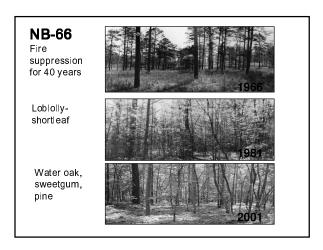


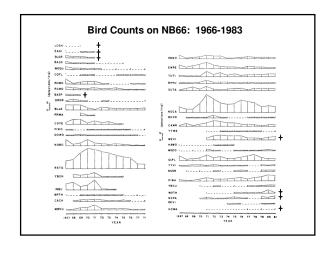
Pine-grassland forests in
Florida support more species
of breeding birds per acre
than hardwood-dominated
forests

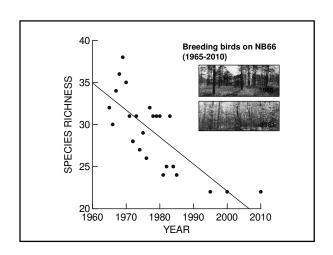
Species	Totals	AL	FL	GA	LA	MS	OK	NC	SC	TX	VA
Red-cockaded Woodpecker	10	-√	√	√	-√	√	√	√	√	-√	√
Bachman's Sparrow	10	√	√	√	√	√	√	√	√	√	√
Henslow's Sparrow	10	√	√	√	-√	√	√	√	√	-√	-√
Loggerhead Shrike	9		√	√	√	√	√	√	√	√	√
Northern Bob white	8			√	√	√	√	√	√	√	√
Brown-headed Nuthatch	8		√		-√	√	√	√	√	-√	-√
Grasshopper Sparrow	7			- √	- √	√		- √	-√	- √	4
Prairie Warbler	6					γ	V	٧	٧	Α.	- 7
Southeastern Kestrel	5	√	V	√				√		√	
Field Sparrow	5				-√			√	√	√	√
Eastern Meadowlark	5		V					√	√	-√	√
Common Ground-Dove	3		V			√			√		
Red-headed Woodpecker	3		√				√			-√	
Florida Sandhill Crane	2		V	√							
Eastern Wood Peewee	2								√		√
Eastern Kingbird	2							√			√
Cooper's Hawk	1							√			
Sharp-shinned Hawk	1							√			
Common Nighthawk	1							√			
Florida Grasshopper Sparrow	1		V								

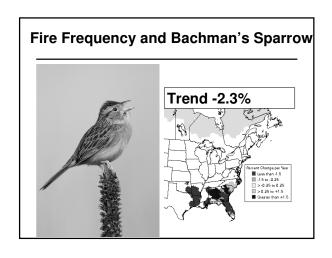
Frequency Season Scale

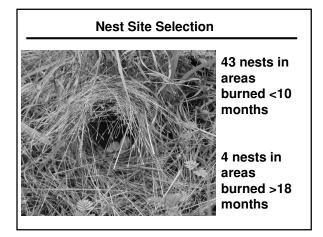
Frequency Season Scale

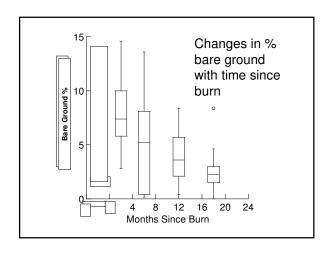


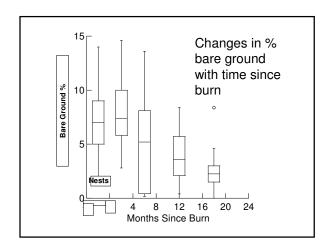


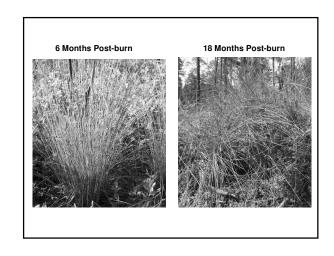


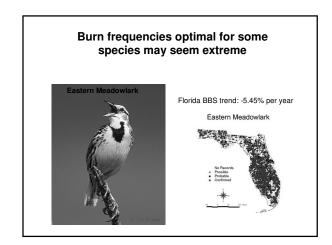




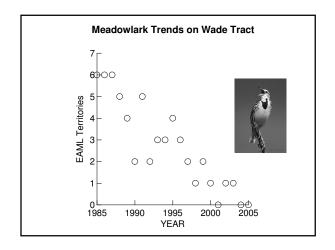












RED-COCKADED WOODPECKER

Cavities excavated only in living pine trees

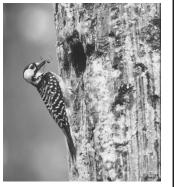
Requires large areas of mature (>90 yrs) pine forests (BA 40-80+)

Requires frequent (≤ 3 year) burning.

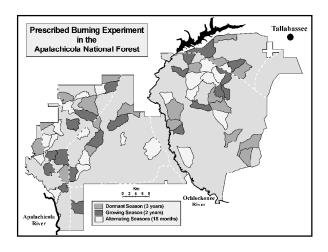


Greater
diversity of
arboreal ants
on sites burned
≤3 year

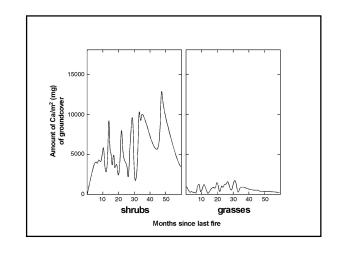




Red-cockaded Woodpecker



	n	Average percent decrease in woody/palmetto per 10 years
Dormant season burn every three years	19	-2
2. Growing season burn every other year	18	-17
3. Both dormant and growing season burns	17	-24



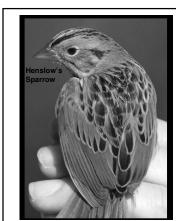
Higher Frequency Improves Nest Productivity

Higher frequency burning puts more calcium into food cycle.

Larger clutches laid in first year after a fire regardless of season.





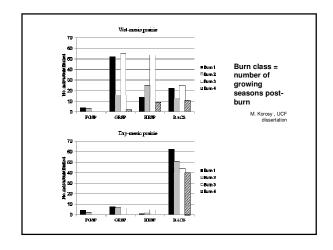


Global Population <95,000 Winters throughout southeastern pinelands (Oct – Apr)





Florida Grasshopper Sparrow and Migratory Grasshopper Sparrow

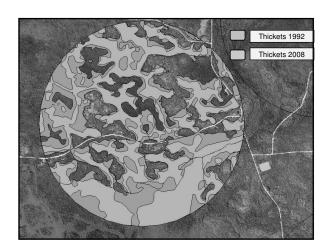


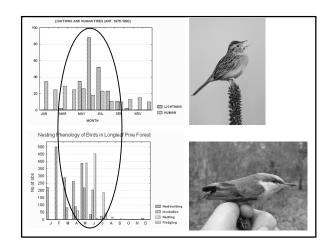
Frequency:

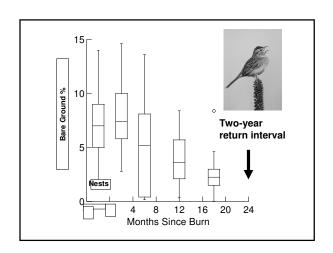
<3 year return intervals best meet needs of declining pine-grassland birds</p>

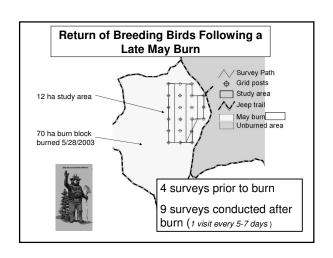
Frequency Season Scale

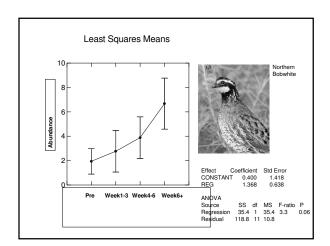




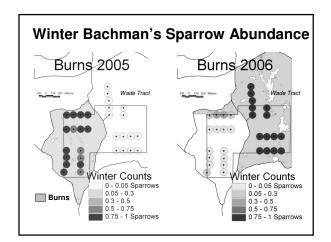


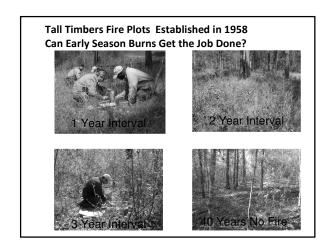


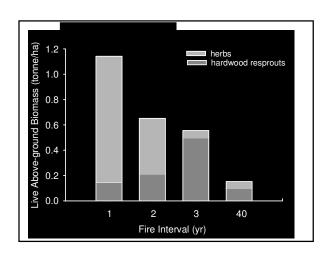




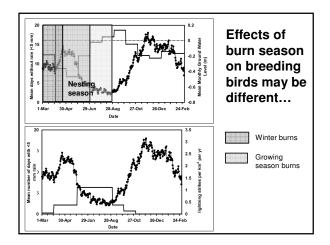












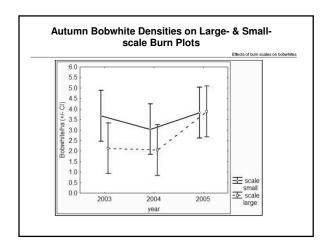


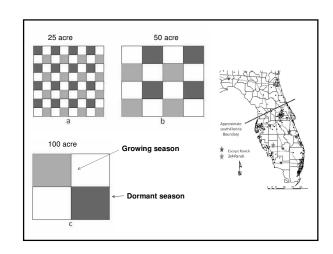
Frequency Season Scale

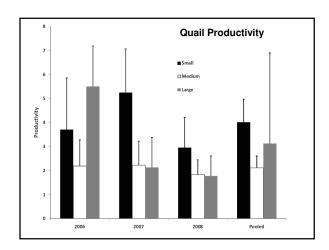


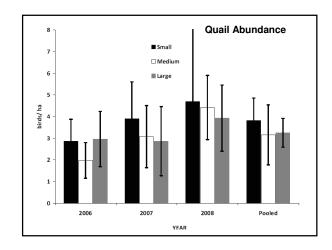
"...burn at the smallest scale possible to improve bobwhite survival and productivity."

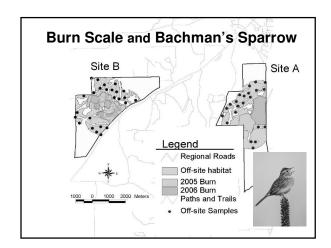
Wellendorf and Palmer 2006











Male home range size Male site fidelity Maximum displacement Monthly survival rates Male densities Larger on small-scale Lower on small-scale Mreater on small-scale No difference Lower on small-scale Lower on small-scale

"Because of concerns about potential scale effects, it took us 5 days to burn the acreage we'd normally burn in a day....."

Chuck Hess, ANF

Frequency
Season
Scale

