

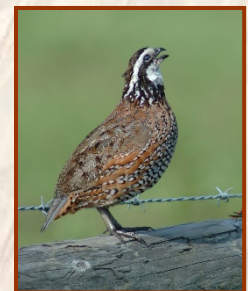
A photograph of several bobwhite quail in flight over a field of tall, golden-brown grass. The birds are captured in various stages of flight, with their wings spread wide, showing intricate feather patterns. The background is a soft-focus field of similar grass, creating a sense of a natural, open habitat.

Land Management Considerations:

Using Bobwhite Management to benefit other wildlife

Many considerations when discussing management of a natural area

- What Species?
- Can the land support the species?
- What are the limiting factors?
 - Food
 - Cover
 - Usable space
- What management actions are needed?
- Tradeoffs – hard to maximize economic and wildlife objectives on same acre



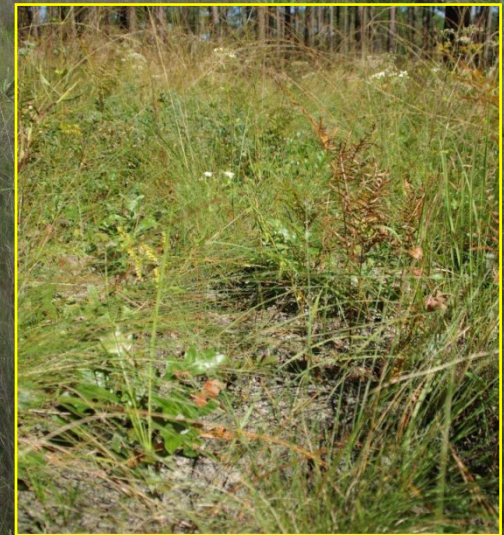
Today's focus will be on the relationship between bobwhite management and other wildlife species

- Habitat Basics
- Landscape Changes & Impacts to bobwhites
- Bobwhite and Fire
 - Frequency
 - Season
- Integrated Management
 - Roller chopping
 - Timber
 - Mid-story management
 - Wildlife openings

What is habitat for bobwhites?



Mixture herbaceous/shrub cover
Various species –region/soils/history
Intermixed - mosaic of cover types
Frequently “disturbed”
Open structure at ground level
Moderate timber density (40 – 60 ba)



Changing Landscapes

- 5,000,000+ acres of suitable or potentially suitable habitat have been converted to improved pasture (sod forming grasses)

Native Range



Improved Pasture

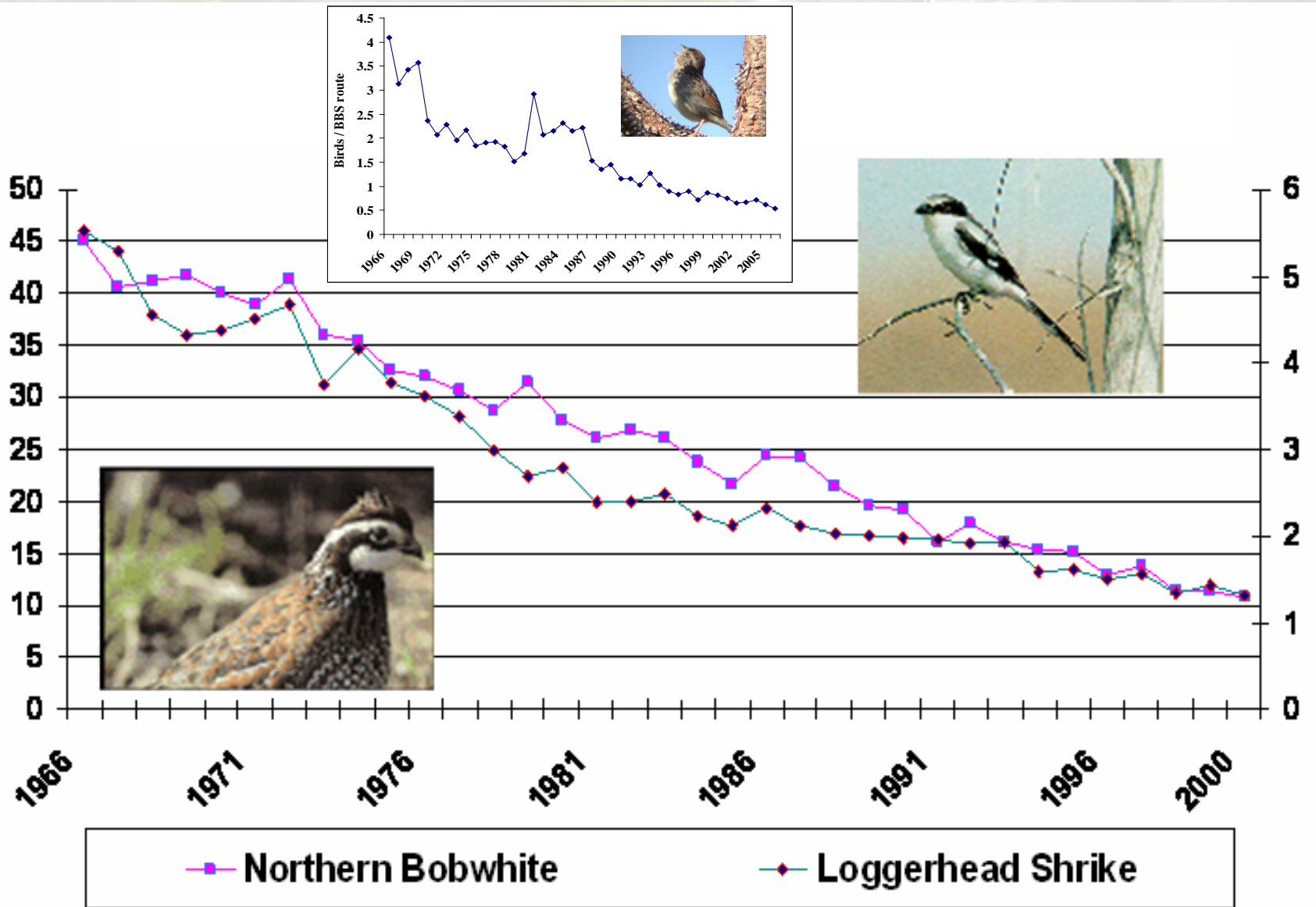


Changing Landscapes

Along with change came modifications in management philosophy:

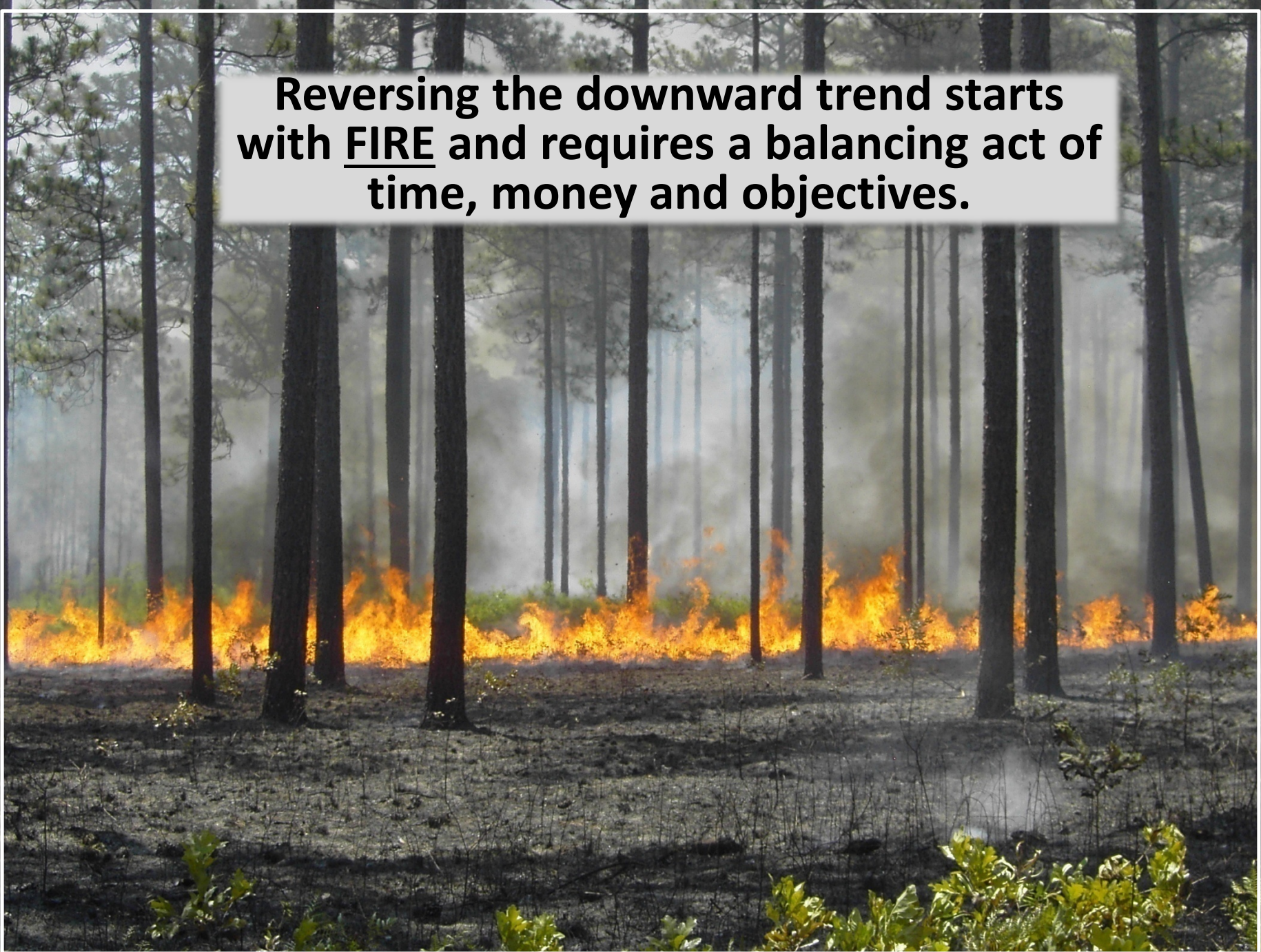
- Management intensity increased
- Habitat suitability decreased
- Specialized wildlife such as bobwhites and grassland birds declined





Bobwhite and associated species have declined 70%, range wide, since 1980

Reversing the downward trend starts with FIRE and requires a balancing act of time, money and objectives.

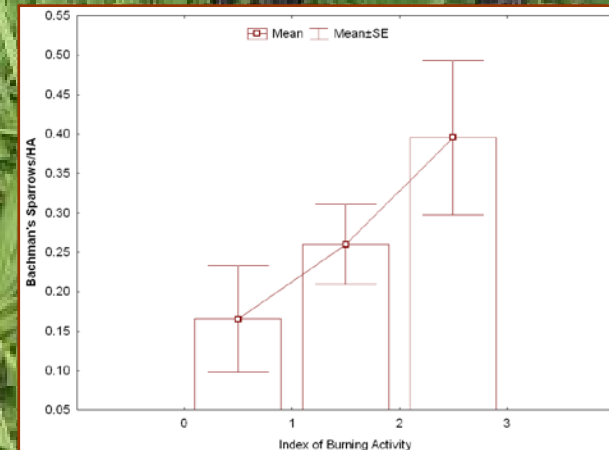


Fire Frequency is King!

- Prescribed fire is a must for bobwhites and other fire-dependent grassland species
- Need 2-year frequencies, on average, to sustain early successional habitat and the species dependent upon them.
- Promotes Seed/forage
- Insect biomass (bobwhites & turkeys)
- Raises PH and recycles nutrients

Too Long Fire Frequency

- No longer suitable structure and composition
- Mid story development
- Poor/zero seed production
- High plant residue on ground



Season of Fire

- Frequency most important to shifting vegetation structure and composition
- Choose Season to meet Goals/objectives
- Vary season as much as possible
- With high fuel loads, or a re-introduction of fire, you may want to use dormant season first

Growing season

and

Dormant season

=

YES!

Season of fire

- **Burn 50 – 60% of landscape annually**
- **Adjust for weather and habitat conditions**
- **Spread burns out across the entire landscape**
- **Burn when you can!**
 - **Ideally = March – early June**



Integrated Management Increases Effectiveness



Roller Chopping

Can quickly create early successional habitat that can be maintained with frequent fire



Pre Roller Chopping (May 2007)



18 months post roller chopping and prescribed burn (December 2009)

- Restores neglected habitats
- Promotes diversity
- Produces grasses and forbs = seeds, browse & insects
- Helps with pine regeneration



October 2013

Timber Harvest & Wildlife

- Opens canopy increasing sunlight to the ground
- Promotes vegetation growth and diversity
- Thin mature stands (40 – 60 ba) and heavy on planted pines
- Different spacing for objectives (bobwhites & deer)
- Constant attention should be given to timber densities





BA 40-Juvenile



BA 40-Mature



BA 60-Juvenile



BA 60-Mature

Mid-story Management



- **Chemical or Mechanical (can be costly); must follow with fire**
- **Improves ground cover (seeds, browse, insects)**
- **Reduce heavy fuel loads**
- **Reduces predator habitats**
- **Leave beneficial hardwoods for wildlife**

Wildlife Openings



Utilize

- Log decks, woods roads, forest openings

Management

- Winter disking (every other year)

Food Plots

- Beneficial...if all other habitat work is done
- What is objective...food, hunting, etc.



Putting it all together

- Frequent fire is a must
- Integrated management increases effectiveness
- Set goals based on desired wildlife and economic objectives
- Develop a management plan



Questions?

