

# Sage-grouse in Utah: an overview

Presented to County Commissions/Councils  
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# Outline

- Basic sage-grouse biology/ecology
  - What is a sage-grouse ?
  - What it needs, where it lives, history
- 2009 Utah sage-grouse state wide plan
  - State level actions/strategies
- History and listing decision 2010
  - Candidate species decision
  - What this means for Utah and the counties
- Local working group plans
  - What we do, actions/strategies



# What is a sage-grouse?

'cock'



'chick'



'hen'



lek



nest/eggs





# Sage-grouse Leks

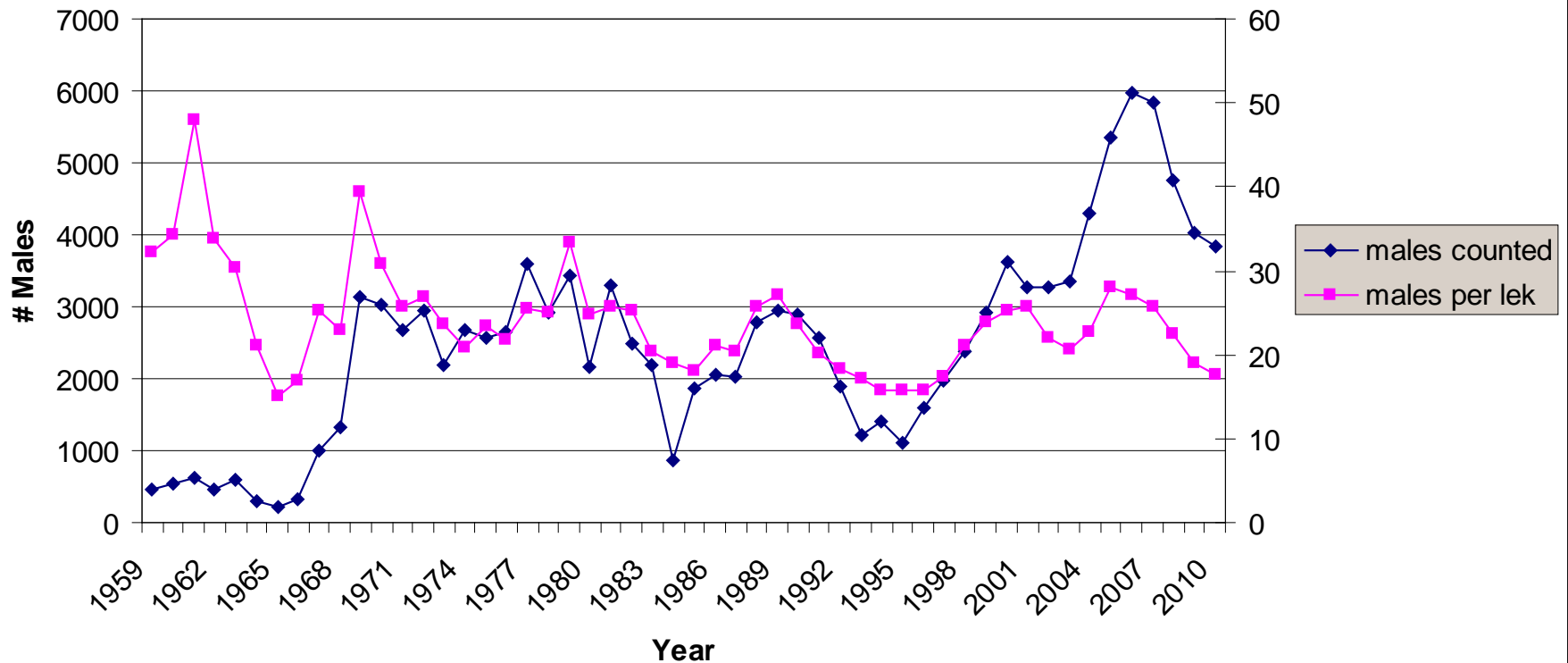
- A *lek* is a gathering of males, of certain animal species, for the purposes of competitive mating display.
- Utah's sage-grouse lek mid March through early May.
- Leks are very traditional -- some leks in Utah have been monitored/counted for over 50 years.
- Center point for population, population estimates and trends, hunting permit allocation



12 hens 4 males at Deseret Land and Livestock, 2010

# Number of male sage-grouse counted in Utah

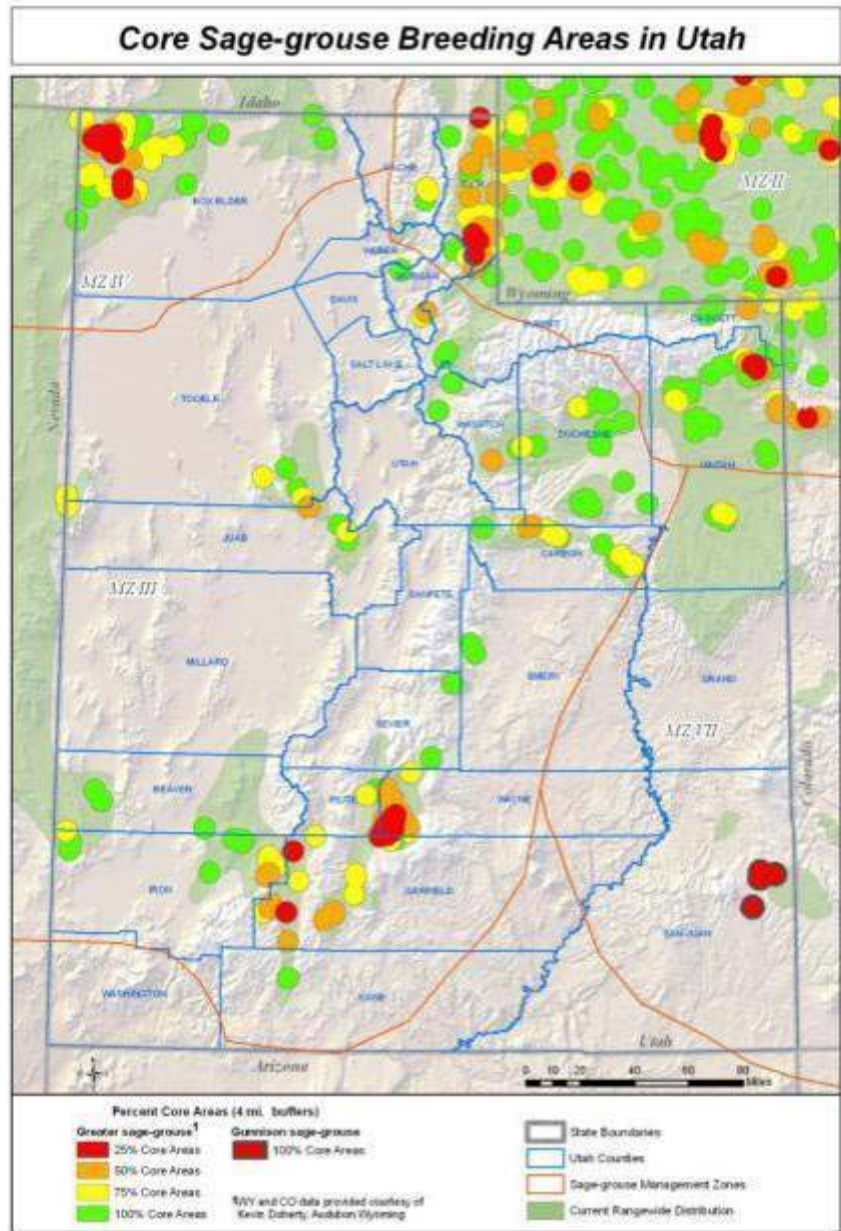
Utah Sage-grouse Max Males Count



*Increased counts in the past 10 years probably reflect increased searching effort, new leks, and increases in populations*



# Core Areas





# Nesting Habits

- Most hens nest within 4 miles of a lek
- Most nest under sagebrush
- 'Clutch' average ~8/nest
- 'Nest success' ~50%





# Survival

- Adult survival rates are 50-70% but much lower for chicks
- For stable populations, need 2.25 juveniles/hen
- Rain and snow influence survival
- Many things directly kill grouse: predation (raptors, corvids, canids, badgers), hunting, and disease.
- Combinations of factors can decrease survival





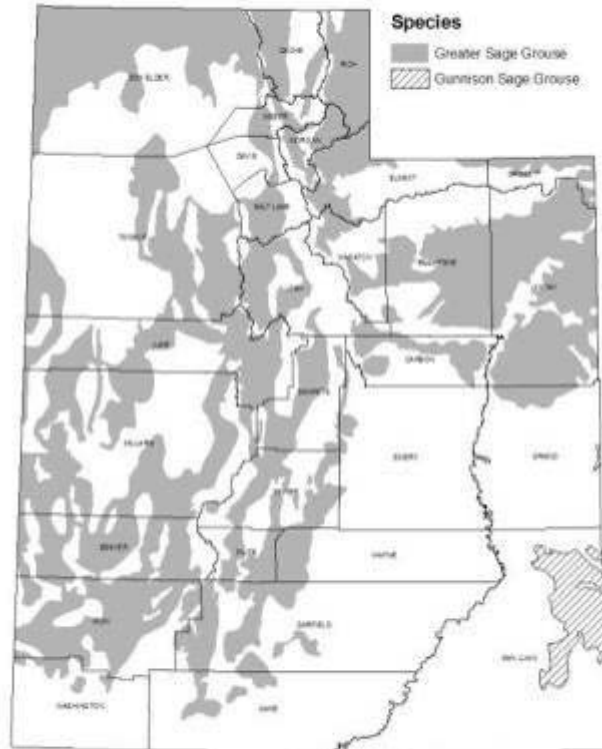
# Sage-grouse need sagebrush

- Large unfragmented tracts
- Eat sagebrush Oct -- March
- Grocery stores: a variety of grasses/forbs = insects for chicks
- Cover in winter
- Not all sagebrush is good habitat
  - Season of use
  - Black sage vs. big sage





# Distribution of Sage-grouse in Utah



Historical Distribution



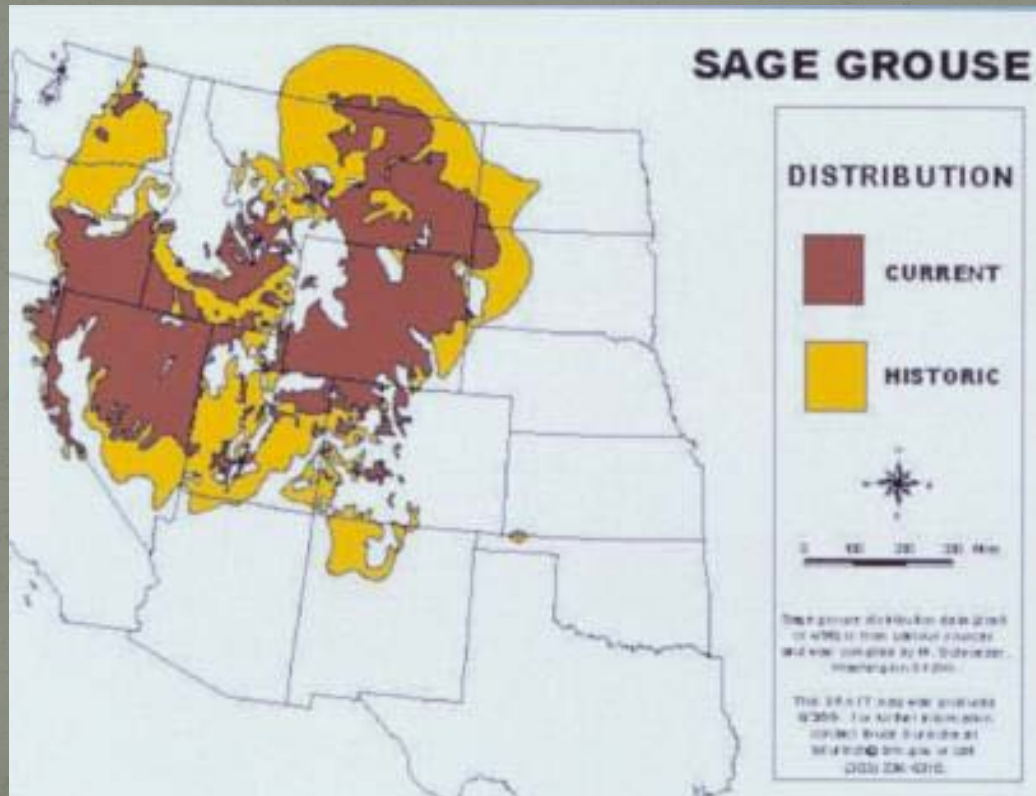
Present Distribution

*Historical distribution is based on the distribution of sagebrush habitat in Utah, as well as observations by early settlers and explorers. Utah's sage-grouse populations were likely connected through these large tracts of sagebrush which have been lost to fires, habitat conversion, development, and invasive species such as cheat grass and pinion/juniper encroachment. Presently, sage-grouse populations are highly fragmented across Utah.*



# Sage-grouse Declines

- Declining throughout western U.S.
  - Occupy 56% of pre-settlement habitat (Schroeder et al. 2004)
- Utah has suffered loss of habitat and populations





# 2009 Utah Sage-grouse state wide plan

- 2 Species of sage-grouse in Utah
  - Greater sage-grouse
  - Gunnison sage-grouse (San Juan County)
- This plan addresses Greater Sage-grouse
  - An update/revision of the first Utah plan from 2002
  - Assistance from a specially chartered Sage-grouse Plan Advisory Committee





# 2009 UT SAGR state wide plan

- Dave Olsen UDWR; Upland Game Coordinator
- Jason Robinson UDWR; Upland Game Project Leader
- Anita Candelaria UDWR; Notes/Secretary
- Allan Smith Private lands/ranching
- Steve Madsen Bureau of Land Management
- Clint McCarthy U.S. Forest Service
- Kim Christy School and Institutional Trust Lands Administration
- Jan Anderson Utah Farm Bureau
- Joan DeGiorgio The Nature Conservancy/NGO
- Terry Messmer Utah Local Working Groups/Universities
- Dave Dahlgren Upland Game Advisory Committee/Research
- Ernie Perkins Utah Wildlife Board
- Jim Gaskill Utah Regional Advisory Committee
- Brian Maxfield UDWR; Region biologists
- Susan White Utah Division of Oil, Gas, and Mining
- Tom Clayson Anadarko Petroleum Corporation



# History and listing decision 2010

- Sage-grouse is an upland game species
- Utah State Sensitive Species
- Petitioned for listing under the ESA
- Jan. 2005, listing was “not warranted”
- 2007: Jan. 2005 finding was in error, issued a second 12-month review
- 12-month status review was up in December 2008—fast forward to...
- March 5<sup>th</sup> 2010:

*The USFWS announced that a “protected status for the greater sage-grouse **is warranted but precluded.**” This means that the species could be listed, but because there are currently so many candidate species, the USFWS is unable to do so at this time.*





# Listing decision 2010

- What does the listing decision mean for Utah?
  - Business as usual
  - Data collection and monitoring
  - Continue current management and implementation of the state plan
- Going forward...
  - Reviewed annually by USFWS
  - UDWR still manages sage-grouse
  - USU Extension facilitates the Local Working Groups





# What does the listing decision mean for the county?

- Support state and LWG plan implementation
- Be aware of sage-grouse and its habitat requirements
- Consider sage-grouse in all types of developments
  - urban, rural
  - oil, gas, mines
  - transmission lines, trails, etc
- Know your resources
  - Local working group
  - UDWR website and personnel
  - USU extension





# Local working groups

- 2002 State Sage-grouse Plan:
  - *Sage-grouse management must be a cooperative effort between federal and state land management agencies, Utah Division of Wildlife Resources, Tribal governments, private landowners, grazing and livestock interests, and other interested groups.*
- 10 Greater-sage-grouse groups in Utah
- USU Extension administers working groups: “Community-Based Conservation Program”
- UDWR has management authority



# USU Extension role in working groups

- Facilitate local working groups
- Engage all stakeholders
- Help each group write and implement a local sage-grouse conservation plans.
- Work with local stakeholders to identify, design, implement, and monitor management projects.
- Assist in monitoring and research
- Be a resource for all partners



Utah's Community-Based Conservation Program:

*“If it's not good for the community, it's not good for wildlife”*

<http://utahcbcp.org>



# Local working groups



- 10 Local Working Groups for greater sage-grouse
- Every group writes a plan
  - Current situation/threats
  - Strategies to improve



(C) Todd A. Black



# Local working group plans

Each plan identifies local threats to sage-grouse, like:

- Loss of quality habitat
- Drought and weather
- Development
- Parasitism/disease
- Invasive plants
- Recreation
- Fire management
- Predation
- Livestock grazing
- Poaching





# Local working groups

- All groups have completed plans.
- Plans are in a 10-year implementation phase.
- Groups meet at least 3 times/year, with a field tour
- Plans are modified as new information is learned through research, or the threats change
- USU Extension tracks the groups' progress annually





# Local working group website

- USU Extension has a website for the Community Based Conservation Program (CBCP)
  - Local working group information
    - Local conservation plan
    - Meeting times
    - Research projects
  - Research publications
  - Annual progress reports
  - Useful references and links

<http://utahcbcp.org/>





# Your local working group: SVARM

- Strawberry Valley Adaptive Resource Management group
- Actions/strategies
  - **Habitat improvement**
    - Nesting/Breeding habitat
    - Control noxious weeds
  - **Address threats**
    - Recreation disturbance
    - Predation
    - Fragmentation by development
  - **Learn about local populations**
    - Share that info: new polygons
  - **Work with private landowners and other partners**





# Your local working group: SVARM

- Research:
  - BYU tracking birds in area
  - Working to understand predation effects
- Current Projects/Issues
  - Habitat improvement projects
  - Recreation disturbance: kiosk
  - Weed management
  - TransWest powerline
  - Development pressures
- Keeping partners informed
  - Come join us for lek counts!





**Next SVARM Meeting:  
TODAY at 10:00 am  
Wasatch County Community Bldg**



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Questions?