

Quail 9  
Joint Quail  
Conference



28<sup>th</sup> Annual  
NBTC Meeting

9<sup>th</sup> National  
Quail Symposium

August 1-5, 2022 | Springfield, Missouri



# Our Partners



University of Missouri



# Welcome

Welcome to the Joint Quail Conference of the 28th Annual Meeting of the National Bobwhite Technical Committee (NBTC) and the Ninth National Quail Symposium.

The National Bobwhite Conservation Initiative (NBCI), National Bobwhite Technical Committee (NBTC), Missouri Department of Conservation (MDC), University of Missouri (MU), United States Forest Service (USFS), Quail Forever (QF), and Clemson University have the privilege of hosting the Joint Conference of the 28th Annual Meeting of the NBTC and the Ninth National Quail Symposium.

## National Bobwhite Technical Committee

NBTC is comprised of 100+ wildlife professionals from state and federal agencies, universities, and Private Organizations. The primary mission of the NBTC is to provide leadership and technical guidance for the National Bobwhite Conservation Initiative. The group was formed in 1995 for the purpose of:

- Identifying factors responsible for population declines of bobwhites and other associated early successional wildlife species.
- Identifying gaps in knowledge about the bobwhite population dynamics and ecology.
- Developing and implementing solutions to habitat and population management problems.
- Providing sound scientifically based information to stakeholders, administrators, and policy makers.
- Developing and implementing solutions to specific bobwhite population, habitat and management problems.
- Perpetuating the tradition of the sport of wild bobwhite quail hunting.

## National Quail Symposium

This is the ninth in the series of Northern Bobwhite symposia dating back to 1972, and since Quail 3 in 1992, western quail have been included. Beginning with Quail 7, the symposia series has been led by NBCI and NBTC.

Quail 9 will feature more than 40 presentations featuring bobwhite and western quail management and research on topics such as restoration, translocation, population ecology, behavior, population estimation, hunting, physiology, and genetics.

# Schedule At A Glance

## Monday, August 1, 2022

- 8:00 am - 12:00 pm NBTC Steering Committee Meeting
- 1:30 - 5:00 pm NBTC State Quail Coordinators Meeting
- 7:00 - 8:30 pm New Member Orientation and Partner Meeting

## Tuesday, August 2, 2022

- 8:00 am - 12:00 pm NBTC Plenary Session
- 12:00 - 1:30 pm Lunch on your own
- 1:30 - 3:15 pm NBTC Structure Critical Review
- 3:15 - 3:30 pm Break
- 3:30 - 4:20 pm NBTC Structure Critical Review - Session 2
- 4:20 - 5:00 pm NBTC Structure Critical Review Summary
- 5:30 - 7:00 pm NBTC Reception

## Wednesday, August 3, 2022

- 7:00 - 8:00 am Breakfast Buffet
- 8:00 - 9:45 am NBCI Strategic Habitat Conservation (CIP) Critical Review
- 9:45 - 10:00 am Break
- 10:00 am - 12:00 pm NBCI Strategic Habitat Conservation (CIP) Critical Review
- 12:30 pm NBTC Awards Luncheon
- 2:30 - 5:00 pm Business Meeting
- 6:00 pm NBTC/Quail 9 Reception and Poster Session

## Thursday, August 4, 2022

- 7:00 - 8:00 am Breakfast Buffet
- 8:00 am - 12:00 pm Quail 9 Welcome  
Dave Hoover
- Welcome to Missouri  
Aaron Jeffries, *Deputy Director of Engagement*
  - Missouri Quail Research Video
  - Adaptive Quail Management - Western Perspective  
Dr. Lenny Brennan
  - Adaptive Quail Management - Eastern Perspective  
Dr. James Martin
  - Background for the Southwest MO Quail Study  
Kyle Hedges
  - Results from the Southwest MO Quail Study  
Dr. Frank Thompson

12:00 - 1:00 pm Lunch

1:00 - 2:00 pm State of the Bobwhite Talk  
Dr. James Martin

2:00 - 4:40 pm Quail 9 Concurrent Sessions

## Friday, August 5, 2022

- 7:00 - 8:00 am Breakfast Buffet
- 8:00 - 10:00 am Quail 9 Concurrent Sessions
- 10:00 am Break
- 10:30 - 11:45 am Quail 9 Concurrent Sessions
- 11:50 am - 2:00 pm Quail 9 Awards Luncheon
- 2:00 - 3:00 pm Closing Remarks: The Evolution of Quail Research  
Dr. Fidel Hernández

# NBTC Meetings

Monday, August 1, 2022 - Tuesday, August 2, 2022

Monday, August 1, 2022		Room
8:00 am - 12:00 pm	NBTC Steering Committee Meeting	Texas Room
1:30 - 5:00 pm	NBTC State Quail Coordinators Meeting	Texas Room
7:00 - 8:30 pm	New Member Orientation and Partner Meeting	Arkansas ABC Room

Tuesday, August 2, 2022	
Nebraska/Iowa Room	
NBTC Plenary Session	
All groups meet from 8:00 am - 12:00 pm	
8:00 - 8:25 am	<b>Welcome to Missouri - Opening Remarks</b> Bill White and Lisa Potter
8:25 - 8:55 am	<b>NBCI Director's Remarks</b> John Morgan
8:55 - 9:25 am	<b>State of the Bobwhite in Missouri</b> Beth Emmerich
9:25 - 9:45 am	<b>Making Habitat a Habit; the Power of Cooperative Efforts in Conservation and Agriculture</b> Greg Collier
9:45 - 10:05 am	<b>Grassland Conservation Opportunities Abound</b> Nate Muenks and Megan Buchanan
10:10 - 10:20 am	<b>Break</b>
10:20 - 10:40 am	<b>NRCS Wildlife Efforts and Accomplishments in Missouri</b> Jason Sykes
10:40 - 11:00 am	<b>Quail Forever in Missouri: Where We've Been, Where We're Going</b> Andrew White
11:00 - 11:20 am	<b>Bird Monitoring with the Future in Mind: A Covey of Remote Data Possibilities</b> Ethan Duke
11:20 - 11:40 am	<b>Community Conservation in Missouri - Connecting People with Nature Where They Live</b> Jason Jensen
11:40 am - 12:00 pm	<b>Bumble Bee Reliance on Native Plants and Diversity</b> Bill White
12:00 - 1:30 pm	<b>Lunch on Your Own</b>

# NBTC Meetings

Tuesday, August 2, 2022 - Wednesday, August 3, 2022

Tuesday, August 2, 2022 <i>(Continued)</i>		Room
<b>NBTC Structure Critical Review</b> All groups meet from 1:30 - 5:00 pm		
	Facilitated groups 1 and 2	Colorado A Room
	Facilitated groups 3 and 4	Colorado B Room
3:15 - 3:30 pm	Break	Ballroom Lobby
	Facilitated groups 5 and 6	Kansas A Room
	Facilitated groups 7 and 8	Kansas B Room
	Facilitated groups 9 and 10	Kansas C Room
5:30 - 7:00 pm	NBTC Reception	Nebraska/Iowa Room

Wednesday, August 3, 2022		Room
7:00 - 8:00 am	Breakfast Buffet	Ballroom Lobby
<b>NBCI Strategic Habitat Conservation (CIP) Critical Review</b> All groups meet from 8:00 am - 12:00 pm		
	Facilitated groups 1 and 2	Colorado A Room
	Facilitated groups 3 and 4	Colorado B Room
9:45 - 10:00 am	Break	Ballroom Lobby
	Facilitated groups 5 and 6	Kansas A Room
	Facilitated groups 7 and 8	Kansas B Room
	Facilitated groups 9 and 10	Kansas C Room
12:30 pm	NBTC Awards Luncheon	Nebraska/Iowa Room
2:30 - 5:00 pm	Business Meeting	Nebraska/Iowa Room
6:00 pm	NBTC/Quail 9 Reception and Poster Session <i>Sponsored by Quail Forever</i>	Nebraska/Iowa Room

# NBTC/Quail 9 Poster Session

Wednesday, August 3, 2022 — 6:00 pm

Nebraska/Iowa Room	
1.	<b>A Monitoring Program to Evaluate the Coastal Grassland Restoration Incentive Program (C-GRIP)</b> Stephen J. DeMaso, William G. Vermillion, and Mark W. Parr
2.	<b>Stress and Predation Impacts on North American Quail Translocations</b> Curt Vandenberg, Sarah Currier, Jeffrey Whitt, and Kelly Reyna
3.	<b>Bobwhite Response to Cattle Grazing in South Texas</b> Bradley K. Johnston
4.	<b>Impacts to Quail Space Use and Demographics from Oil and Gas Development</b> Kelsey R. Davis, Eric D. Grahmann, Fidel Hernández, Chase R. Currie, Timothy E. Fulbright, David B. Wester, and Humberto L. Perotto-Baldivieso
5.	<b>Exploring the Relationships between South Texas Northern Bobwhite Populations and Cecal Worms via System Dynamics</b> Nicole J. Traub, Benjamin L. Turner, Leonard A. Brennan, and Alan M. Fedynich
6.	<b>Northern Bobwhite Survival and Productivity in Relation to Food Supplementation</b> Shelby R. Simons, Greg Hagan, Theron M. Terhune II, and James A. Martin
7.	<b>Avian abundance and diversity on Knoxville Wildlife Area in California following the County Fire of 2018</b> Katherine S. Miller, Stacy Martinelli, and Levi E. Souza
8.	<b>Evaluating Release Strategy for Translocated Northern Bobwhites in Cross Timbers Ecoregion of Texas: A Pilot Study</b> Rebekah E. Ruzicka, Dale Rollins, and Ty Bartoskewitz
9.	<b>Effect of Food Distribution on Northern Bobwhite Resource Selection and Survival</b> Rachel Gardner, John Maerz, Theron M. Terhune II, Ira B. Parnell, and James A. Martin
10.	<b>Analysis of Predator Avoidance Behavior in California Valley Quail</b> Curt Vandenberg
11.	<b>Monitoring Scaled Quail Occupancy and Colonization Post-translocation on a Large Landscape</b> Rebekah E. Ruzicka and Dale Rollins
12.	<b>Northern Bobwhite Response to Control of Red Imported Fire Ants in the Gulf Coastal Prairie of Texas</b> Kelly M. Redmond, Eric D. Grahmann, Fidel Hernández, Leonard A. Brennan, Michael E. Morrow, and Timothy Anderson
13.	<b>Cascading Effects of Hunting Disturbance on Northern Bobwhite Behavior, Physiology, and Survival</b> Emily Prosser, Theron M. Terhune, Kristen J. Navara, Geoff Beane, and James A. Martin
14.	<b>A Simulation Model of Sustained-yield Harvest for Northern Bobwhite in South Texas</b> Joseph P. Sands, Stephen J. DeMaso, Fidel Hernández, Leonard A. Brennan, Matthew J. Schnupp, Trent W. Teinert, Dale Rollins, and Robert M. Perez
15.	<b>Translocating Wild California Valley Quail to Texas: An Evaluation of Survival, Dispersal, Tracking Efficacy, and Roost Preference</b> Garrett Rushing

# Quail 9 Concurrent Sessions

Thursday, August 4, 2022

Nebraska/Iowa Room	
Moderator: Dave Hoover and Frank Loncarich	
7:00 - 8:00 am	<b>Breakfast Buffet</b>
8:00 am	<b>Quail 9 Welcome</b> Dave Hoover
8:15 am	<b>Welcome to Missouri</b> Aaron Jeffries, <i>Deputy Director of Engagement</i>
8:45 am	<b>Missouri Quail Research Video</b>
9:00 am	<b>Adaptive Management and Quail Conservation on Rangelands in the American West</b> Dr. Lenny Brennan
9:30 am	<b>State of the Bobwhite</b> Dr. James Martin
10:15 am	<b>Break</b>
10:45 am	<b>Southwest MO Quail Ecology Project: Which Management Model Produces More Quail?</b> Kyle Hedges
11:00 - 11:45 am	<b>Northern Bobwhite Demographics and Resource Selection Are Explained by Prescribed Fire with Grazing and Woody Cover in Southwest Missouri</b> Dr. Frank Thompson III
12:00-1:00pm	<b>Lunch provided</b>
1:00-2:00pm	<b>Adaptive Quail Management - Eastern Perspective</b> Dr. James Martin



# Quail 9 Concurrent Sessions

Thursday, August 4, 2022

	Nebraska/Iowa Room	Colorado Room	Kansas Room
	Bobwhite Restoration	Translocation	Western Quail
	Moderator: Frank Loncarich	Moderator: Kyle Hedges	Moderator: David Garcia-Solorzano
2:00 pm	Habitat works: How Partnerships and Habitat Improvement have Restored Quail Populations in the 2C Quail Focus Area <b>Lee Metcalf</b>	Survival, movement, and habitat use of translocated northern bobwhite in Texas <b>Nova Silvy</b>	Population Density Estimates of the Montezuma Quail ( <i>Cyrtonyx montezumae</i> ) in West Texas <b>Alberto Macias-Duarte</b>
2:20 pm	Landowner cooperative key to success in the Bee Ridge Quail focus area <b>John A. Pinkowski</b>	Winter Survival and Resource Use of Translocated Northern Bobwhite in the Mid-Atlantic United States <b>Theron Terhune</b>	Montezuma Quail in the Edwards Plateau of Texas: Detection, Occurrence, and Habitat <b>Zachary J. Pearson</b>
2:40 pm	Lessons Learned from the First 10 Years of the Oaks and Prairies Joint Venture's Grassland Restoration Incentive Program (GRIP) <b>James J. Giocomo</b>	Highly variable autumn calling rates of northern bobwhite following translocation <b>John Palarski</b>	Nesting Of Montezuma Quail In Mexico <b>David Garcia-Solorzano</b>
3:00 pm	Results from Kentucky's 10-year Bobwhite Recovery Plan <b>Cody M. Rhoden</b>		Age, sex and family composition of Montezuma quail ( <i>Cyrtonyx montezumae</i> ) coveys in Arizona, New Mexico and Texas <b>Alberto Macias-Duarte</b>
3:20 pm	<b>BREAK</b>		





# Quail 9 Concurrent Sessions

Thursday, August 4, 2022

	Nebraska/Iowa Room	Colorado Room	Kansas Room
	<b>Bobwhite Ecology in SW Missouri</b>	<b>Quail Physiology/Ecology</b>	<b>Western Quail</b>
	<i>Moderator: Beth Emmerich</i>	<i>Moderator: Kyle Hedges</i>	<i>Moderator: David Garcia-Solorzano</i>
3:40 pm	Nest Hatch Chronology of Northern Bobwhite and Implications for Management <b>Frank Loncarich</b>	Estimating Northern Bobwhite Density in Privately Owned Forests across the Southeast <b>Victoria Nolan</b>	Landscape-scale Effects of Habitat and Weather on Scaled Quail Populations <b>John T. Edwards</b>
4:00 pm	Home range and space use of northern bobwhite under two different management models in southwestern Missouri <b>Thomas R. Thompson</b>	Histopathological Analysis of Quails in the Trans-Pecos Ecoregion of Texas <b>Trey E. Johnson</b>	Masked Bobwhite Recovery: The Need For A Multifaceted Approach <b>Lacrecia A. Johnson</b>
4:20 pm		Exploring a Plant-Diversity Hypothesis to Explain Helminth Prevalence in Northern Bobwhite in Texas <b>John E. Herschberger</b>	Habitat of the Long-Tailed Wood-Partridge in central Mexico <b>David Garcia-Solorzano</b>




# Quail 9 Concurrent Sessions

Friday, August 5, 2022

	Kansas Room	Colorado Room	Nebraska/Iowa Room
	Bobwhite Ecology	Population Estimation/ Hunting	Western Quail
	<i>Moderator: Beth Emmerich</i>	<i>Moderator: Dave Hoover</i>	<i>Moderator: Kyle Hedges</i>
8:00 am	Effects of Climate Change on Northern Bobwhite Nesting Chronology and Clutch Size <b>Justin A. Rectenwald</b>	Applying Multistate Mark-recapture Models with State Uncertainty to Estimate Survival and Reproduction of Quail <b>Rebekah E. Ruzicka</b>	Variability and Genetic Structure of the Montezuma Quail <i>Cyrtonyx Montezumae</i> in the Northern Limit of Its Distribution <b>Alberto Macias-Duarte</b>
8:20 am	Northern Bobwhite Response to Vegetation Management and Recovery in South Texas <b>Leonard A. Brennan</b>	Breeding Season Survival and Reproduction in a High-Density Bobwhite Population: A Case Study <b>William E. Palmer</b>	Winter Diet of Montezuma Quail in Arizona and New Mexico <b>Oscar E. López-Bujanda</b>
8:40 am	Examining a Habitat-Weather Threshold for Northern Bobwhite Populations in the Southwestern United States <b>John T. Edwards</b>	Detection Rates of Northern Bobwhite Coveys Using a Small Unmanned Aerial System-mounted Thermal Camera <b>Megan E. Martin</b>	Composition of the Montezuma Quail's Diet in Arizona, New Mexico, and Texas <b>Ana G. Paredes-Acuña</b>
9:00 am	Diurnal Occurrence of Great-Horned Owls on Northern Bobwhite Hunting Properties in Southwest Georgia <b>Justin A. Rectenwald</b>	Examination of an Anecdotal "October Disappearance" of Northern Bobwhite in the Rolling Plains of Texas Through Demographic Data <b>Joshua Luft</b>	Characteristics of Hunter Harvested Montezuma Quail Wings and Implications for Molt Phenology <b>Charles J. Randel III</b>
9:20 am	Climate Impacts on North American Quail <b>Jeffrey G. Whitt</b>	Evaluation of a Solar-Recharged Micro-GPS Datalogger for Northern Bobwhite in the Rolling Plains of Texas <b>Byron Buckley</b>	Western Quail Concluded
9:40 am	Measuring Multiple Demographic Rates in Two Populations of Northern Bobwhite <b>Alexander L. Jackson</b>	Spatial and Temporal Analyses of Bobwhite Hunting Dynamics <b>D. Abraham Woodard</b>	
10:00 am	Effect of Prescribed Fire and Mechanical Treatments on Northern Bobwhite Occupancy in Mesic Pine Flatwoods <b>William E. Palmer</b>		

# Quail 9 Concurrent Sessions

Friday, August 5, 2022

	Kansas Room	Colorado Room
	<b>Bobwhite Ecology (continued)</b>	<b>Population Estimation/Hunting (continued)</b>
	<i>Moderator: Beth Emmerich</i>	<i>Moderator: Dave Hoover</i>
10:20 am	<b>Break</b>	
10:40 am	Northern Bobwhite and Fire: A Review and Synthesis <b>David A. Weber</b>	The Efficacy of Video Cameras to Account for Northern Bobwhites Flushed, but Undetected during Aerial Surveys <b>Andrea Montalvo</b>
11:00 am	Adaptive Management Facilitates Increase in Northern Bobwhite Populations <b>James A. Martin</b>	Evaluating the Harvest Rate Recommendation for Northern Bobwhites in South Texas <b>D. Abraham Woodard</b>
11:20 am	Efficacy of a Preemergence Herbicide Following Postemergence Control to Reduce Sericea Lespedeza in Old-Fields Managed for Northern Bobwhite <b>Mark A. Turner</b>	Relationships between Meteorological and other Variables and Bobwhite Spring Call Counts <b>Jeffrey G. Whitt</b>
11:40 am	Behavioral State-specific Northern Bobwhite Chick Resource Selection <b>Justin N. Hill</b>	<b>Population Estimation/Hunting Concluded</b>
	<b>Nebraska/Iowa Room</b>	
	<i>Moderator: Dave Hoover</i>	
12:00 pm	<b>Quail 9 Awards Luncheon</b>	
	<b>Bringing Declining Grassland Songbirds into the Quail Management Fold</b> <i>Sarah Kendrick, Migratory Bird Biologist, US Fish and Wildlife Service Midwest Region</i>	
2:00 pm	<p style="text-align: center;"><b>Closing Remarks: The Evolution of Quail Research</b> Fidel Hernández, Ph.D.</p> <p>Fidel Hernández is a Professor in the Department of Rangeland and Wildlife Sciences and holds the Alfred C. Glassell, Jr. Endowed Chair for Quail Research. Fidel is a native of Brackettville, Texas and was raised on a working ranch on the western fringe of the Edwards Plateau. His research interests involve wildlife-habitat relationships, rangeland ecology and management, and population ecology. He is a Certified Professional in Rangeland Management with the Society for Range Management.</p>	
		

# What's in a Word?

Words matter,  
and our words have changed before...

as we began:

**Northern Bobwhite  
Conservation Initiative**



as the product of growth, the name changed to:

**National Bobwhite  
Conservation Initiative**



then, another product of growth, our name is now:

**National Bobwhite &  
Grassland Initiative**



*Our name change is designed to bring new people, new attention, and renewed purpose to our work. We believe this gives us a new chance for success by clarifying our mission and breaking down some existing barriers.*

We are the "National Bobwhite & Grassland Initiative",  
and we are restoring bobwhite, pine savannas,  
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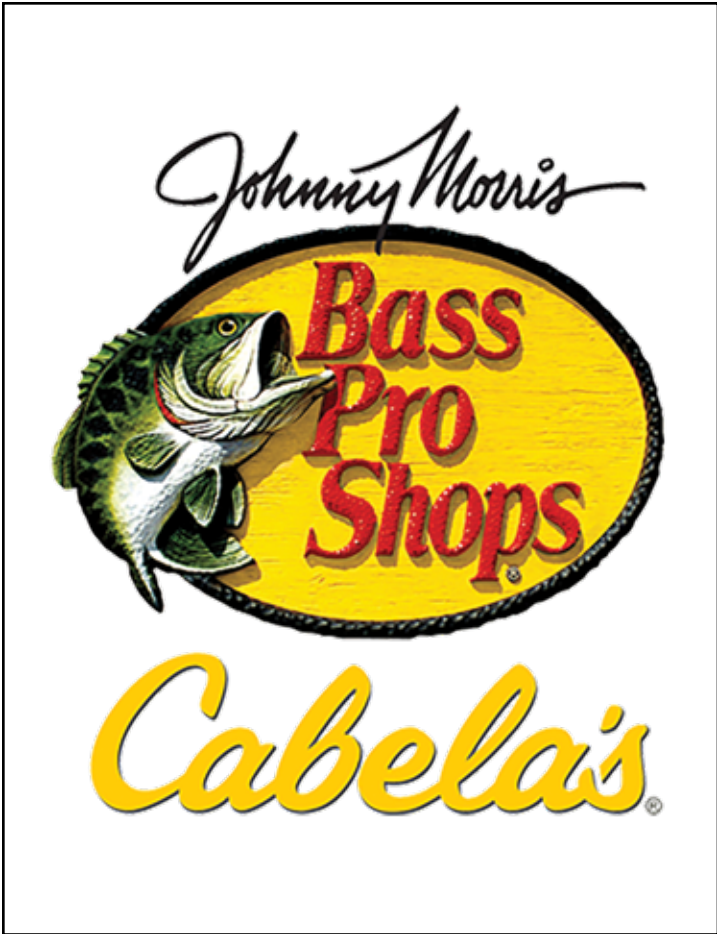
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# Joint Quail Conference Committee

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Casey Bergthold, Quail Forever/Pheasants Forever

Frank Loncarich, Missouri Department of Conservation

Penny Barnhart, National Bobwhite Conservation Initiative

Kyle Hedges, Missouri Department of Conservation

Frank Thompson, U. S. Forest Service

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Ethan Kleekamp, Quail Forever/Pheasants Forever

Garret Albright, Missouri Department of Conservation

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## National Quail Symposium Technical Committee

*Chair:* Frank Loncarich, Missouri Department of Conservation and chair of National Bobwhite Technical Committee Science sub-committee

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Frank Thompson, U. S. Forest Service

John Mark Yeiser, University of Georgia

Molly Foley, National Bobwhite Conservation Initiative

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# Quail 9: National Quail Symposium Proceedings

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## Editorial Assistant

Molly K. Foley, *National Bobwhite Conservation Initiative*



# Our Exhibitors

Exhibitors will be in the Convention Center's Nebraska/Iowa meeting rooms and lobby. The exhibit space is integrated with the general sessions and receptions that will be held in this area. Exhibitors will be available at both the Tuesday and Wednesday night receptions.



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CONSERVATION**  
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Lotek



# Presenter Index

CO = Colorado Room

KS = Kansas Room

NE = Nebraska/Iowa Room

Title	Presenter	Day	Time	Room
Adaptive Management and Quail Conservation on Rangelands in the American West	Brennan, Leonard A.	Th.	9:00 a.m.	NE
Northern Bobwhite Response to Vegetation Management and Recovery in South Texas	Brennan, Leonard A.	Fri.	8:20 a.m.	KS
Evaluation of a Solar-Recharged Micro-GPS Datalogger for Northern Bobwhite in the Rolling Plains of Texas	Buckley, Byron	Fri.	9:20 a.m.	CO
Impacts to Quail Space Use and Demographics from Oil and Gas Development	Davis, Kelsey R.	(4.) Poster Session		
A Monitoring Program to Evaluate the Coastal Grassland Restoration Incentive Program	DeMaso, Stephen J.	(1.) Poster Session		
Landscape-scale Effects of Habitat and Weather on Scaled Quail Populations	Edwards, John T.	Th.	3:40 p.m.	KS
Examining a Habitat-Weather Threshold for Northern Bobwhite Populations in the Southwestern United States	Edwards, John T.	Fri.	8:40 a.m.	KS
Nesting Of Montezuma Quail in Mexico	Garcia-Solorzano, David	Th.	2:40 p.m.	KS
Habitat of the Long-Tailed Wood-Partridge in central Mexico	Garcia-Solorzano, David	Th.	4:20 p.m.	KS
Effect of Food Distribution on Northern Bobwhite Resource Selection and Survival	Gardner, Rachel	(9.) Poster Session		
Lessons Learned from the First 10 Years of the Oaks and Prairies Joint Venture's Grassland Restoration Incentive Program (GRIP)	Giocomo, James J.	Th.	2:40 p.m.	NE
Southwest MO Quail Ecology Project: Which Management Model Produces More Quail?	Hedges, Kyle	Th	10:45 a.m.	NE
The Evolution of Quail Research: Trends in Themes, Cognitive Extent, and Lexical Diversity	Hernández, Fidel	Fri.	2:00 p.m.	NE
Exploring a Plant-Diversity Hypothesis to Explain Helminth Prevalence in Northern Bobwhite in Texas	Herschberger, John E.	Th.	4:20 p.m.	CO
Behavioral State-specific Northern Bobwhite Chick Resource Selection	Hill, Justin N.	Fri.	11:40 a.m.	KS
Measuring Multiple Demographic Rates in Two Populations of Northern Bobwhite	Jackson, Alexander L.	Fri.	9:40 a.m.	KS
Masked Bobwhite Recovery: The Need For A Multifaceted Approach	Johnson, Lacreia A.	Th.	4:00 p.m.	KS
Histopathological Analysis of Quails in the Trans-Pecos Ecoregion of Texas	Johnson, Trey E.	Th.	4:00 p.m.	CO
Bobwhite Response to Cattle Grazing in South Texas	Johnston, Bradley K.	(3.) Poster Session		

# Presenter Index

Title	Presenter	Day	Time	Room
Bringing Declining Songbirds into the Quail Management Fold	Kendrick, Sarah	Fri.	12:40 p.m.	NE
Nest Hatch Chronology of Northern Bobwhite and Implications for Management	Loncarich, Frank L.	Th.	3:40 p.m.	NE
Winter Diet of Montezuma Quail in Arizona and New Mexico	López-Bujanda, Oscar E.	Fri.	8:20 a.m.	NE
Examination of an Anecdotal “October Disappearance” of Northern Bobwhite in the Rolling Plains of Texas Through Demographic Data.	Luft, Joshua	Fri.	9:00 a.m.	CO
Population Density Estimates of the Montezuma Quail ( <i>Cyrtonyx montezumae</i> ) in West Texas	Macias-Duarte, Alberto	Th.	2:00 p.m.	KS
Age, Sex and Family Composition of Montezuma Quail ( <i>Cyrtonyx montezumae</i> ) Coveys in Arizona, New Mexico and Texas	Macias-Duarte, Alberto	Th.	3:00 p.m.	KS
Variability and Genetic Structure of the Montezuma Quail ( <i>Cyrtonyx montezumae</i> ) in the Northern Limit of Its distribution	Macias-Duarte, Alberto	Fri.	8:00 a.m.	NE
State of the Bobwhite	Martin, James A.	Th.	9:30 a.m.	NE
Adaptive Quail Management	Martin, James A.	Th.	1:00 p.m.	NE
Adaptive Management Facilitates Increase in Northern Bobwhite Populations	Martin, James A.	Fri.	11:00 a.m.	KS
Detection Rates of Northern Bobwhite Coveys Using a Small Unmanned Aerial System-mounted Thermal Camera	Martin, Megan E.	Fri.	8:40 a.m.	CO
Habitat Works: How Partnerships and Habitat Improvement have Restored Quail Populations in the 2C Quail Focus Area	Metcalf, Lee	Th.	2:00 p.m.	NE
Avian abundance and diversity on Knoxville Wildlife Area in California following the County Fire of 2018	Miller, Katherine S.	(7.) Poster Session		
The Efficacy of Video Cameras to Account for Northern Bobwhites Flushed, but Undetected during Aerial Surveys	Montalvo, Andrea	Fri.	10:40 a.m.	CO
Estimating Northern Bobwhite Density in Privately Owned Forests across the Southeast	Nolan, Victoria.	Th.	3:40 p.m.	CO
Highly Variable Autumn Calling Rates of Northern Bobwhite Following Translocation	Palarski, John	Th.	2:40 p.m.	CO
Breeding Season Survival and Reproduction in a High-Density Bobwhite Population: A case study	Palmer, William E.	Fri.	8:20 a.m.	CO
Effect of Prescribed Fire and Mechanical Treatments on Northern Bobwhite Occupancy in Mesic Pine Flatwoods	Palmer, William E.	Fri.	10:00 a.m.	KS

# Presenter Index

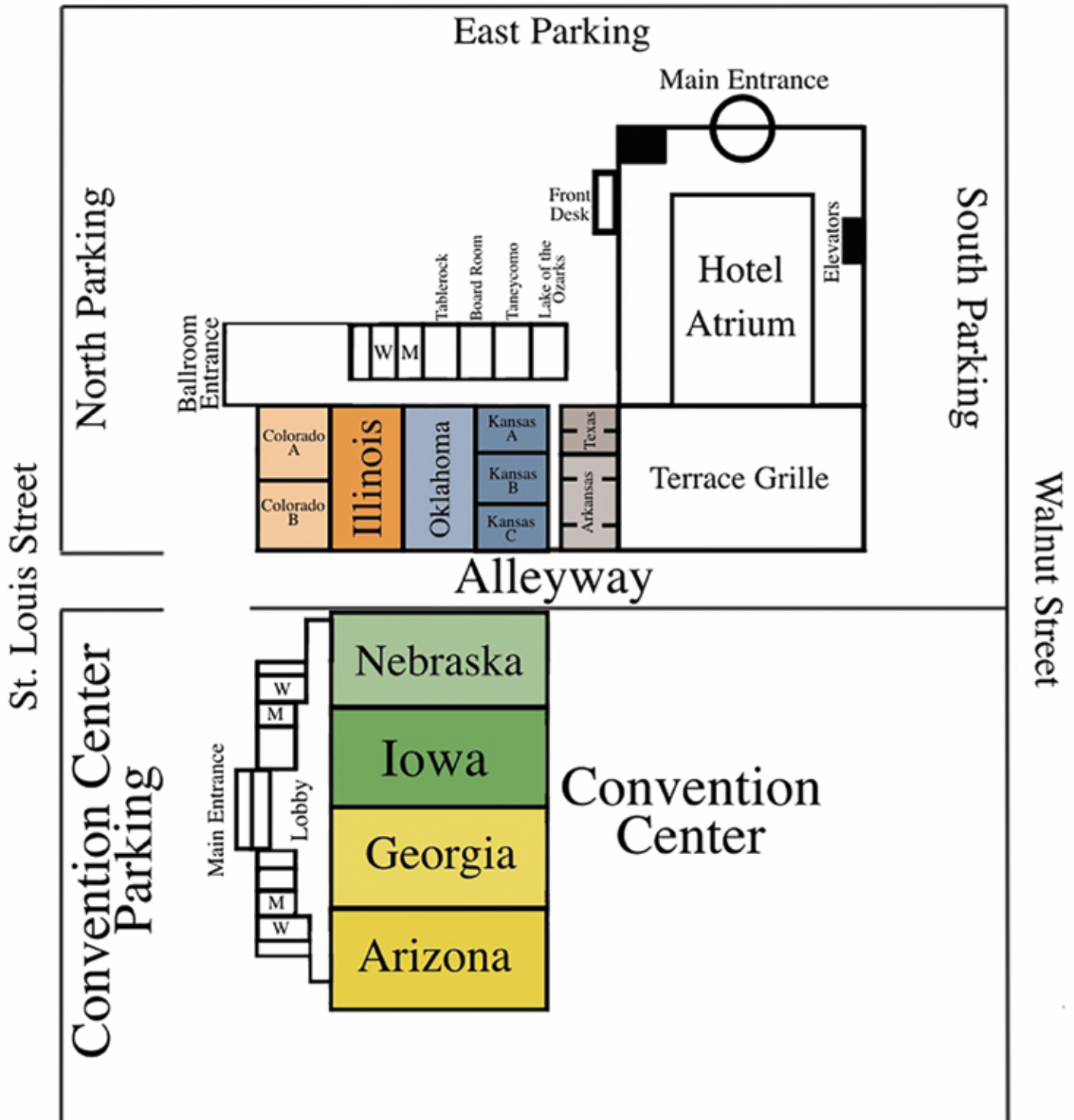
Title	Presenter	Day	Time	Room
Composition of the Montezuma Quail's Diet in Arizona, New Mexico, and Texas	Paredes-Acuña, Ana G.	Fri.	8:40 a.m.	NE
Montezuma Quail in the Edwards Plateau of Texas: Detection, Occurrence, and Habitat	Pearson, Zachary J.	Th.	2:20 p.m.	KS
Landowner Cooperative Key to Success in the Bee Ridge Quail Focus Area	Pinkowski, John A.	Th.	2:20 p.m.	NE
Cascading Effects of Hunting Disturbance on Northern Bobwhite Behavior, Physiology, and Survival	Prosser, Emily	(13.) Poster Session		
Characteristics of Hunter Harvested Montezuma Quail Wings and Implications for Molt Phenology	Randel, Charles J. III	Fri.	9:00 a.m.	NE
Diurnal Occurrence of Great-Horned Owls on Northern Bobwhite Hunting Properties in Southwest Georgia	Rectenwald, Justin A.	Fri.	9:00 a.m.	KS
Effects of Climate Change on Northern Bobwhite Nesting Chronology and Clutch Size	Rectenwald, Justin A.	Fri.	8:00 a.m.	KS
Northern Bobwhite Response to Control of Red Imported Fire Ants in the Gulf Coastal Prairie of Texas	Redmond, Kelly M.	(12.) Poster Session		
Results from Kentucky's 10-year Bobwhite Recovery Plan	Rhoden, Cody M.	Th.	3:00 p.m.	NE
Translocating Wild California Valley Quail to Texas: An Evaluation of Survival, Dispersal, Tracking Efficacy, and Roost Preference	Rushing, Garrett	(15.) Poster Session		
Applying Multistate Mark-recapture Models with State Uncertainty to Estimate Survival and Reproduction of Quail	Ruzicka, Rebekah E.	Fri.	8:00 a.m.	CO
Evaluating Release Strategy for Translocated Northern Bobwhites in Cross Timbers Ecoregion of Texas: A Pilot Study	Ruzicka, Rebekah E.	(8.) Poster Session		
Monitoring Scaled Quail Occupancy and Colonization Post-translocation on a Large Landscape	Ruzicka, Rebekah E.	(11.) Poster Session		
A Simulation Model of Sustained-yield Harvest for Northern Bobwhite in South Texas	Sands, Joseph P	(14.) Poster Session		
Survival, Movement, and Habitat Use of Translocated Northern Bobwhite in Texas	Silvy, Nova J.	Th.	2:00 p.m.	CO
Northern Bobwhite Survival and Productivity in Relation to Food Supplementation	Simons, Shelby R.	(6.) Poster Session		
Winter Survival and Resource Use of Translocated Northern Bobwhite in the Mid-Atlantic United States	Terhune, Theron	Th.	2:20 p.m.	CO

# Presenter Index

Title	Presenter	Day	Time	Room
Northern Bobwhite Demographics and Resource Selection Are Explained by Prescribed Fire with Grazing and Woody Cover in Southwest Missouri	Thompson, Frank R. III	Th.	11:00 a.m.	NE
Home Range and Space Use of Northern Bobwhite under Two Different Management Models in Southwestern Missouri	Thompson, Thomas R.	Th.	4:00 p.m.	NE
Exploring the Relationships between South Texas Northern Bobwhite Populations and Cecal Worms via System Dynamics	Traub, Nicole J.	(5.) Poster Session		
Efficacy of a Preemergence Herbicide Following Postemergence Control to Reduce <i>Sericea Lespedeza</i> in Old-fields Managed for Northern Bobwhite	Turner, Mark A.	Fri.	11:20 a.m.	KS
Stress and Predation Impacts on North American Quail Translocations	Vandenberg, Curt	(2.) Poster Session		
Analysis of Predator Avoidance Behavior in California Valley Quail	Vandenberg, Curt	(10.) Poster Session		
Northern Bobwhite and Fire: A Review and Synthesis	Weber, David A.	Fri.	10:40 a.m.	KS
Climate Impacts on North American Quail	Whitt, Jeffrey G.	Fri.	9:20 a.m.	KS
Relationships between Meteorological and other Variables and Bobwhite Spring Call Counts	Whitt, Jeffrey G.	Fri.	11:20 a.m.	CO
Spatial and Temporal Analyses of Bobwhite Hunting Dynamics	Woodard, D. Abraham	Fri.	9:40 a.m.	CO
Evaluating the Harvest Rate Recommendation for Northern Bobwhites in South Texas	Woodard, D. Abraham	Fri.	11:00 a.m.	CO

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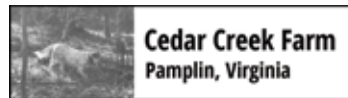
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