# Lower Mississippi Valley Joint Venture



Austin Klais

# Who is the LMVJV?

- self-directed, non-regulatory private, state, and federal conservation partnership
- that exists for the purpose of sustaining bird populations and their habitats
- through implementing and communicating the goals and objectives of relevant national and international bird conservation plans



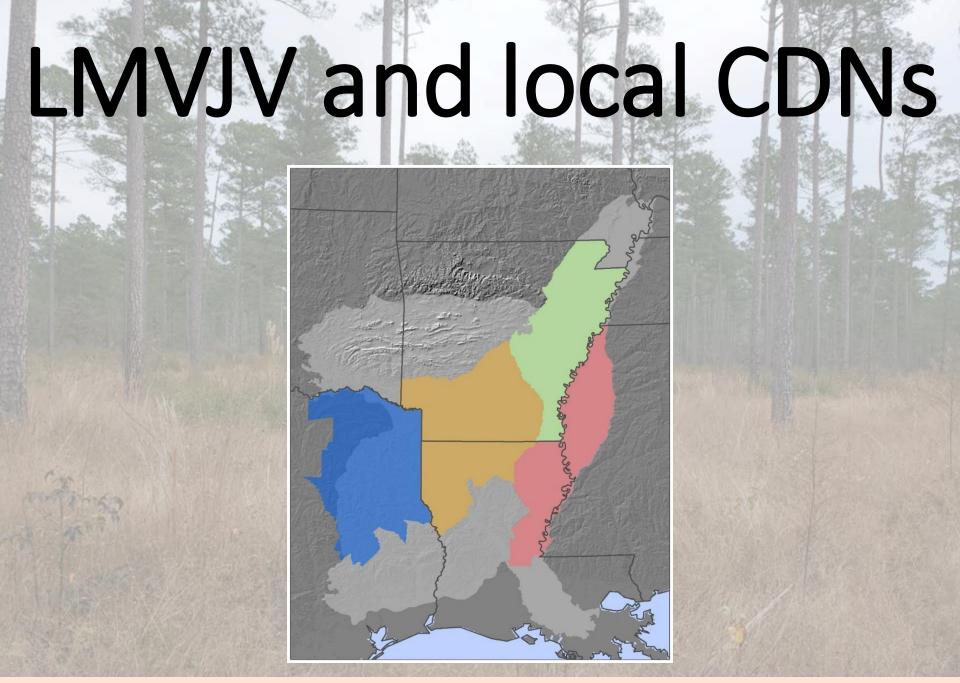
# What does the LMVJV do?

- Functions as the forum in which private, state, and federal conservation community develops
- A shared vision of bird conservation for the Lower Mississippi Valley and West Gulf Coastal Plains/Ouachita's regions
- Cooperates in its implementation
- Collaborates in its refinement

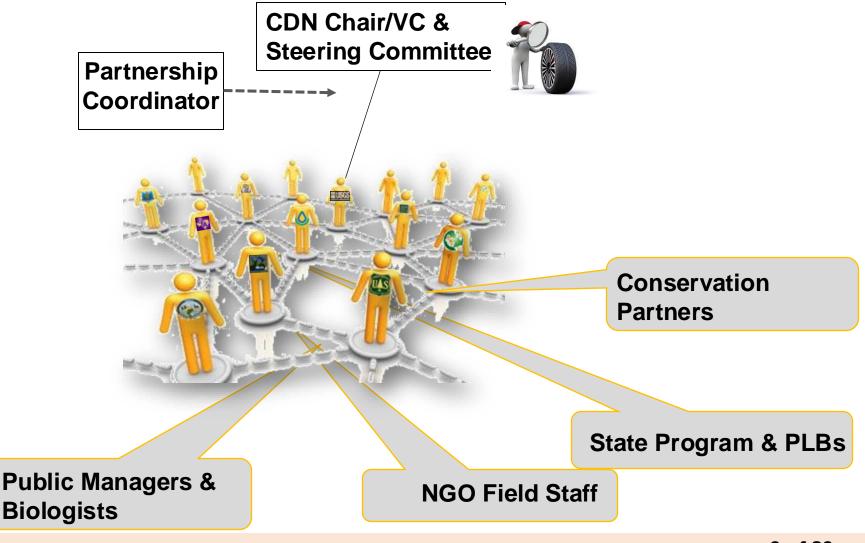
# How?

 Strategic habitat conservation Adaptive management In the end, only one of these five functional elements is the target

instant Biological Planning Outcome based monitorigo Tssumption-driven Research onservation Desi am Deliver Implementation



## **Conservation Delivery Networks**



### **Conservation Delivery Networks**

 Forum where agencies and organizations responsible for natural resource conservation coordinate on-the-ground delivery of otherwise independent efforts, prioritizing delivery actions that target high priorities for conservation.

### **2.9 billion** birds gone since 1970

Why?

-1,000,000,000 -

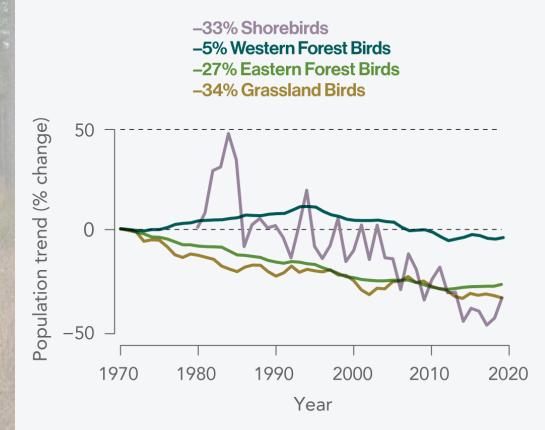
-2,000,000,000

-3,000,000,000

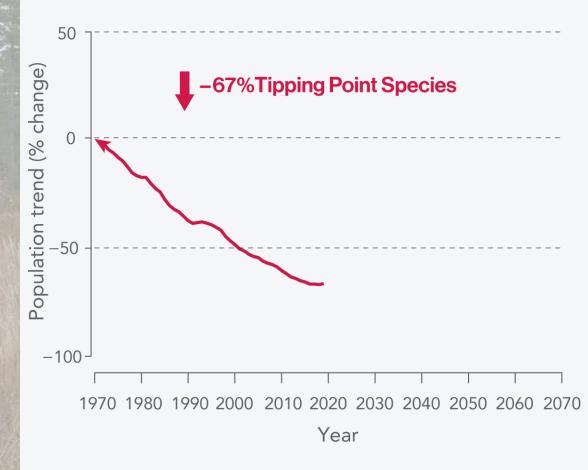
1970 1980 1990 2000 2010

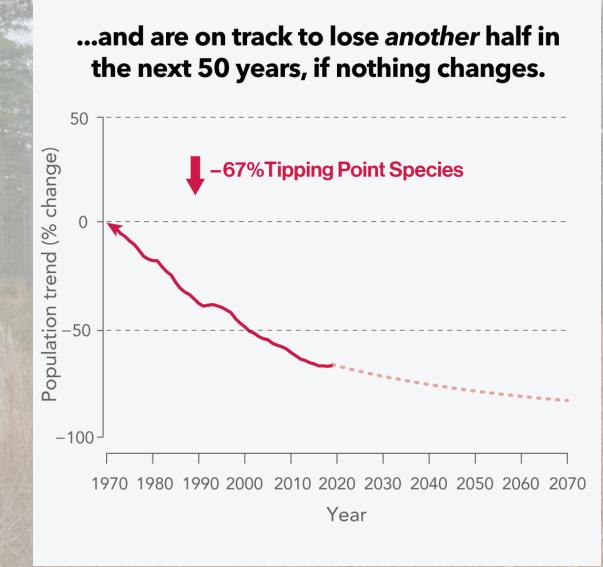
Courtesy of the Cornell Lab of Ornithology. Source: Science, 2019











#### SPECIES OF CONTINENTAL CONCERN

#### Table 1. PIF WATCH LIST FOR CONTINENTAL UNITED STATES AND CANADA

#### SEE WATCH LIST TABLE AT A GLANCE FOR DEFINITIONS (page 5)

												_												
						Urgen		Regions of H	ighest Importance										Urgency/ Half-Life	Continental	Regions of High			
	Species		Distribution Threats				Half-Life		al		Breeding			Species	Distribution Threats									Breeding
		<sup>15</sup> 10	ND		TN		(year								P5 80	ND	TB TN	PT		(years)	Threat			
														Snowy Owl	_	-	_	-	64%		a	4	11	Arctic Tundra
FOR	COVER: Red Watch List - S	pecies wit	n extre		nign vuin	eradinty due	o small popula	oon and range, nigh tr	eats, and rangewide deci	ues (13 species)				Spotted Owl					15-50%		F. Cl	34, 5, 32, 15	34, 5, 32, 15	Western Forest
Gu	nnison Sage-Grouse					> 50%		R, E, Cl, U, D	16	16	Sagebrush			Long-eared Owl					91%			[widespread]	22, 35, 33, 18, 9, 34, 15	Forest Generalist
Les	sser Prairie-Chicken					> 50%		A, R, E, C	18, 19	18, 19	Grassland		_	Eastern Whip-poor-will				-	67%		F, T, Co, U, Cl	24, 29, 27, 25	31. NI	Eastern Forest
Cal	lifornia Condor					> 50%		Co. D. E	32, 16	32, 16	Chaparral			Mexican Whip-poor-will		-	-		15-50%		T, F, Co, Cl	14	MX-H: GT	Mexican Pine Oak
Ber	d-cockaded Woodpecker					79%	38*	P P	27, 25	27, 25	Eastern Forest		>	Black Swift		-			94%	16	d	5,10		Western Forest
Ivo	ry-billed Woodpecker					uncerta	n	r, u	27, 25, 26, 31	27, 25, 26, 31	Eastern Forest			Rufous Hummingbird					60%	34	0,7		26, 37, 36	Western Forest
Rec	d-crowned Parrot					> 50%		H, T	36	36	Tropical Dry Forest			Allen's Hummingbird				-	835	17	C, U	12, 5	13	Chaparral
Bla	ick-capped Vireo					15-505		R, U	35, 20	MX-P	Desert Scrub								15-50%		10	12, 5	MX-P: MX-H	Mexican Pine Oak
Flo	rida Scrub-Jay					> 50%		U, A, D	31	31	Eastern Forest	1		Elegant Trogon		-			67%	> 50	1,0	<b>1</b> 4		
Bic	knell's Thrush					15-509		7,5,0	14	Hisp	Boreal Forest	1		Lewis's Woodpecker		-		-	68%			8, 10	32, 15, 16, 34	Western Forest
Ber	ndire's Thrasher					80%	18	R, A, U, E, O	33, 16	33	Desert Scrub	1	_	Red-headed Woodpecker						> 50	r, u	22, 19, 27, 26, 24	26, 27, 25, 24	Eastern Forest
Let	Conte's Thrasher					67%	27	R, A, U, E, O	33	33	Desert Scrub	1		Arizona Woodpecker		_			15-50%		T, F, Cl	p4	34	Mexican Pine Oak
- Dat	chman's Warbler					uncerta	in		27, 25, 26	cu	Eastern Forest			Gilded Flicker					58%	33	R, U	33	33	Desert Scrub
Go	iden-winged Warbler		-	-		00%	н.	<u>т. т. и</u>	12, 23, 28	CR, PA, HN, NI	Eastern Forest			Green Parakeet		4	444		15-50%		T, H	36	36	Tropical Dry Fores
	Iden-cheeked Warbler					> 50%		<b>1.5.U</b>	20	NI, HN, MX-H	Western Forest	1		Olive-sided Flycatcher		_			78%	24	τ, η, α	4, 10, 5	CO, EC, VE	Boreal Forest
	chman's Sparrow					72%	24		27, 31	27, 31	Eastern Forest	1		Pinyon Jay					84%	19	F, R	16, 9	16, 9	Western Forest
	tmarsh Sparrow					94%		CI, U	30	27, 30	Coastal Saltmarsh			Yellow-billed Magpie					49%	11	P	32	12	Western Forest
	colored Blackbird					> 50%	> 50	A	12	12	Wetland			Chestnut-backed Chickadee					51%	46	r, u	5	5	Western Forest
	ick Rosy-Finch					95%		0	10,9	16	Alpine Tundra	1		Mexican Chickadee					15-50%			34		Mexican Pine Oak
	own-capped Rosy-Finch					25%		0		16	Alpine Tundra	1		Oak Titmouse					53%	40	r, u	32	32	Western Forest
Bro	wn-capped kosy-rinch					30%		0	40	40	Autor Instant			Black-capped Gnatcatcher					15-50%		A, R, U	34	34	Desert Scrub
PRE	VENT DECLINE: "R" Yellov	w Watch L	ist - Spe	cies r	not declin	ing but vulne	able due to sm	all range or population	and moderate threats (12	species)				Wrentit					24%	> 50	U	32, 15	32, 15	Chaparral
The	mmulated Owl					uncerta	n	1, C, U	34, 16, 10		Western Forest	1		Wood Thrush					59%	31	F, T, U, E, I	28, 29, 27, 24, 13	BZ, GT, HN, MX-C	Eastern Forest
Luc	cifer Hummingbird					uncerta	'n	ci	35	MX-H; MX-P	Desert Scrub	1		California Thrasher					58%	34	U	32	32	Chaparral
Gri	ay Vireo					none	> 50	T, F, D	16, 34	MX-B	Western Forest	1		Sprague's Pipit					73%	27	A, R, E, I	11	36, 37, 35, 21, 34	Grassland
Isla	and Scrub-Jay					uncerta	n	F, D	12	32	Western Forest	1		Chestnut-collared Longspur					85%	21	A, R, E, I	11, 17	35, 34	Grassland
Gi	Ifornia Gnatcatcher					uncerta	n	U	32	32	Chaparral	1		McCown's Longspur					85%	> 50	A, R, E, I	11, 18, 17, 10	35, 21, 18, 34, 19	Grassland
Mc	Key's Bunting					uncerta	n	ci	1	1	Arctic Tundra	1	$\leq$	Prothonotary Warbler					34%	> 50	T, U, P	26, 27	RA, CR	Eastern Forest
	ima Warbler					uncerta	n		35	Madt	Mexican Pine Dak	1		Virginia's Warbler				-	38%	> 50	τ.ε.υ	16, 34	Mx-P	Western Forest
	tland's Warbler					none		L	12	85	Eastern Forest	1		Connecticut Warbler					51%	> 50	1.1	6, 8, 12	60	Boreal Forest
	nslow's Sparrow	-				uncerta	n >50	A, U	24, 22	25, 26, 27	Grassland		$\sim$	Kentucky Warbler					25%	> 50	τ.τ.υ	24, 25, 27, 28	BZ, GT, HN, MX-C	Eastern Forest
	Ison's Sparrow	-				uncerta		C, A, U	7, 11, 6, (14)	37, 27	Wetland	1		Cape May Warbler					795	> 50		6, 6, 12, 7	Hisp, BS, CU	Boreal Forest
	aside Sparrow					none	>50	CLU	37, 30, 27	37, 27	Coastal Saltmarsh			Cerulean Warbler					735	26	TEEU	28	60	Eastern Forest
	dubon's Oriole					uncerta	_	1	37, 30, 27	36			$\sim$	Prairie Warbler					545	> 50	T, T, U	27, 29, 28, 24, 25	BS, CU, Hisp	Eastern Forest
						_	_		r~	Pro-	Tropical Dry Forest			Grace's Warbler					52%	> 50	T, F, Cl	34, 16	BZ, GT, HN, MX-H	Mexican Pine Oak
REV	ERSE DECLINE: "D" Yellow	Watch Li	it - Spec	ies w	rith popul	ation decline	and moderate	to high threats (55 sp	cies)					Canada Warbler					63%	> 50	LI	8, 12, 14	0	Boreal Forest
Mo	ountain Quail					19%	> 50	CL F	32, 15, 5	32, 15, 5	Western Forest	1		Rufous-winged Sparrow					15-50%		R.A.U	33, 34	13, 34	Desert Scrub
Sca	aled Quail					67%	8	R, A, CI	35, 18	35, 18	Desert Scrub	1		Black-chinned Sparrow					61%	> 50	RU	15, 12, 14	34, 35	Chaparral
Gri	eater Sage-Grouse		$\square$			67%	> 50	E.R.D.A.CL	10, 17, 9	10, 17, 9	Sagebrush	1		Five-striped Sparrow					15-50%			14	MX-P	Tropical Dry Forest
	oty Grouse					52%	> 50		5	5	Western Forest	1		Baird's Sparrow					725	> 50		11	14	Grassland
	eater Prairie-Chicken					> 50%	-	ALLI	19	19	Grassland		_	Le Conte's Sparrow					61%	43	A,U, Cl	6, 7, 11	25, 21, 20, 37	Grassland
	hite-crowned Pigeon					15-505		T.H	31	31	Mangrove			Harris's Sparrow		-			63%		A, U	1.7	19, 21	Arctic Tundra
	nd-tailed Pigeon					60%	>50	5.7	5, 32, 34		Western Forest			Bobolink					59%	48*	A.U	11, 13, 12, 17, 14, 23	80	Grassland
	ingrove Cuckoo					15-505		U,T	11	-	Mangrove			Cassin's Finch		-			68%	> 50		10. 9. 15	16	Western Forest
	ck-billed Cuckoo					60%	37*	τ.τ.υ	12, 13, 23, 28	VE, MX-P, EC	Eastern Forest													Boreal Forest
	hiskered Screech-Owl					15-505		5,0,0		14	Mexican Pine Oak			Evening Grosbeak					92%	38*	,	14, 12, 9, 10, 5	6, 8	sores rorest
we we	inkered screech-owl					15-509	· [	r, u, ci		P.4	mexican Pine Oak													

Partners in Night 2016 Landbird Conservation Plan Revision

7 =

### **Priority Bird Plans**

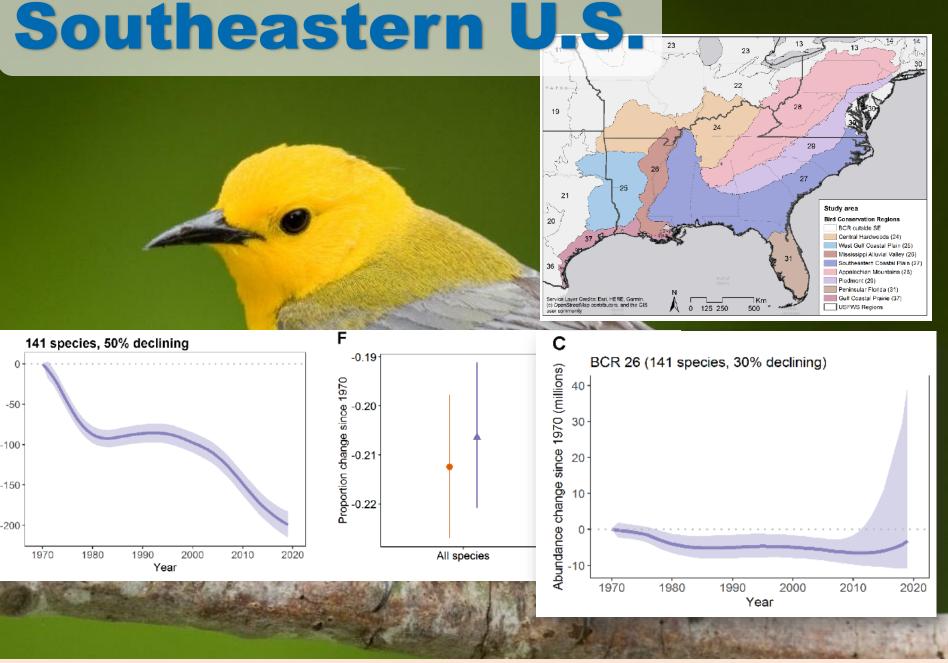
- Identifies priority bird species
- Identifies key habitat characteristics
- Population goals
- Key Management
- Decision support tools

Lower Mississippi Valley Joint Venture SHOREBIRD PLAN SUMMARY 2019





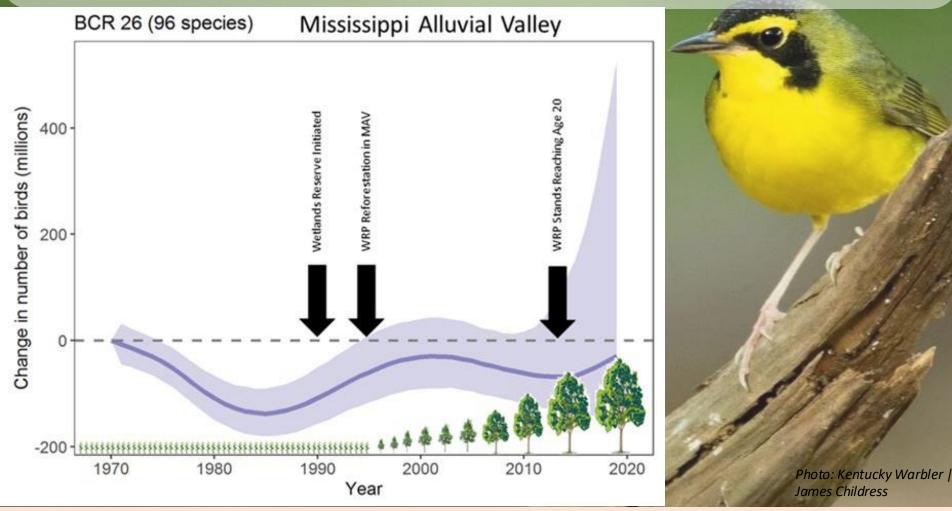




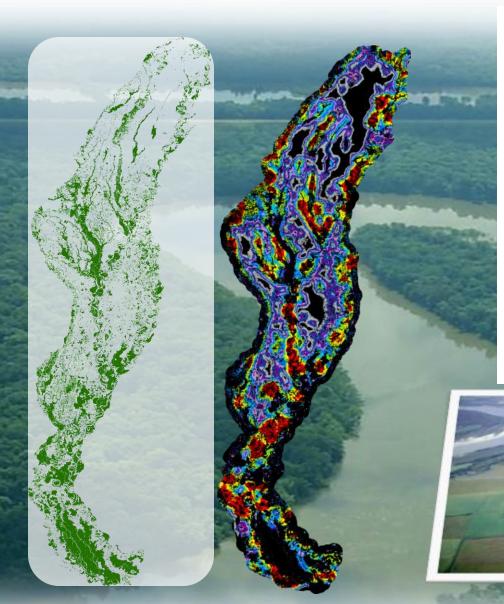
Michel et al. 2023

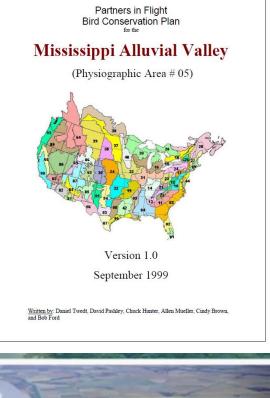
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## Mississippi Alluvial Valley (MAV)



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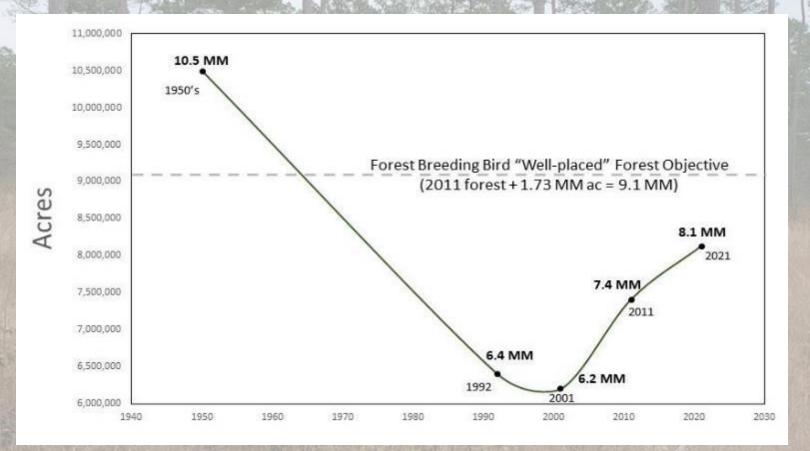








# **MAV Restoration Goal**



consider Your Objectives Opem Pine

CA AND ALL

Red-Cockaded woodpecker 40-60 Basal Area (sq tt/acre)

### Woodland

Basal Area Target : 40 - 60 sq ft/acre

Open Pine Priority Bird Species NEED specific habitat features!



If your objective is to manage for Open Pine Woodland bird species, mature pine stands should be thinned to a basal area **below 60 sq ft/acre.** 

For Open Pine Woodland birds to thrive, ALL of their habitat needs should be met including: nesting, over wintering, and foraging.

Red-cockaded Woodpecker (Betty Rizzotti); Brown-headed Nuthatch (ABC); Bachman's Sparrow (Greg Lavaty); Red-headed Woodpecker (Karl Krueger)



Brown-headed Nuthatch 20-60 Basal Area (sq ft/acre)



Bachman's Sparrow < 60 Basal Area



Red-headed Woodpecker 40-60 Basal Area (sq ft/acre) Consider Your Objectives

### Pine

### Savannas

Basal Area Target : 15 - 30 sq ft/acre

Open Pine Priority Bird Species NEED specific habitat features!

Henslow's Sparrow

< 40 Basal Area

If your objective is to manage for Pine Savanna bird species, mature pine stands should be thinned to a basal area **below 40 sq ft/acre.** 

For Pine Savanna birds to thrive, ALL of their habitat needs should be met including: nesting, over wintering, and foraging.

Henslow's Sparrow (Lev Frid); Northern Bobwhite (Jim Giocomo); LeConte's Sparrow (Ian Maton); Prairie Warbler (Ray Hennessy )



Northern Bobwhite **40 Basal Area** (sa ft/acre)



LeConte's Sparrow **< 40 Basal Area** (sa ft/acre)



### AR-LA CDN Open Pine Landscape Restoration RCPP 2319 Purpose

- Objective 1 open pine habitat on 30,000 acres of private lands
  - 9,600 acres of management practices planned FY22 (2,150 land acres)
  - 20,700 acres of management practices planned FY23 (2,810 land acres)
- Objective 2 open pine habitat on 30,000 acres contribution
  - 61,056 acres management contributed
- Project will benefit
  - Priority birds
  - T&E species
  - SWAP SGWN

MAV Challenges & Opportunities

- Hydrology changes
- Forest stand condition
  Forest
  - management

WGCPO Challenges & Opportunities

- Prescribed fire
- Landowner barriers
- Economic tradeoffs

- Bird response metrics
- Testing of assumptions