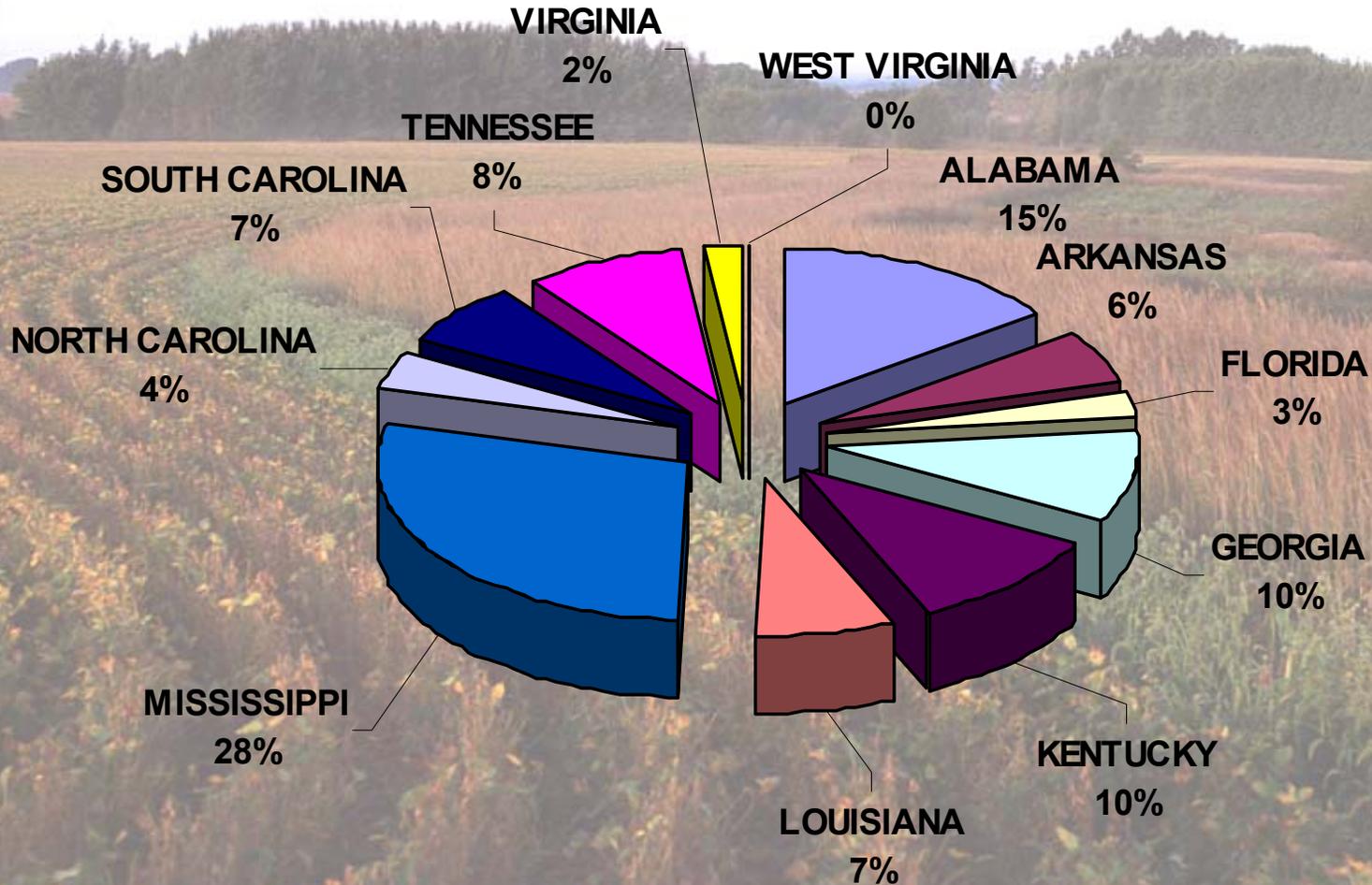


CRP in the Southeast: Issues Affecting Wildlife Value

Wes Burger
Department of Wildlife & Fisheries
Mississippi State University

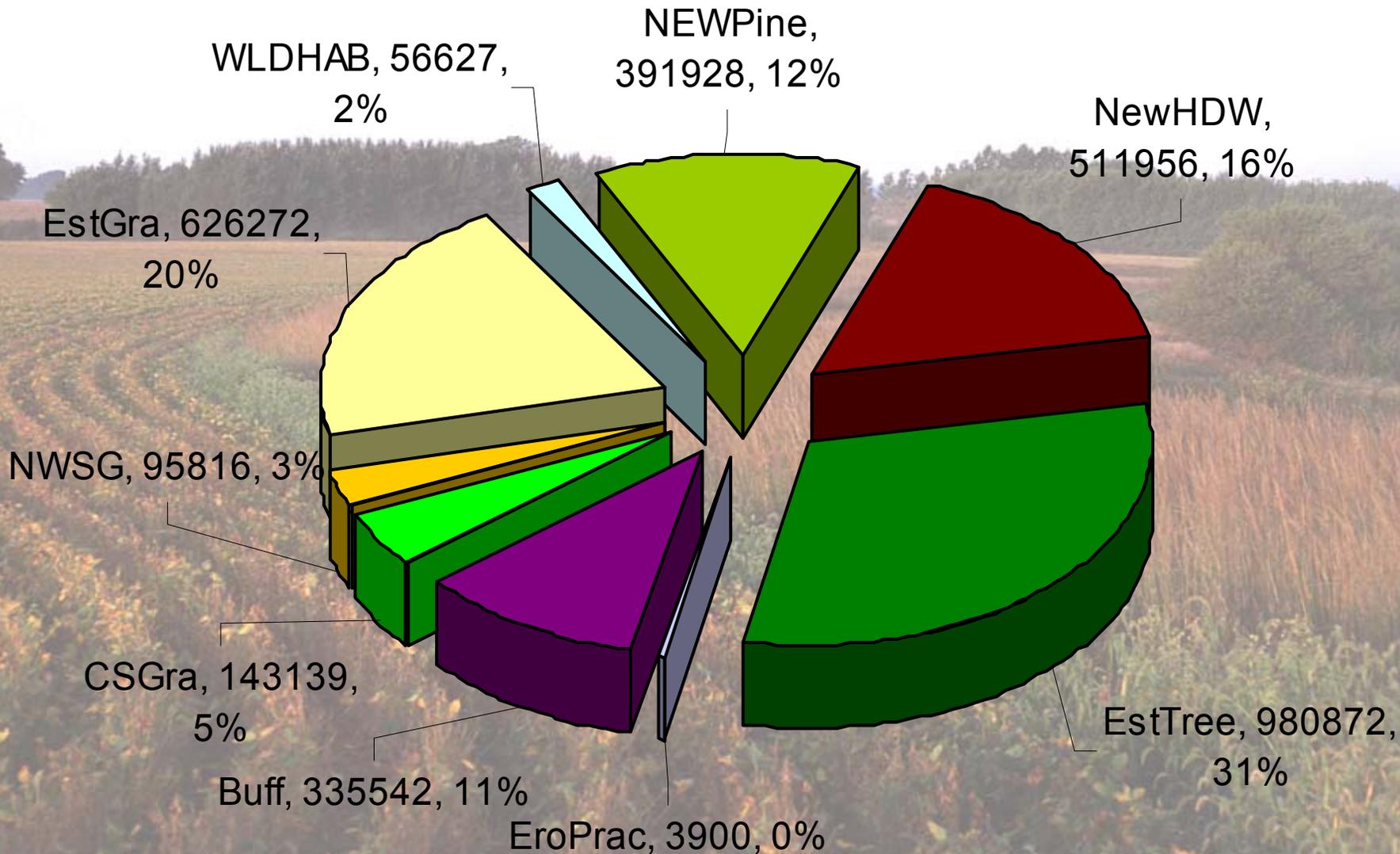
CRP Distribution by State

3.25 Million Acres



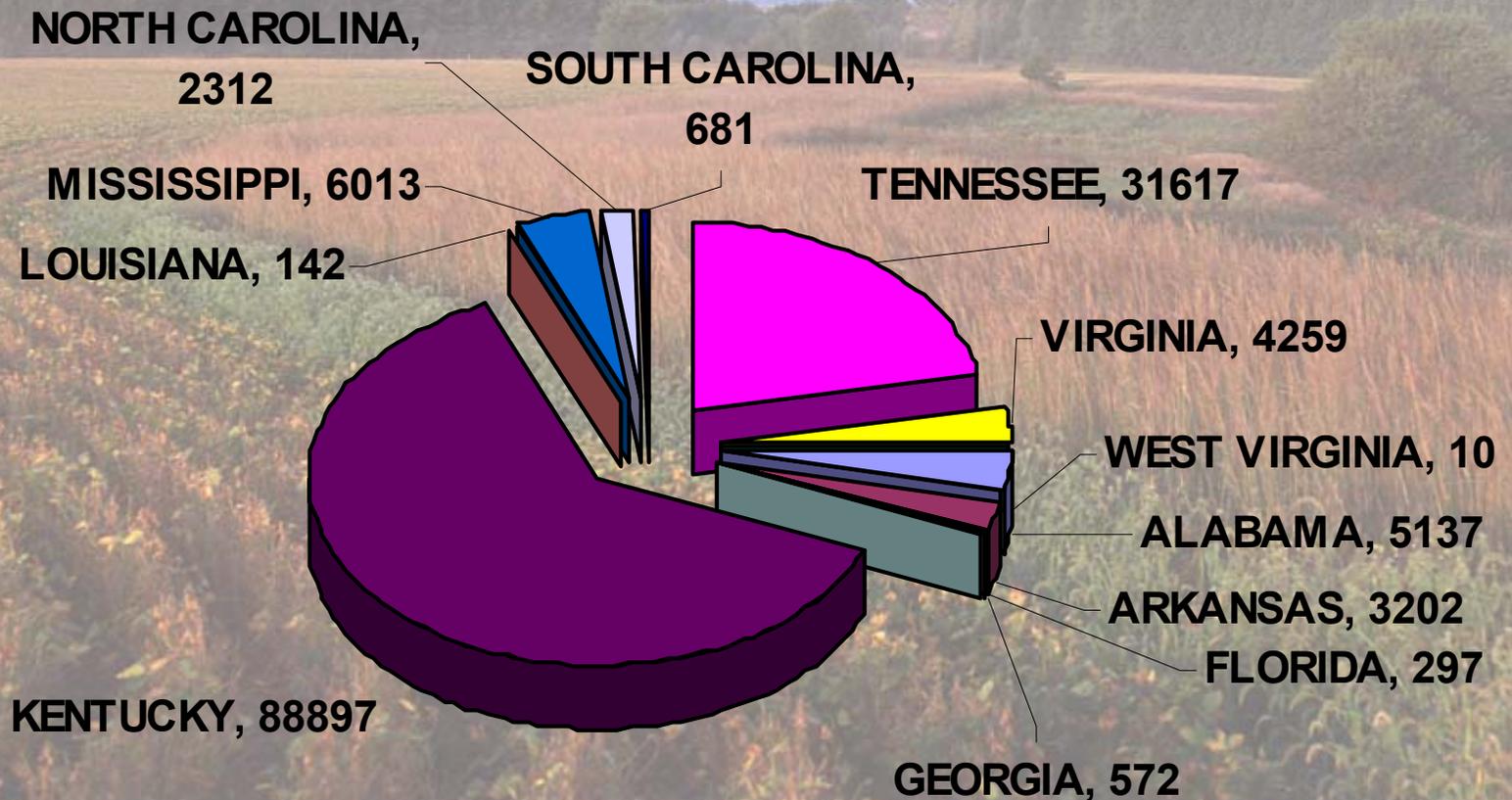
SE CRP Enrollment - Active Contracts

3.25 Million Acres



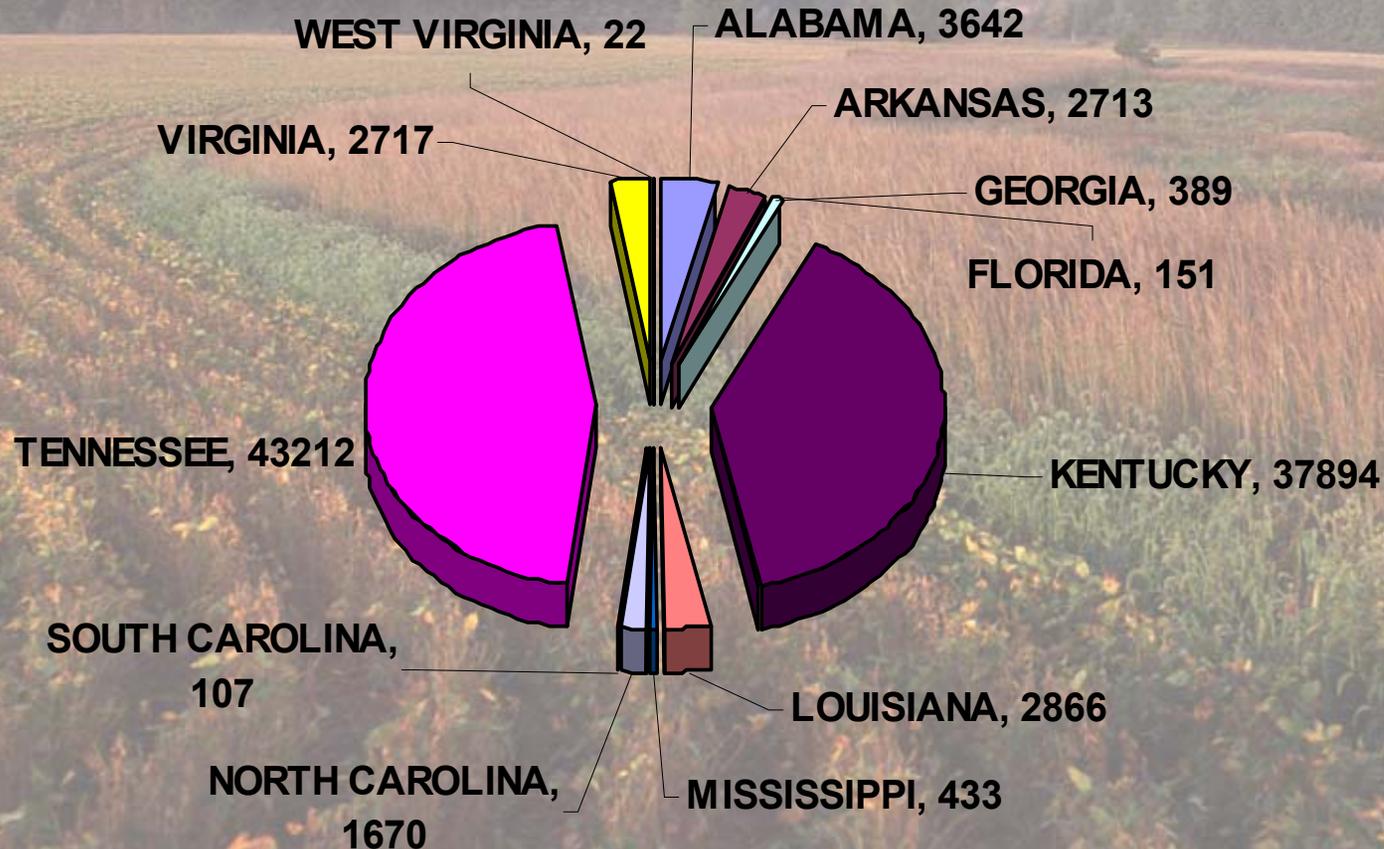
CP1 Acreage-By State

Cool Season Grass



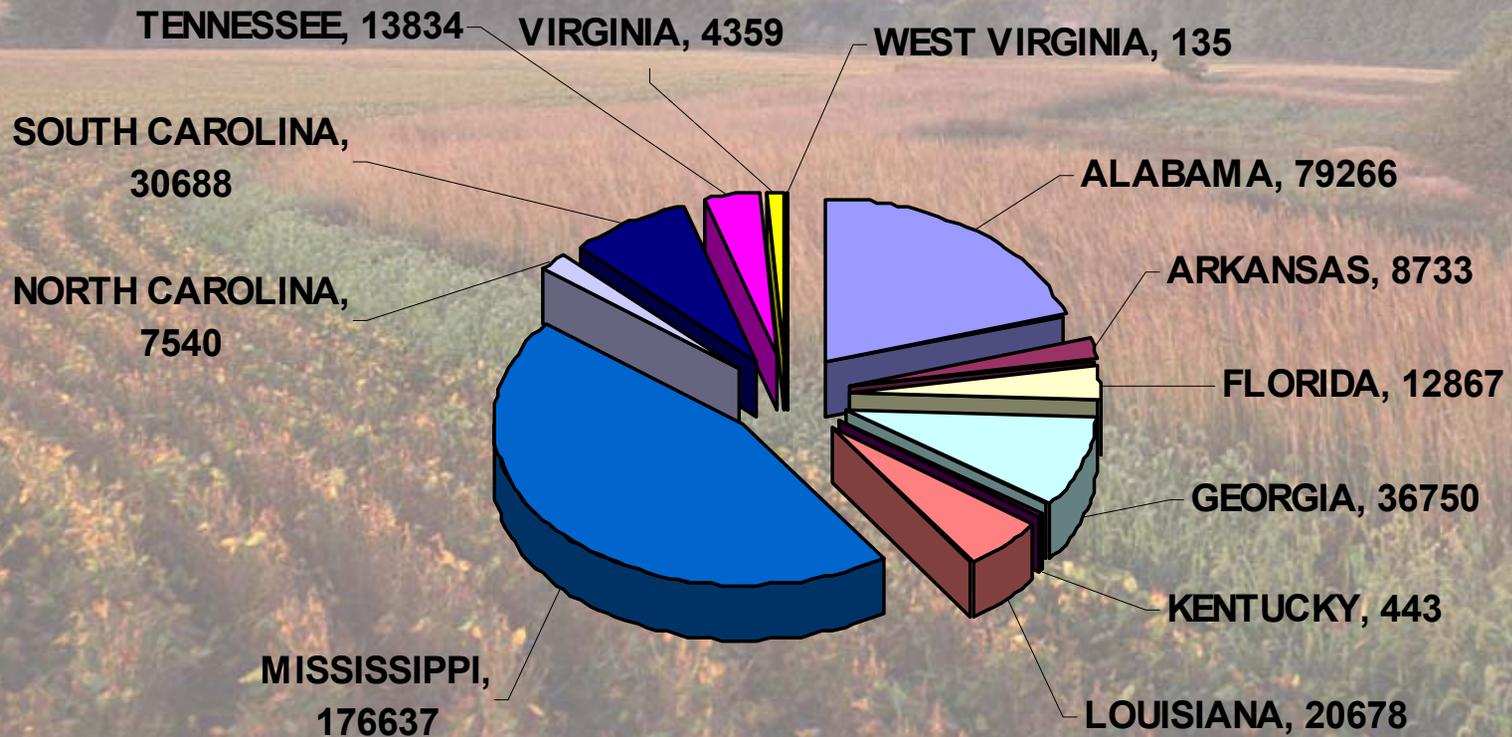
CP2 Acreage- By State

Native Warm Season Grass



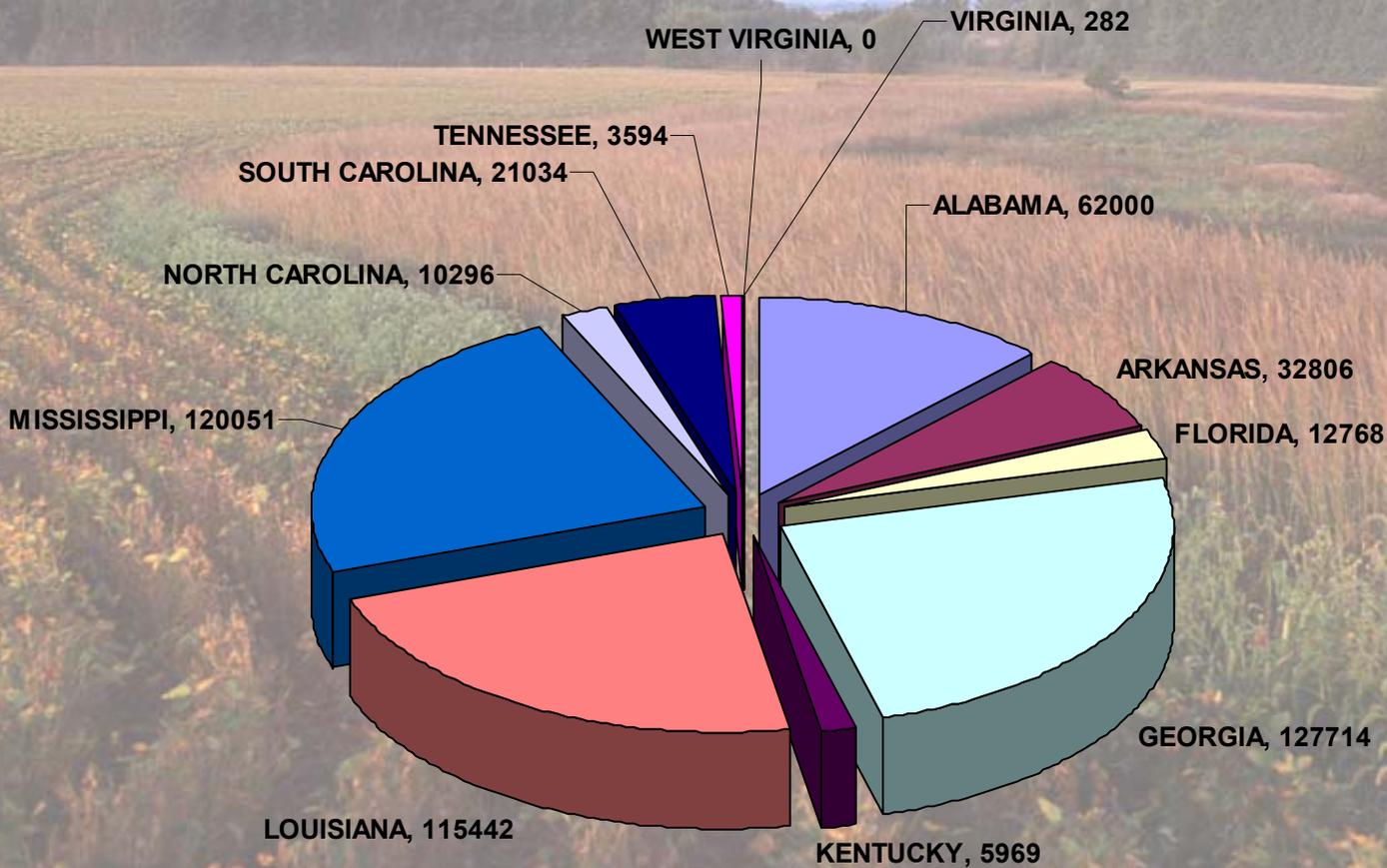
CP3 Plantings – By State

New Pine Plantings

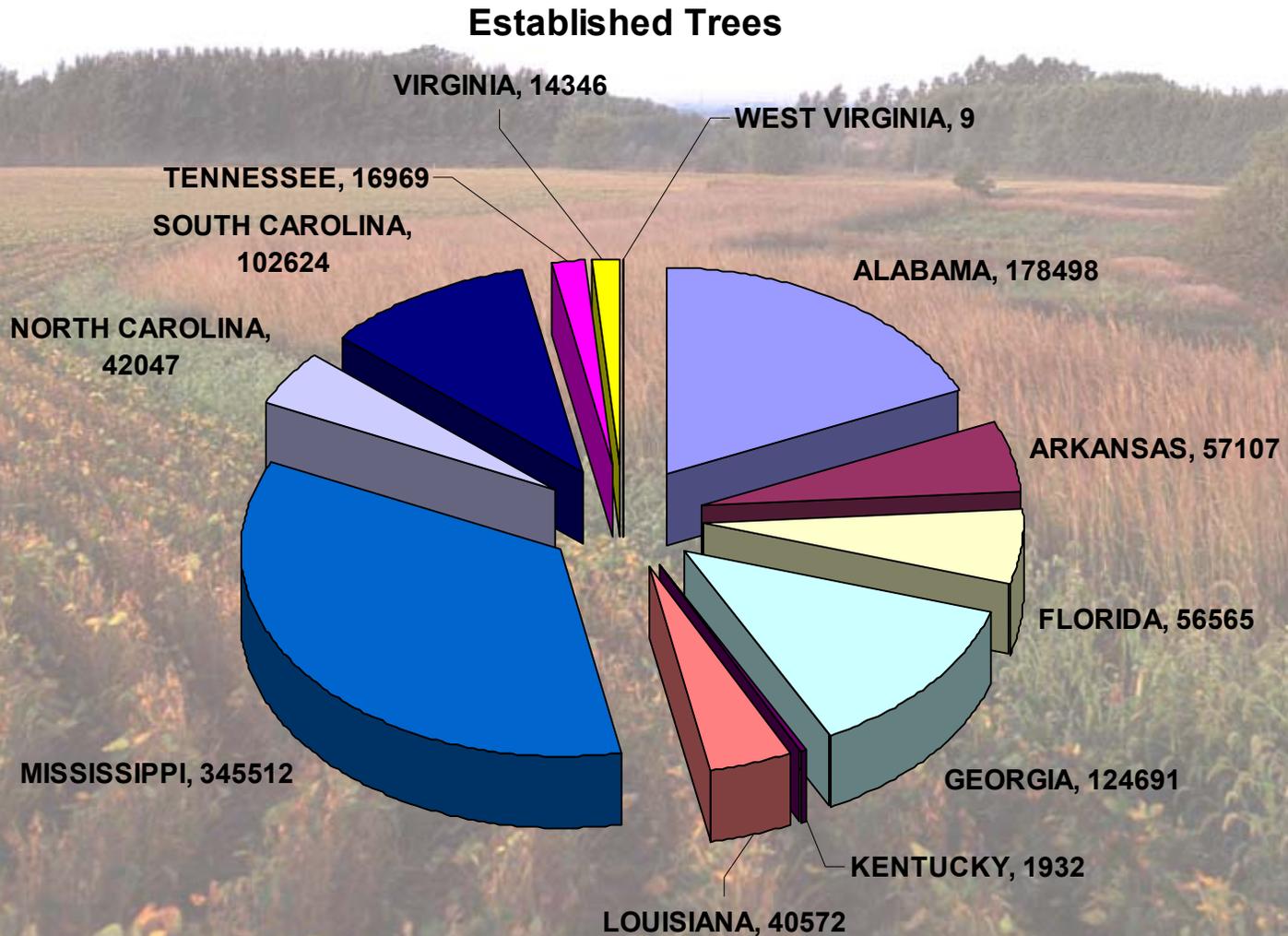


CP3a Plantings – By State

New Hardwood Plantings

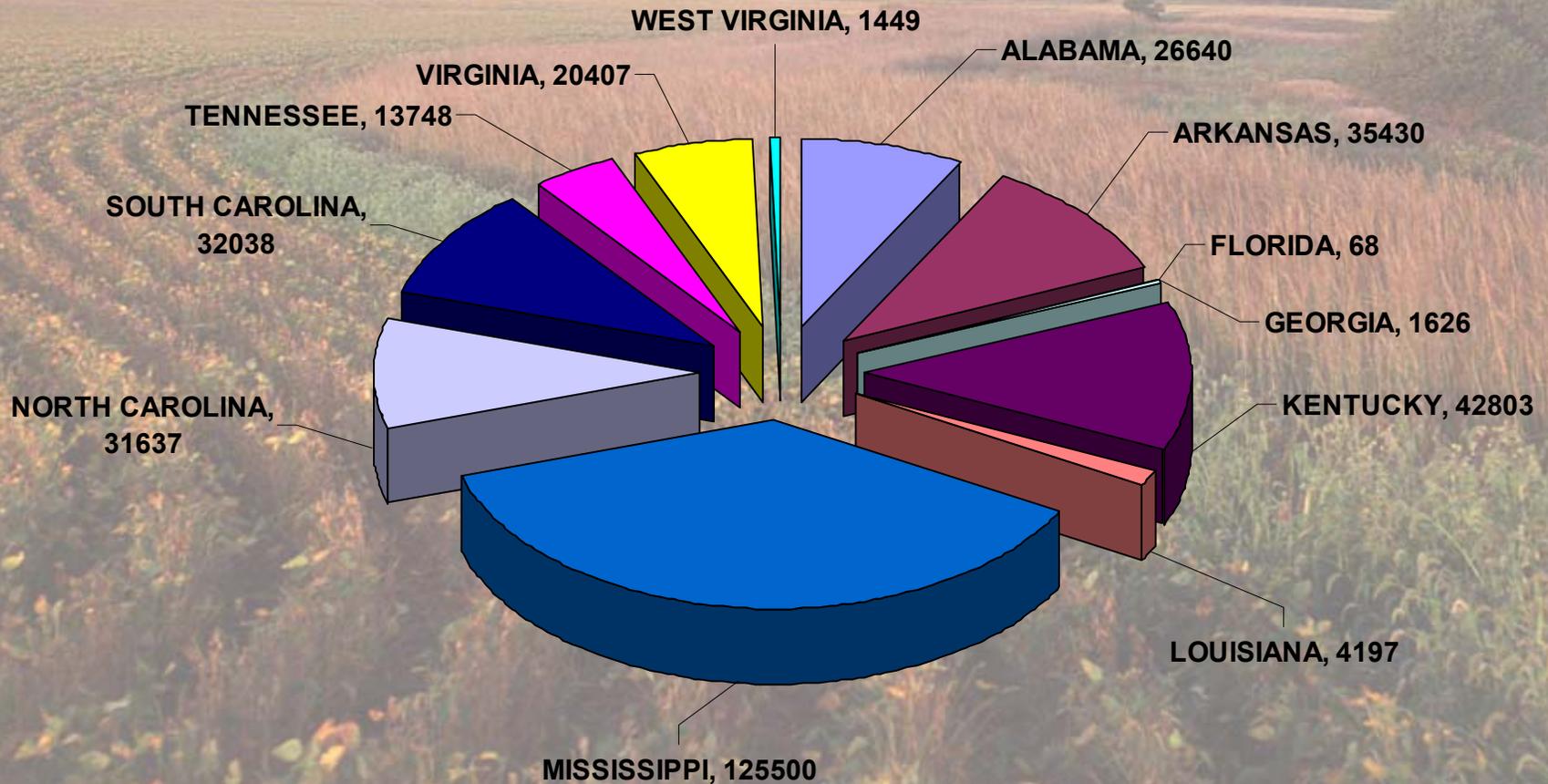


CP11 Plantings – By State



Buffer Practices – By State

Buffer Practices



CRP Goals - Presuppositions

- In theory
 - Co-equal objectives
 - Commodity control
 - Reduce soil erosion
 - Enhance water quality
 - Provide wildlife habitat
- In Practice
 - Apparent objectives
 - Commodity control
 - Reduce soil erosion
 - Enhance water quality
 - Rural economic development
- Practice approval, bid acceptance, and compliance should be evaluated in the context of all 4 legislatively mandated goals
- Programatically much more stringent about soil and water criteria and economic interests of contract holders than wildlife habitat quality



Wildlife Habitat

• \$\$\$ +  =  ?

- Enrolled \neq Wildlife Habitat
- Requires premeditated planning
 - Attention to:
 - Habitat requirements
 - Cover crop selection
 - Recurring management actions

Wildlife Habitat Value on Farm Program Lands

- Will vary in relation to:
 - Cover crop
 - Stand age
 - Management practices
- Wildlife benefits species specific



Issues in the SE

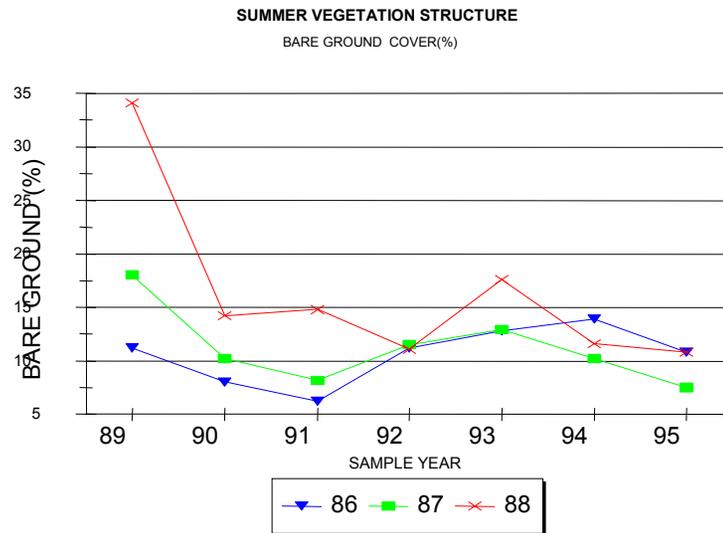
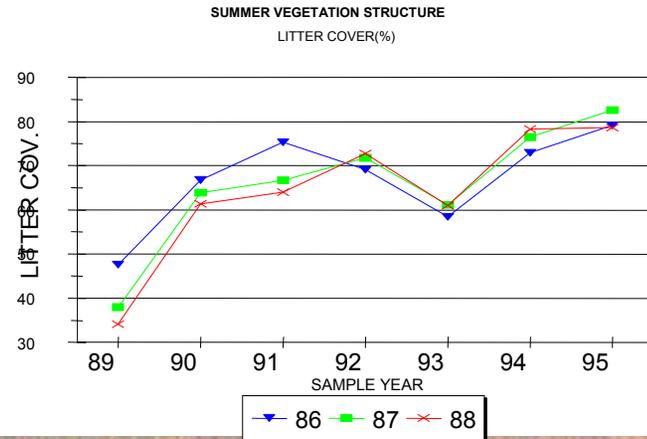
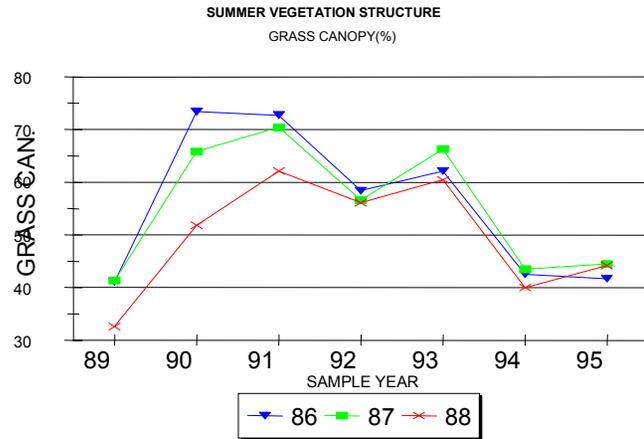
- Recurring management
- Undesirable cover plantings
 - CP1 – fescue, bermuda, bahia
 - CP3 – loblolly vs longleaf
 - CP11 – reenrollment of unmanaged pines (10 pt option)
- Field Border Practice

Succession Happens!

- Plant communities change over time
 - Natural Succession
- Wildlife resources change
- Habitat quality changes
- Succession happens faster in the South



CRP Vegetation Changes



CRP Vegetation Changes

As stand ages

- Annual weeds decline
- Perennial forbs and grasses increase
- Litter accumulates
- Bare ground declines
- Woody vegetation encroaches
- Food resources and invertebrates decline



Grassland Succession



Hardwood Plantings

Successional Processes



0-4 yrs



7-15 yrs



21-27 yrs



Mature

Hardwood Plantings

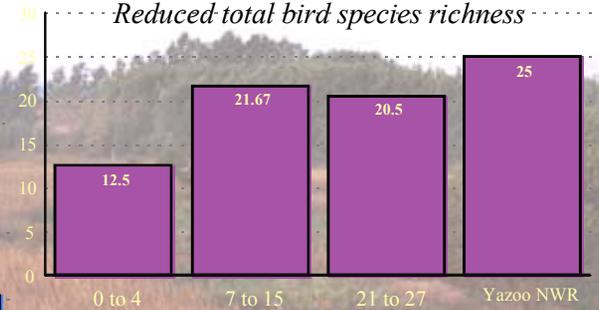
Changes in avian community

Total bird species richness

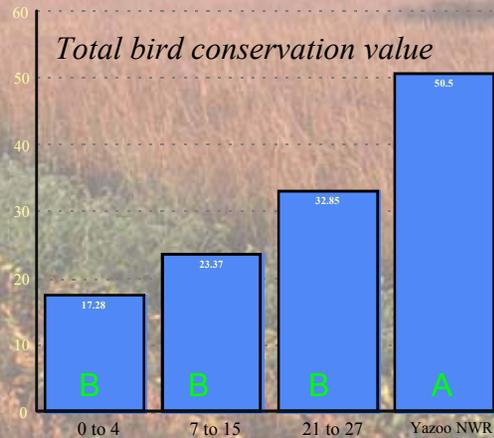


Treatment

Reduced total bird species richness

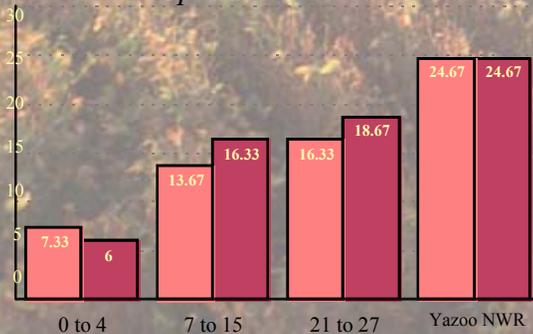


Total bird conservation value

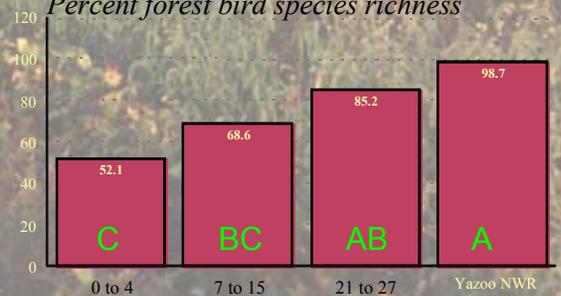


Treatment

Forest bird species richness



Percent forest bird species richness



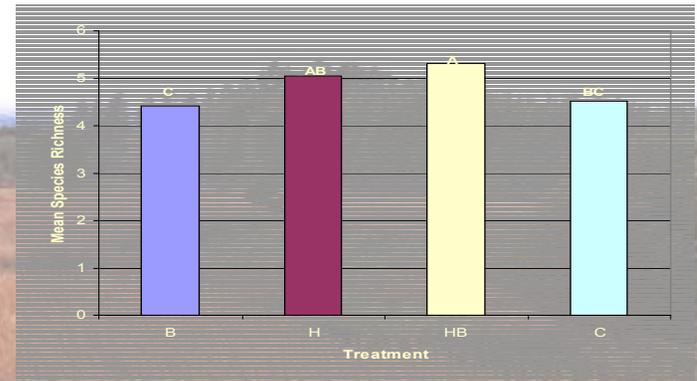
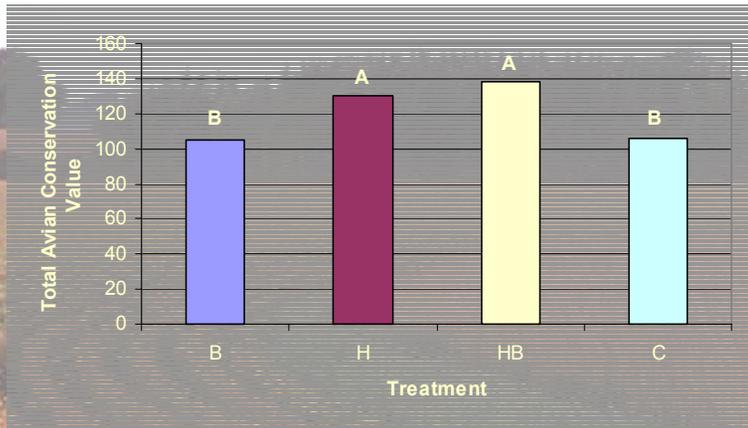
Treatment

Pine Plantings

- Annuals replaced by perennials
- Canopy closes, sunlight excluded
- Herbaceous community lost
- Habitat quality and wildlife diversity reaches low point of rotation 7 – 20 years
- Habitat improves after thin/burn/herbicidal control of invasive hardwoods



Avian Communities in Pine Plantations



Recurring Management

- Plant communities are not static
- Conservation plans must include recurring management activities to maintain desired habitat quality
 - Thinning
 - Disking
 - Prescribed fire
 - Selective herbicide
- Recurring management must be cost-shared
- On new contracts management should be compulsory

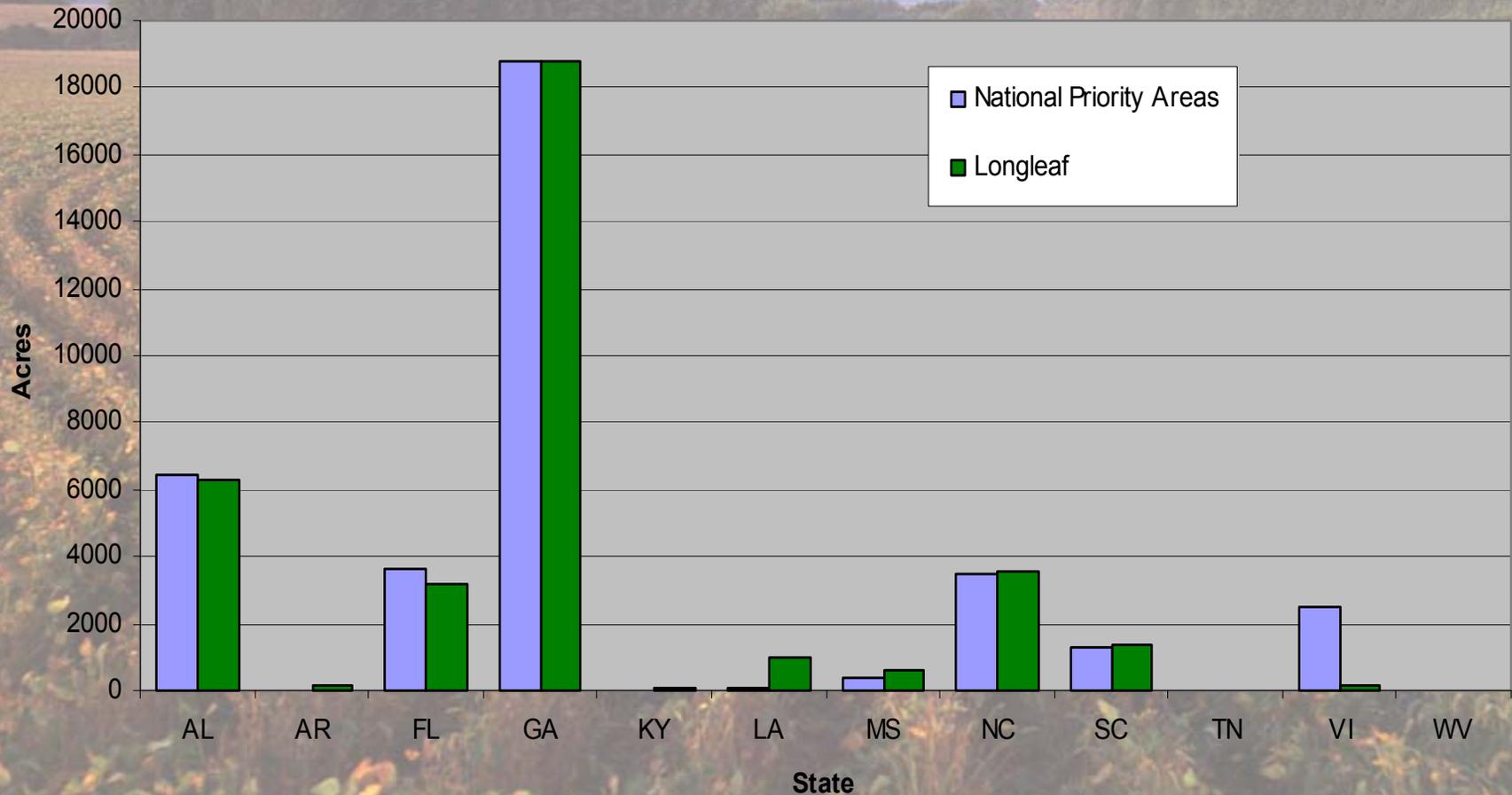


Regional Conservation Initiatives

- CRP more likely to provide quality wildlife habitat when enrollment is part of a regional conservation initiative.
 - Specific desired plant communities identified.
 - Habitat goals established
 - Preferential enrollment provided for bids that help achieve habitat goals

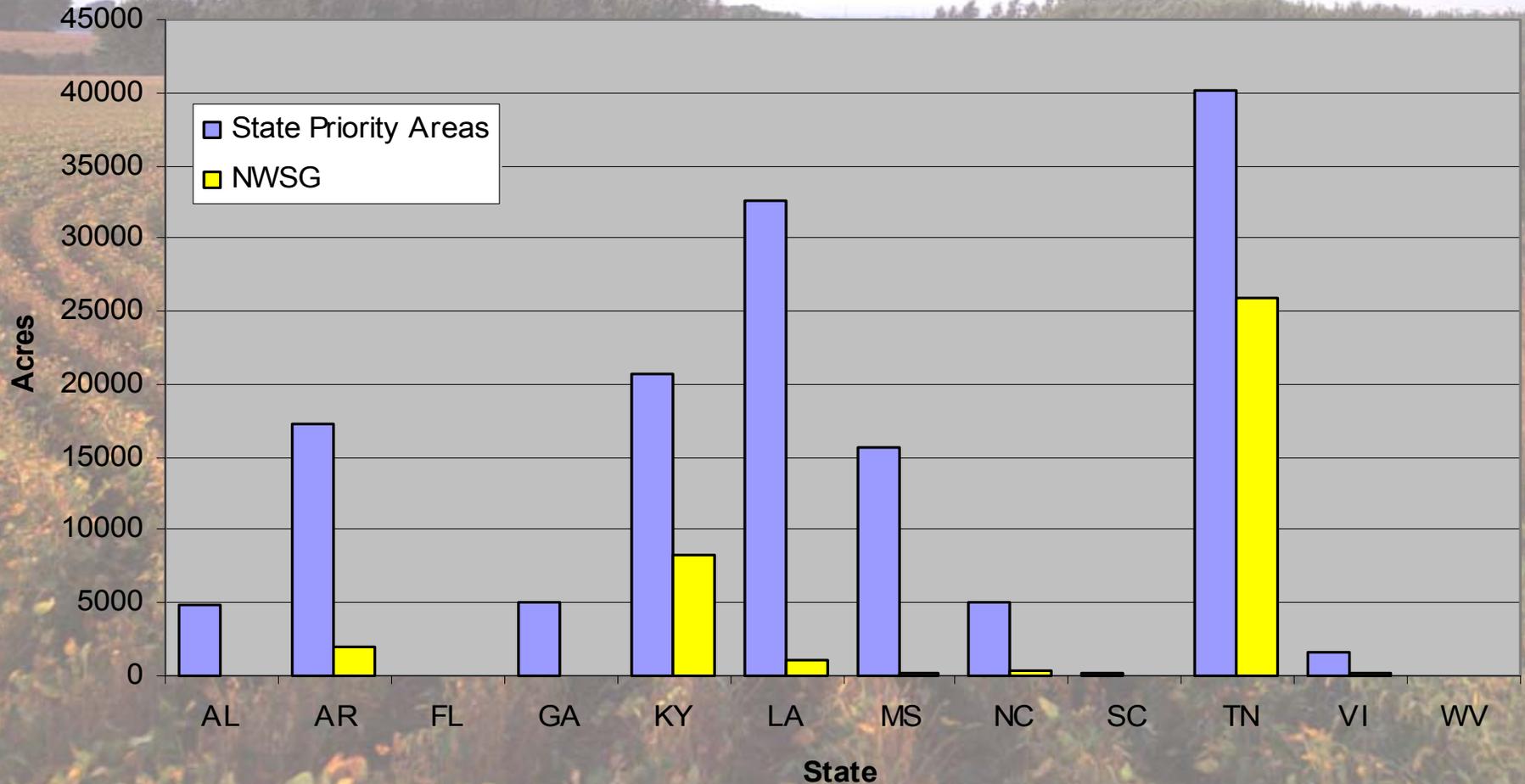
Conservation Implementation

Longleaf Pine Restoration

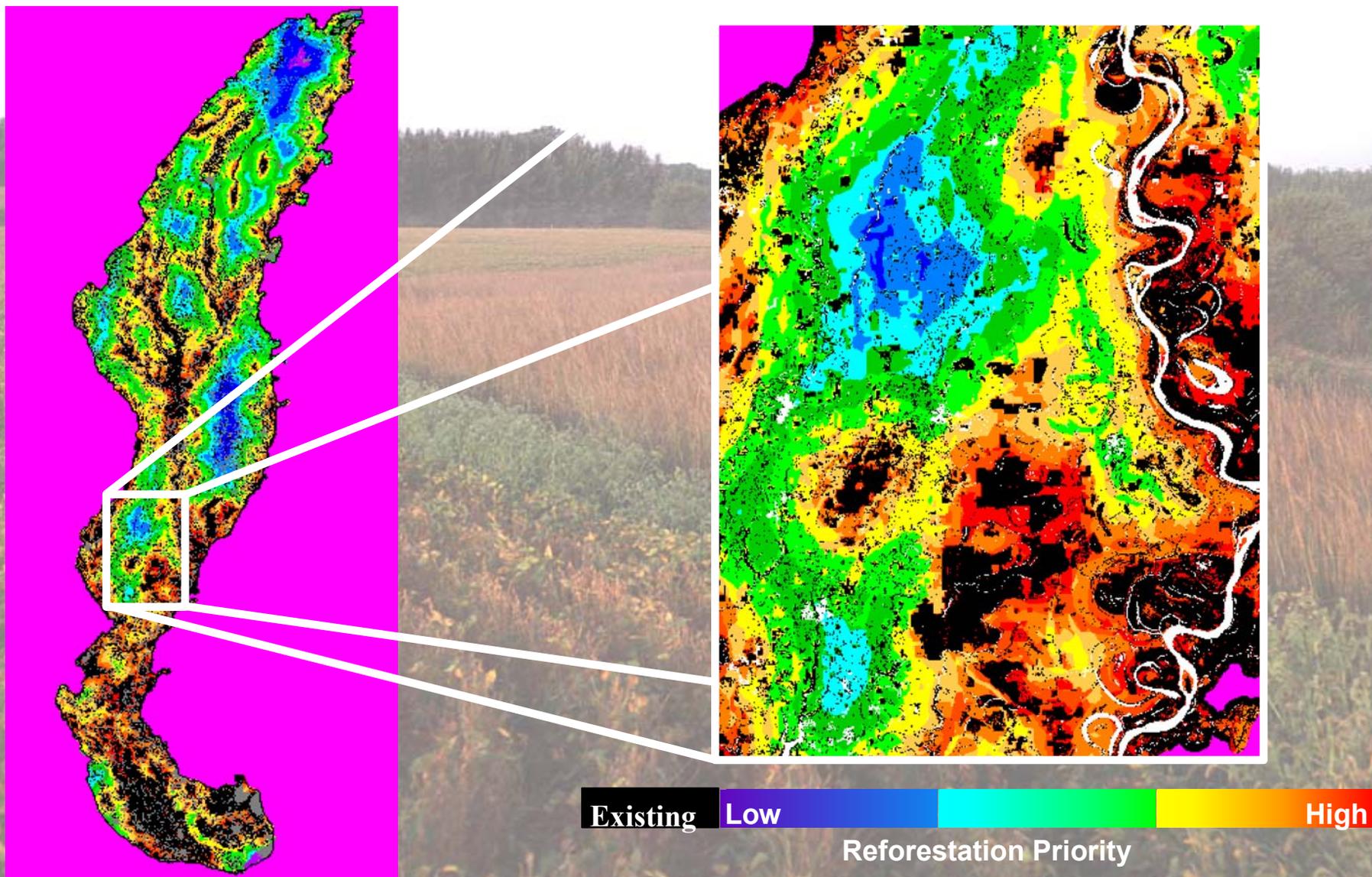


Conservation Implementation

Native Warm Season Grass Establishment - Signup 26

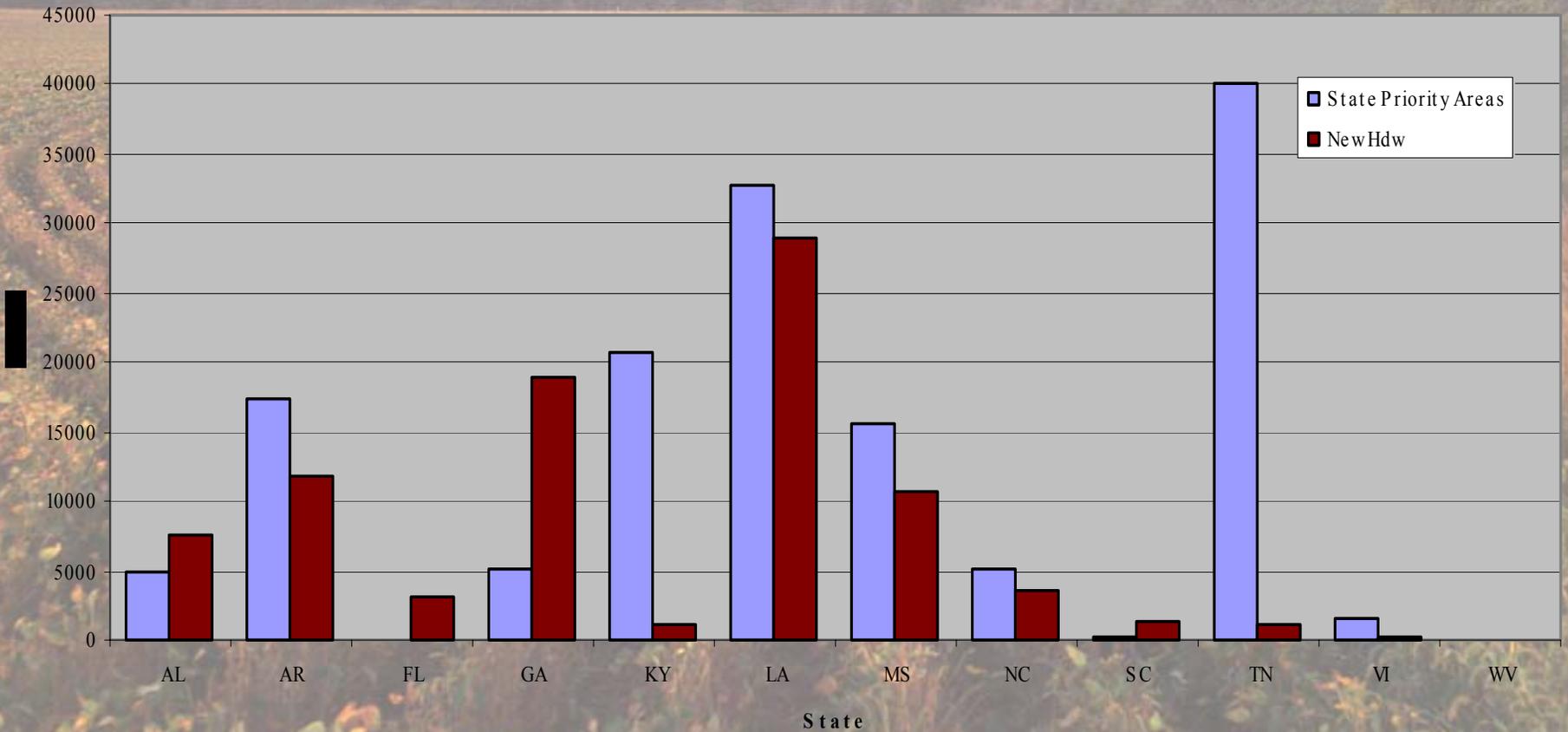


Reforestation Priorities for Forest Breeding Birds



Conservation Implementation

Hardwood Establishment - Signup 26

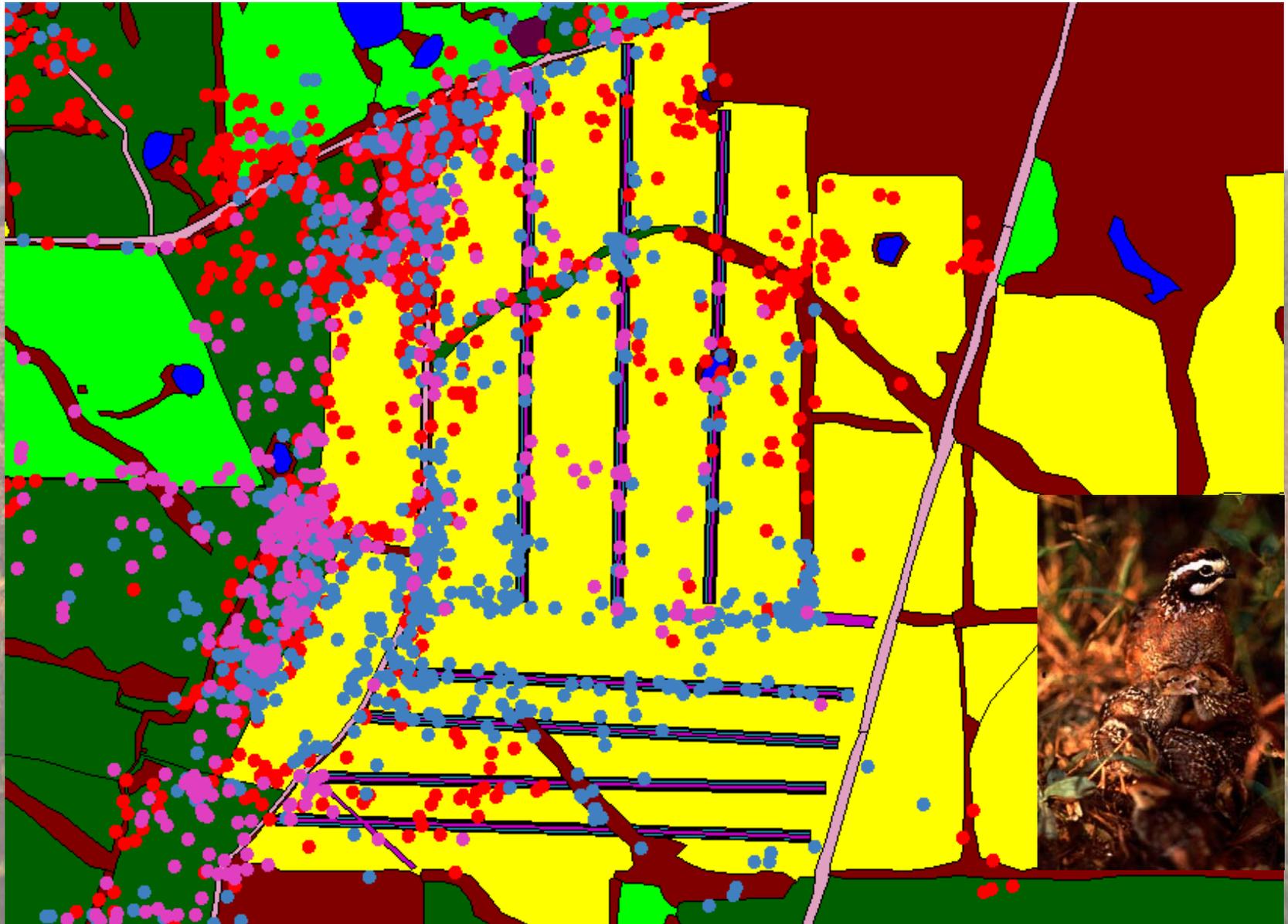


Field Border Practice

NORTHERN BOBWHITE
CONSERVATION INITIATIVE

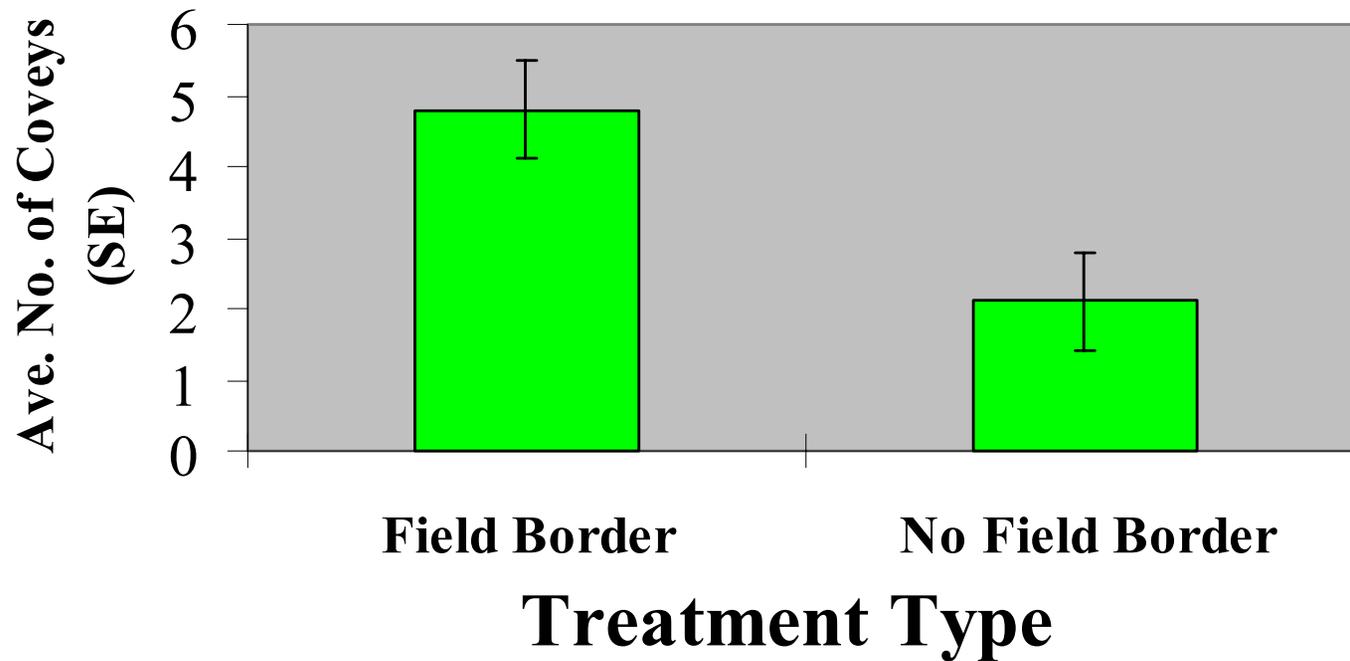


Field Borders for Bobwhite



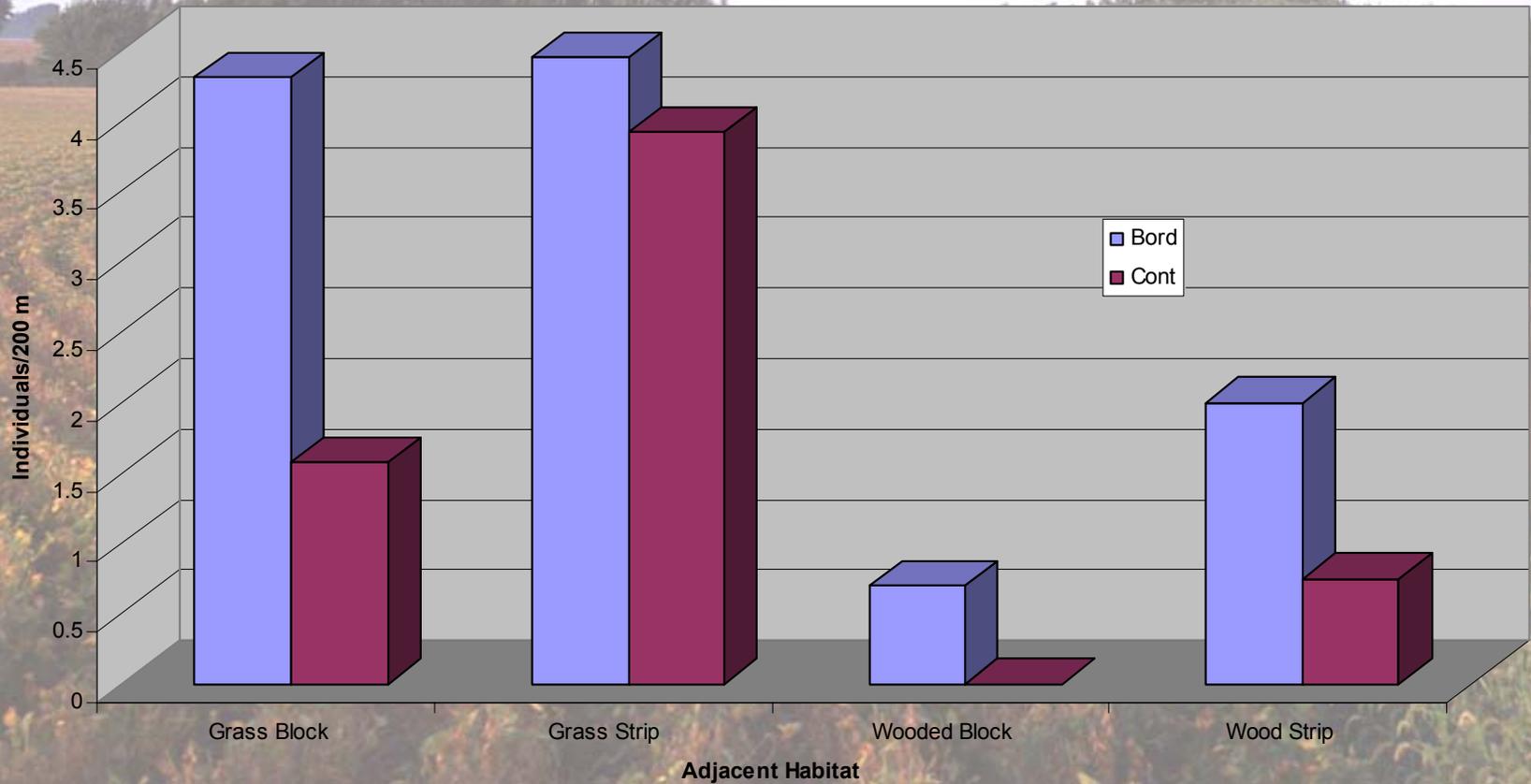
Field Borders for Bobwhite

1998 Covey Call Index for Field Border Treatments

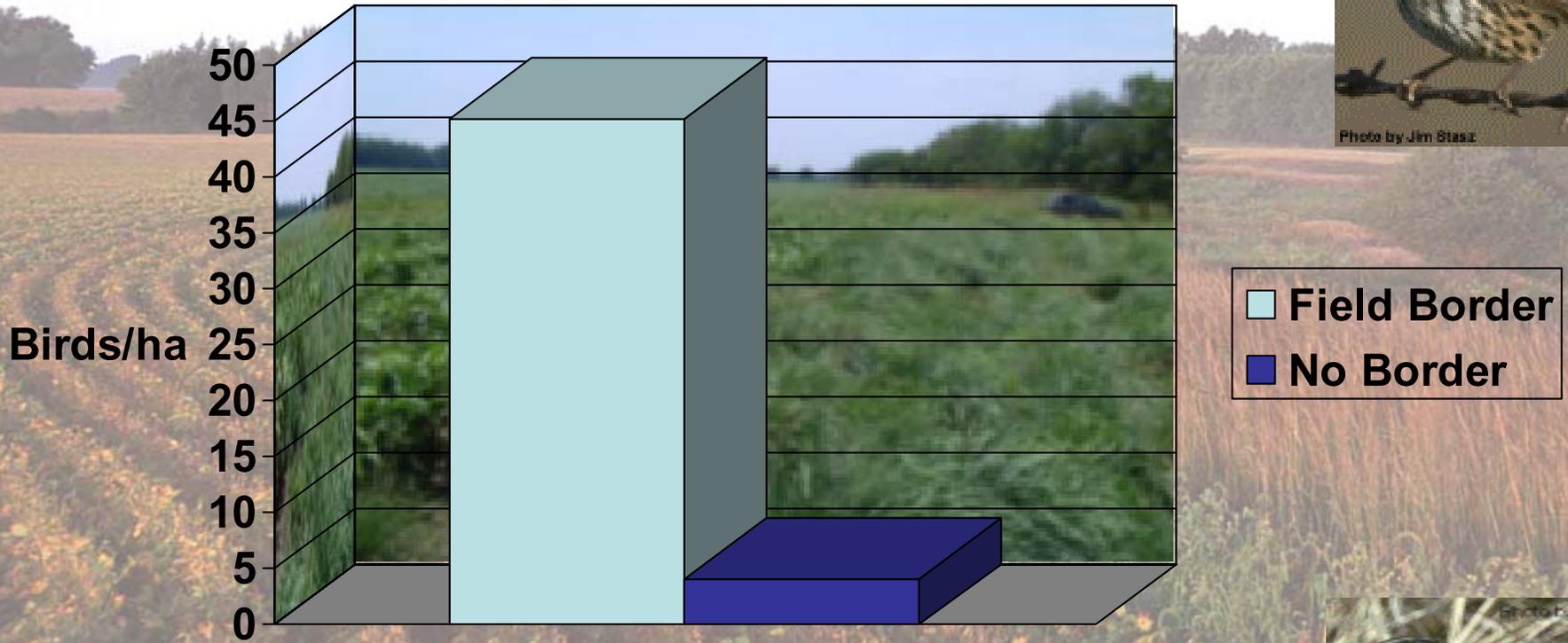


Field Borders

Breeding Season - Dicksissel



Field Borders



Planning Paradigms

- Program-driven

- Program selected
- Management practices driven by programmatic requirements
- Cover crop and management a result of program selection
- Program implemented
- Wildlife habitat accidental by-product (or not)
- Client objectives may or may not be met

- Objective-Driven

- Client objectives clearly defined
- Landowner objectives in context of regional conservation goals
- Landscape meeting objectives is visualized
- Management practices required to create desired landscape defined
- Programmatic alternatives identified
- Optimal mix of programs and practices selected
- Practices implemented under selected programs
- Wildlife habitat results
- Client objectives achieved

Landscape Level Planning

Pasture Buffer



Riparian Corridor



Non-crop fallow area



Filter Strips



Riparian Buffer



Field Border



Producer Objectives

- 3 kinds of producers
 - Wildlife primary objective
 - Opportunity costs
 - Plantings and management practices
 - Practices with multiple benefits
 - Wildlife and commodity production coequal objectives
 - Plantings and management practices
 - Practices with multiple benefits
 - Wildlife not a primary objective
 - Plantings and management practices
 - Recommend practices with nontarget benefits



CRP Research Needs in SE

- Spatially explicit data on CRP distribution
- Wildlife habitat value of CP3/CP11 over time and between Loblolly/Long Leaf
- Avian breeding season and wintering habitat value of SE CRP grasslands
 - Density
 - Reproductive success