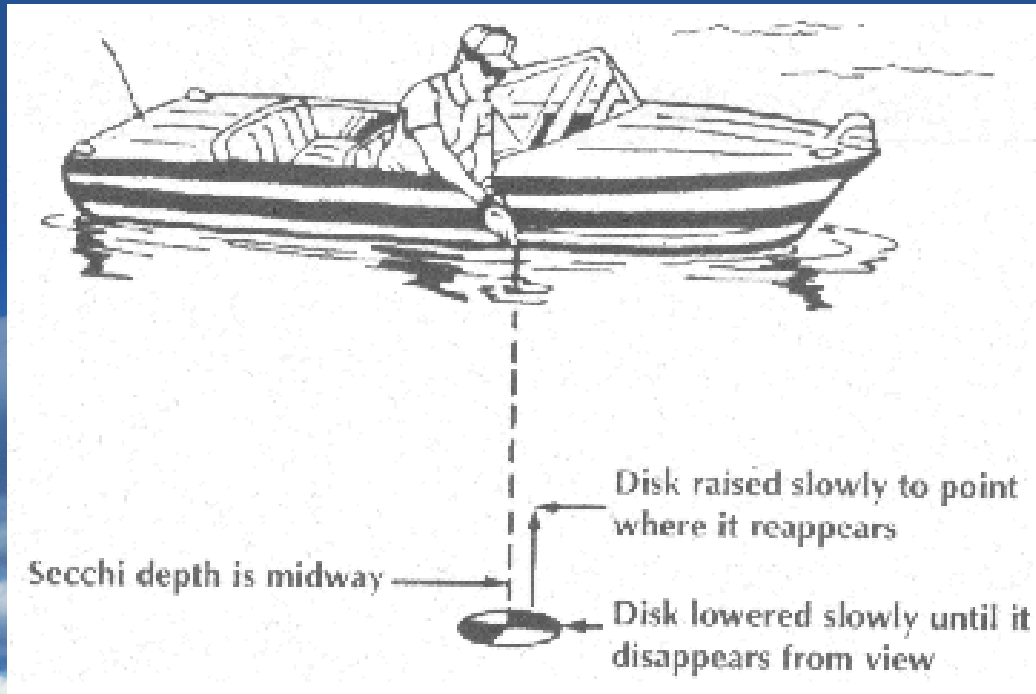








# How do we know it works?





# Eastern Red Cedar

- Pros
  - Easy to get established
  - Grows quickly
  - Dense
- Cons
  - Easy to get established
  - Grows quickly
  - Dense





# Overlooked Problems





# Overlooked Problems

- Old fields & CRP





# Overlooked Problems

- Accretion property





# Overlooked Problems

- That lone tree in the pasture.





# Obvious Problems







**Photo submitted by Vernon Hansen. Taken Sept 1965**





**January 2011. Taken by Jeff Nichols**



**1965**



**2011**





**1974**



**Submitted By: Vernon Hansen**



**2007**



**Photo By Brad Carlson**



**1974**



**2007**





# Control Methods

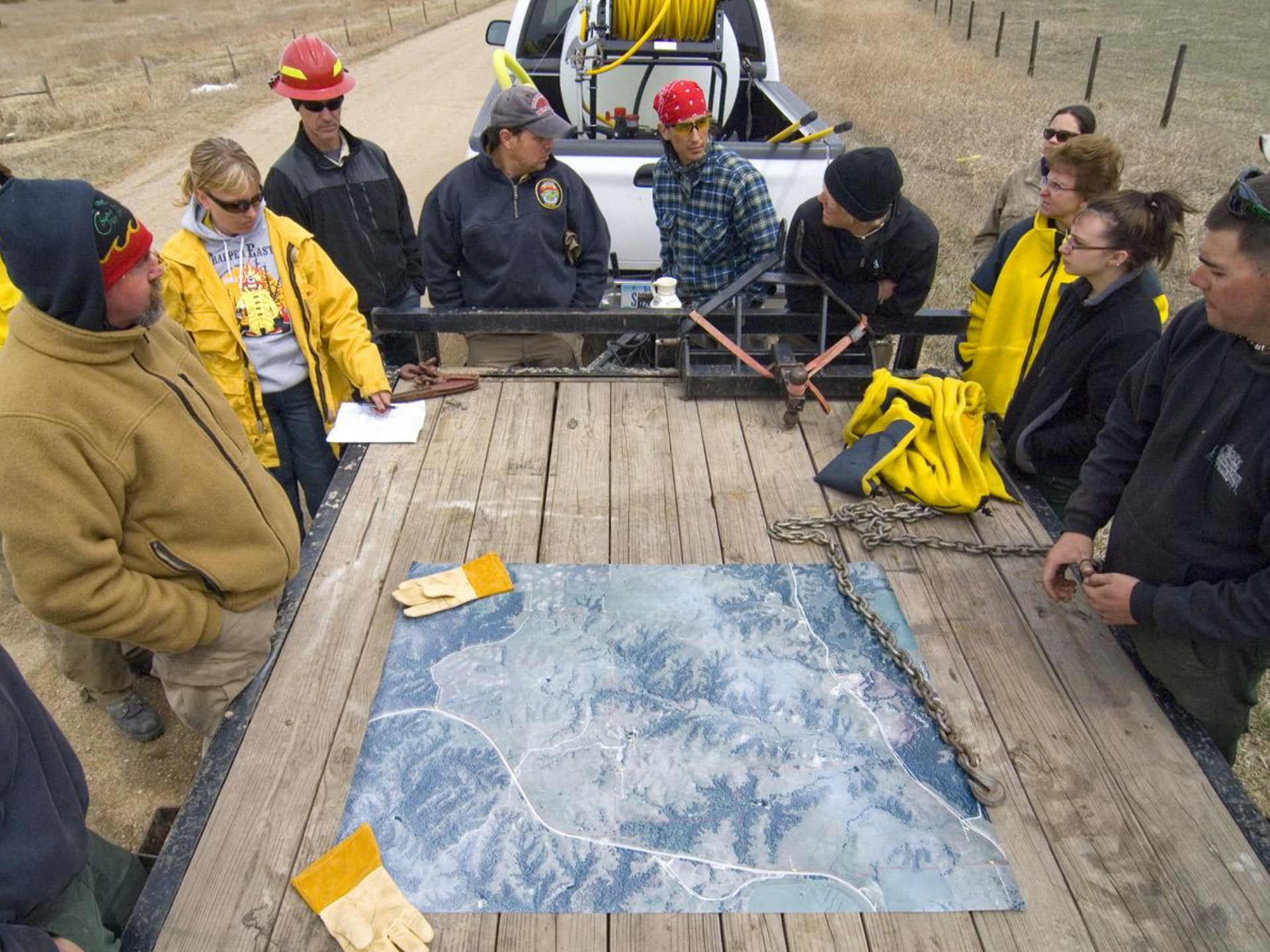
- Cultural
  - Prescribed Burning
- Mechanical
  - Cut below lowest branch
- Chemical

























**RANGE FIRES**

**ARE DESTRUCTIVE**  
**HELP PREVENT THEM**



An aerial photograph showing a landscape with dense brush and a fence line. The brush is dark green, and the cleared areas are lighter green. A black horizontal line represents the fence line, with a red arrow pointing to it from a box labeled 'Fenceline'.

Mechanical Brush Removal  
= \$150-\$400/Acre

Fenceline

Effectiveness = 30-100% short term



# STF and Partners Impact on Cedar Invasion

- Over 27,000 acres cleared of invasive cedars in the last 5 years
- Currently have 27,000+ acres in contract or in planning phase
- For every \$1 STF spends, \$4.46 is leveraged from partners
- Average cost of \$13.56/acre





A large fire is burning in a field, with a massive plume of dark smoke rising into the sky. The fire is bright orange and yellow, and the smoke is thick and black. The foreground shows a field of dry grass and some small trees. The background is a clear blue sky.

Take home message:

- Maintenance is required.



# Outreach

- Ranch Tours
- Informational meetings
- Hands on prescribed burn trainings
- Supporting Nebraska Youth Range Camp
- Supporting Nebraska Leopold Conservation Award
- Providing a scholarship for UNL Grazing Livestock Systems major















# HANDS ON Prescribed Fire Training

- 25 participants in Ericson!
- 80% had zero prescribed burn experience
- Successfully burned 2 units
- Shared a lot of information and people were able to ask lots of questions.

















# - **HANDS ON** - **Prescribed Fire Training!**

**Come learn prescribed fire techniques and safety measures from a professional prescribed burn contractor! Registration is FREE, Lunch is provided!**

Two locations in the Sandhills:

**Will be scheduled for spring of 2018**

How to Register:

**Email or text/call Tad to get on the contact list:**

[Tad@sandhillstaskforce.org](mailto:Tad@sandhillstaskforce.org)

**402-340-6839**



**Training sponsored by:**

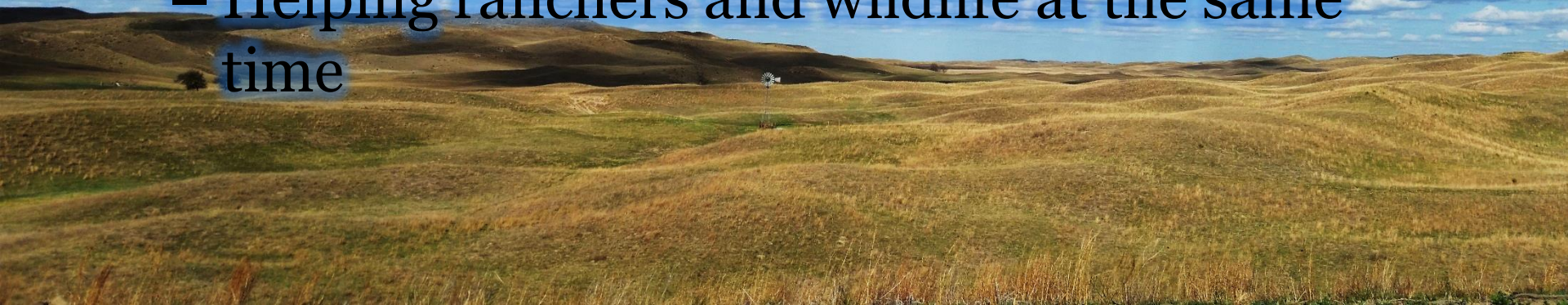
*Sandhills Task Force*  
"Where People and Land are One"





# Summary

- Information about the Nebraska Sandhills
  - Largest native, intact grassland in North America
- Sandhills Task Force
  - Non-profit organization
- Projects and Impacts
  - Helping ranchers and wildlife at the same time





# www.SandhillsTaskForce.org

Check our website to learn more and keep up with our activities. Find us on Facebook and Instagram!



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## HELPING PEOPLE HELP THE LAND

ENHANCING GRASSLAND ECOSYSTEMS WHILE  
SUSTAINING PROFITABLE RANCHING

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newsletters!



# Sources

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2. USFS – USDA. *Silvics of Forest Trees of the United States*. US Gov Printing Office.
3. University of Nebraska-Lincoln. *2012 Guide for Weed Management*. 2012

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