Joint Quail Conference Partners:















23rd Annual National Bobwhite Technical Committee Meeting Eighth National Quail Symposium



July 25-28, 2017 | Knoxville, TN





The Joint Quail Conference Is Proudly Hosted By:











Welcome to the Joint Quail Conference of the 23rd Annual Meeting of the National Bobwhite Technical Committee (NBTC) and the Eighth National Quail Symposium.

The week begins with the 23rd Annual Meeting of NBTC July 25-26 and continues as Quail 8 July 26-28.

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 eighth 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 8 will feature 94 presentations and posters on current quail management and research, including updates and progress of the National Bobwhite Conservation Initiative and The Western Quail Plan.

| | Monday, Jul | y 24 |
|---|-------------|---------------------------------------|
| 7:00 PM NBTC State Quail Coordinators Meeting | | NBTC State Quail Coordinators Meeting |

| Tuesday, Jul | Tuesday, July 25 | | | |
|--------------|---|--|--|--|
| 8:00 AM | NBTC Steering Committee Meeting | | | |
| 12:00 PM | NBTC Steering Committee Lunch (Steering Committee members only) | | | |
| 1:00 PM | NBTC General Meeting | | | |
| 2:00 PM | NBTC Subcommittee Meetings, concurrent | | | |
| 6:30 PM | NBTC Reception | | | |

| Wednesday, July 26 | | |
|--------------------|--|--|
| 8:00 AM | NBTC Subcommittee Meetings, concurrent | |
| 12:30 PM | NBTC Awards Luncheon (<i>provided</i>) | |
| 2:30 PM | NBTC Subcommittee Reports and Business Meeting | |
| 6:30 PM | NBTC/Quail 8 Reception and Poster Session | |

| Thursday, July 27 | | |
|-------------------|-----------------------------|--|
| 8:00 AM | Quail 8 Welcome | |
| 9:00 AM | Quail 8 Plenary Session | |
| 10:00 AM | Break | |
| 10:30 AM | Quail 8 Plenary Session | |
| 12:00 PM | Lunch (<i>provided</i>) | |
| 1:00 PM | Quail 8 Plenary Session | |
| 3:00 PM | Break | |
| 3:30 PM | Quail 8 Concurrent Sessions | |
| 6:30 PM | Quail 8 Reception | |

| Friday, July 28 | | |
|-----------------|---|--|
| 8:00 AM | Quail 8 Concurrent Sessions | |
| 10:00 AM | Break | |
| 10:30 AM | Quail 8 Concurrent Sessions | |
| 11:50 AM | Quail 8 Awards Luncheon (<i>provided</i>) | |
| 2:00 PM | Quail 8 Concurrent Sessions | |
| 3:00 PM | Break | |
| 3:15 PM | Quail 8 Closing Remarks | |

| Monday, July 24 | |
|-----------------|---|
| 7:00 PM | NBTC State Quail Coordinators Meeting Cumberland Room |

| Tuesday, July 25 | | | | |
|------------------|--|--|--|--|
| 8:00 AM | NBTC Steering Committee Meeting Windows on the Park, Private Dining Room | | | |
| 12:00 PM | NBTC Steering Committee Lunch (Steering Committee members only) Windows on the Park, Lounge | | | |
| | NBTC Meeting <i>Medallion Room</i> | | | |
| | Moderator: Roger Applegate, Housekeeping and Speaker Introductions | | | |
| | Mark Gudlin, Tennessee Wildlife Resources Agency, Chief of Wildlife & Forestry | | | |
| 1:00 PM | Dr. Keith Belli, University of Tennessee, Forestry, Wildlife and Fisheries Department Head | | | |
| | Don McKenzie, National Bobwhite Conservation Initiative, Director | | | |
| | • Jordan Spaak, National Park Service, Biological Resources Division Ecologist | | | |
| 2:00 PM | NBTC Subcommittee Meetings Room assignments will be posted at registration | | | |
| 6:30 PM | NBTC Reception Parkview Atrium | | | |

| Wednesday, July 26 | | | | |
|---|--|--|--|--|
| 8:00 AM | 8:00 AM NBTC Subcommittee Meetings Room assignments will be posted at registration | | | |
| 12:30 PM | NBTC Awards Luncheon Carriage/Crystal Room Moderator: NBTC Steering Committee | | | |
| 2:30 PM NBTC Subcommittee Reports and Business Meeting Medallion Room | | | | |
| 6:30 PM | :30 PM NBTC/Quail 8 Reception and Poster Session Sunsphere | | | |



SUNSPHERE Poster Session Social (6:30 PM - 10:00 PM)

Evaluation of Land Restoration Practices on Northern Bobwhite Productivity in North-Central Texas: Preliminary Results — Danielle Belleny

Summer Survival of Translocated Northern Bobwhite in the New Jersey Pine Barrens: Preliminary Results — Phillip Coppola

A Method for Setting Northern Bobwhite Population and Habitat Objectives for Large Landscape Partnerships — Stephen J. DeMaso

Landscape-Scale Geospatial Assessment of Open Pine and Natural Grassland Condition for Northern Bobwhite in the Gulf Coastal Plains and Ozarks — Kristine Evans

Utility of Fine Resolution Land Cover Data for Modeling Northern Bobwhite Abundance in the Oaks and Prairies of Oklahoma — James Giocomo

Data-Driven Planning for the Conservation of Grassland Birds in the Central Hardwoods Bird Conservation Region — Larry Heggemann

Evaluating Temporal Differences in Land Cover: Implications for Managing Bobwhite at the Landscape-Scale in Virginia — Marc Puckett

An Analysis of the Interactions between Weather and Land Use on Midwestern Gamebird Populations Using Historical Data — Amanda R. Lipinski

Response of Grassland Birds to Varying Agricultural Effort at Different Spatial Scales in 20 Texas Counties from 2013 to 2016 — Anna Matthews

Impacts of Habitat Fragmentation on Northern Bobwhites in the Gulf Coast Prairie Landscape Conservation Cooperative — Katherine S. Miller

Partnering for Quail in South Carolina:

A Cooperative Approach Making a Difference — Jordan S. Nanney

Connecting Land Ethics and Entrepreneurship Through Experiential Learning in a Quail-Centric Outdoor Education Program — Kelly S. Reyna

Influence of Northern Bobwhite Nest Site Selection on Nest Survival in an Agricultural Landscape — Andy D. Richardson

Effects of Growing Season Fire on Northern Bobwhite Nest Site Selection and Survival — Sarah B. Rosche

Effects of Source Population and Release Strategy on Survival and Dispersal of Translocated Scaled Quail in the Rolling Plains of Texas — Rebekah E. Ruzicka

Triple Brood Production by Northern Bobwhites — D. Clay Sisson

Distance Sampling to Assess Post-grazing
Northern Bobwhite Recovery in South Texas — Rachel A. Smith

Winter Survival and Habitat Selection of Translocated Northern Bobwhite in the New Jersey Pine Barrens and Eastern Shore of Maryland — Kaili R. Stevens

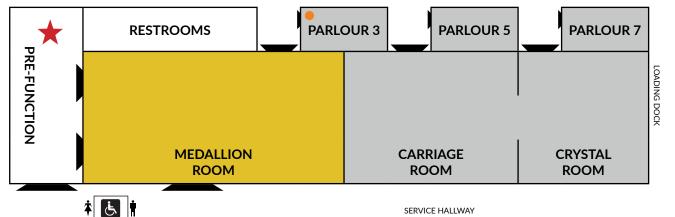
How Many Are There? Estimating the North American Northern Bobwhite Population Size for Conservation Planning Purposes — William Vermillion

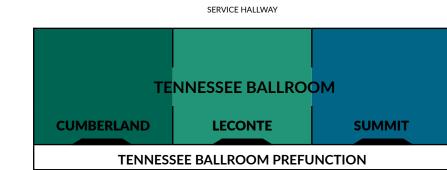
Automated Identification and Mapping of Woody Habitat Using Digital Ortho Imagery — M. Keith Wethington

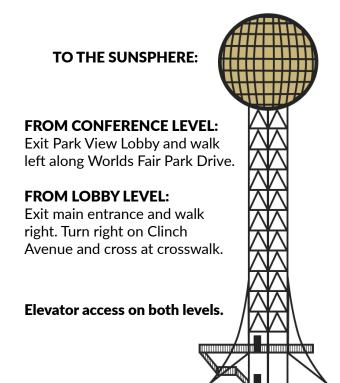
Holiday Inn Floor Plan

WINDOWS ON THE PARK PAVILION









PARK VIEW LOBBY

★ = REGISTRATION

Conference registration is located in the pre-function hallway outside the Medallion Room.

The registration desk will open Tuesday at 8:00 AM.

= SPEAKER PREP

Parlour 3 will be available Wednesday - Friday for speakers to practice their presentations.

MEDALLION ROOM Moderators: Roger D. Applegate, Beth A. Emmerich, and Kelly S. Reyna Welcome 8:00 AM **Ed Carter** Progress of the National Bobwhite Conservation Initiative 9:00 AM Donald F. McKenzie Update on Western Quail Management Plan 9:30 AM Casey J. Cardinal **BREAK** 10:00 AM Monitoring Northern Bobwhite Populations Reduces Uncertainty About Management Effectiveness: A Paradigm of Empiricism and Hope 10:30 AM James A. Martin A Focused Habitat Approach to Northern Bobwhite Restoration in Kentucky 11:00 AM John J. Morgan Fall Quail Densities on Public Land in Missouri: A Decade of Monitoring 11:30 AM Beth A. Emmerich 12:00 PM LUNCH **Effects of Broad-Scale Conservation** on Northern Bobwhite Populations in Agricultural Landscapes 1:00 PM John M. Yeiser Response of Northern Bobwhites to Habitat Improvement on Private Lands in the Rolling Plains of Texas 1:30 PM C. Brad Dabbert Population Response of Three Quail Species to Habitat Restoration in South Texas 2:00 PM Eric D. Grahmann Translocation as a Population Restoration Technique for Northern Bobwhites: A Review and Synthesis 2:30 PM James A. Martin 3:00 PM **BREAK**



| ı | CHARLEN AND DOOM | LECONTE DOOM | CLINANAIT DOONA |
|---------|--|--|--|
| | CUMBERLAND ROOM | LECONTE ROOM | SUMMIT ROOM |
| | Bobwhite Seasonal Climate | Bobwhite Ecology | Bobwhite Restoration - Approaches and Theories |
| | Moderator: Jeff Lusk | Moderator: Philip Coppola | Moderator: Jeffrey G. Whitt |
| 3:30 PM | Effect of Temperature and Wind on Metabolism of Northern Bobwhite in Winter L. Wes Burger, Jr. | Comparing the Accuracy of Egg Candling and Egg Floatation to Estimate the Hatching Date of Northern Bobwhite Clutches **Byron R. Buckley** | The Role of Joint Ventures in Northern Bobwhite Conservation Stephen J. DeMaso |
| 3:50 PM | Temporal and Spatial Assessment of Usable Space and Cover Type Interspersion for Northern Bobwhites on Private Farmlands in Southwestern Ohio <i>Robert J. Gates</i> | Genetic Diversity and Relatedness of Northern Bobwhite Coveys in South Texas <i>Katherine S. Miller</i> | Horizontal Integration of Strategic Habitat Conservation for Declining Grassland Wildlife Population in the Oaks and Prairies Joint Venture James Giocomo |
| 4:10 PM | Breeding Season Microclimate Assessment for Northern Bobwhite in Areas of Experimental Habitat Manipulation on a Reclaimed Surface Mine Site Donald M. Yow | Breeding Season Survival and Nesting of Northern Bobwhite on Native Prairie Versus Traditionally Managed Conservation Areas in Southwestern Missouri <i>Thomas R. Thompson</i> | Long-Term Population Stability in the Greater Red Hills Region Amidst Range-Wide Declines: A Case for Integrated Management Theron M. Terhune, II |
| 4:30 PM | Do Movement Patterns and Habitat Use Differ Between Optimal and Suboptimal Sized Northern Bobwhite Coveys? <i>Christopher K. Williams</i> | Using First Passage Time Analysis to Identify Foraging Patterns of the Northern Bobwhite <i>Diana J. McGrath</i> | Molecular Genetics of New World Quails: Messages for Managers Damon Williford |
| 6:30 PM | RECEPTION | | |

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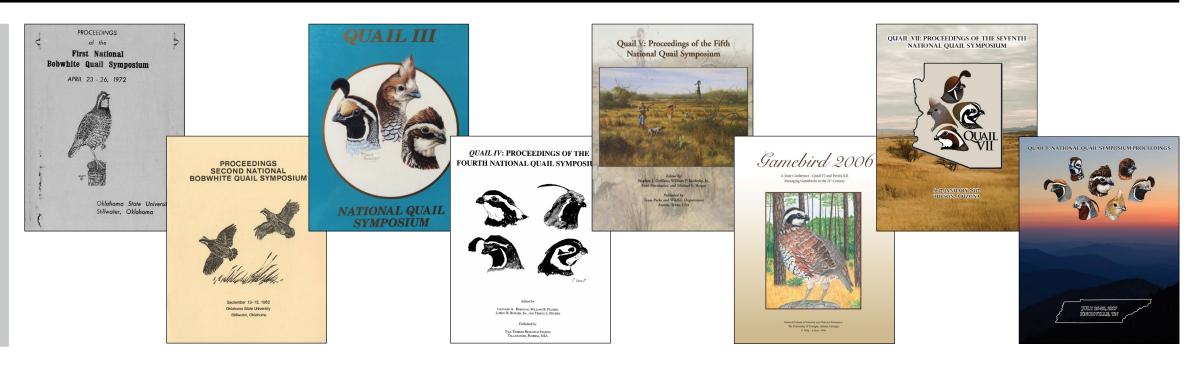
| | College of Veterinary Medicine | | | |
|---------|--|--|--|--|
| 6:30 PM | Quail Eyeworm Workshop 6:30-9:30 PM University of Tennessee, College of Veterinary Medicine 25 person limit, check Registration Desk for availability. | This workshop, provided by Dr. Dale Rollins of Texas A&M University, is an opportunity to learn how to locate and remove eyeworms from the eyes of quail. The workshop will be held at the University of Tennessee College of Veterinary Medicine (UT-CVM) and will last approximately three hours. Dr. Alison Watson, UT-CVM, will supervise laboratory work. Transportation will be arranged from the Holiday Inn to UT-CVM and back, and all necessary supplies and equipment will be provided. | | |

UNIVERSITY OF TENNESSEE

NBCI and the University of Tennessee Libraries are proud to announce the publication of a new e-journal, NBCI National Quail Symposium Proceedings (NQSP).

The e-journal includes proceedings of the First and Second National Bobwhite Quail Symposia, and Quail III, IV, V, VI and VII. Quail 8 will be published in the fall. NBCI NQSP is part of the Digital Commons Network™ (bepress™), and is hosted by University of Tennessee Libraries.

To access the e-journal, visit: www.trace.tennessee.edu/nqsp/



| | CUMBERLAND ROOM Bobwhite Population Estimation and Ecology | LeCONTE ROOM Bobwhite Hunting | SUMMIT ROOM Bobwhite Restoration - Approaches, Theory, and Translocation | PARLOUR 6 Western Quail Ecology and Management |
|----------|---|---|--|---|
| | Moderator: Chuck Yoest | Moderator: David Hoover | Moderator: Craig A. Harper | Moderator: Katherine S. Miller |
| 8:00 AM | Statistical Population Reconstruction Using Wings from Harvested Northern Bobwhites Can Inform Management Theron M. Terhune, II | Factors Influencing Northern Bobwhite Hunter Success on a Public Wildlife Management Area in Kentucky Jarred M. Brooke | National Bobwhite Conservation Initiative Focus Area Monitoring in the 2C Focus Area, Missouri Beth A. Emmerich | Lessons Learned and a Five-Year Plan to Move Masked Bobwhite Conservation Forward <i>Lacrecia A. Johnson</i> |
| 8:20 AM | Comparison of Dog Surveys and Fall Covey Surveys in Estimating Fall Population Trends of Northern Bobwhite Evan P. Tanner | Refining the Hunting Zone of Hunter-Covey Interface Models James A. Martin | Response of Northern Bobwhite to Longleaf Pine Ecosystem Enhancement Through the State Wildlife Grant Program Adam B. Butler | Conservation Status of the Masked Bobwhite in Sonora, Mexico <i>David Garcia-Solorzano</i> |
| 8:40 AM | The Efficacy of GoPro Cameras to Account for Northern Bobwhites Flushed but Undetected During Aerial Surveys Andrea Bruno | Hunter-Covey Interactions Using Pointing Bird Dogs <i>Theron M. Terhune, II</i> | An Evaluation of Northern Bobwhite Conservation Research: A Call for Large-Scale Studies <i>Kelly S. Reyna</i> | Ranges and Movements of Montezuma Quail in Southeast Arizona <i>Pedro M. Chavarria</i> |
| 9:00 AM | Use of Spring Whistle Counts to Predict Northern Bobwhite Relative Abundance <i>D. Clay Sisson</i> | Evaluating the Impacts of Hunting Paths on Northern Bobwhite Survival, Economic Costs, and Hunter Satisfaction W. Seth Wood | Uncertainty and Entanglement of Habitat Loss and Fragmentation Effects in the Management of Northern Bobwhite James A. Martin | Changes in Habitat Use of Montezuma Quail in Response to Tree Canopy Reduction in the Capitan Mountains of New Mexico **Ryan S. Luna** |
| 9:20 AM | Retention and Efficacy of Citizen Scientist Volunteers of the Texas Quail Index <i>Kelly S. Reyna</i> | Evaluating Hunting Success of Pen-Reared and Wild Northern Bobwhite in a Reclaimed Kentucky Mineland John M. Yeiser | Detecting Northern Bobwhite Habitat in Semi- Arid Rangeland Using LANDSAT Imagery **Jeffrey G. Whitt** | Survival Demographics of Montezuma Quail in Southeast Arizona Pedro M. Chavarria |
| 9:40 AM | Estimates of Northern Bobwhite Neonate Survival <i>Theron M. Terhune, II</i> | Effect of Field Trials on Northern Bobwhite Survival and Hunt Quality on Dixie Plantation <i>D. Clay Sisson</i> | The Law of Interspersion and the Principle of Edge: Old Arguments and a New Synthesis <i>Mark D. McConnell</i> | Breeding Season Space Use and Habitat Selection of Adult Female Scaled and Gambel's Quail in West Texas Richard Temple |
| 10:00 AM | BRE | AK | BRI | EAK |
| | Bobwhite Ecology | Bobwhite Ecology | Continued Continued | |
| | Moderator: Brian Chandler | Moderator: Dwayne Elmore | Moderator: Kelsey Biles | Moderator: Casey J. Cardinal |
| 10:30 AM | Landscape Features Affecting Northern Bobwhite Predator-Specific Nest Failures in the Southeastern United States John P. Carroll | Foraging Behavior of Northern Bobwhites in Relation to Resource Availability William E. Palmer | Parent-Reared Bobwhite Survival in the Texas Rolling Plains <i>Mark A. Thomas</i> | Efficacy of a Soft Release Strategy for Translocating Scaled Quail in the Rolling Plains of Texas Rebekah E. Ruzicka |
| 10:50 AM | Habitat, Climate, and Raptors as Factors in the Northern Bobwhite Decline: A Multi-Scale Analysis John T. Edwards | Effects of Supplemental Feeding on Breeding-Season Home Ranges and Resource Selection of Northern Bobwhites Shane D. Wellendorf | The Effect of Age-at-Release on Survival of Bobwhite Parent-Reared Chicks <i>Kyle D. Lunsford</i> | Evaluation of Population Indices and Estimators for Scaled Quail in the Rolling Plains of Texas Bradley W. Kubecka |
| 11:10 AM | Effect of Meso-Mammal Nest Predator Activity on Northern Bobwhite Nest Successes | Genetic Structure of Northern Bobwhite in the Rolling Plains | Testing Northern Bobwhite Reintroduction Techniques in the Northern Edge of Their Range | Survival and Nesting Ecology of Scaled Quail in the Trans-Pecos, Texas |
| | Alexander L. Jackson | Peter E. Schlichting | Christopher K. Williams | Richard Temple |
| 11:30 AM | Patch Size and Nest Density Influence Nest Survival | Effects of Tanglehead Expansion on Bobwhite Habitat Use in South Texas | Evaluating Two Trap-and-Release Methods for Bobwhites | Population Trends and a Revised Management Plan for Quail in California |
| | Victoria Simonsen | John T. Edwards | Theron M. Terhune, II | Katherine S. Miller |
| 11:50 AM | AWARDS LUNCHEON Moderators: Beth A. Emmerich and Kelly S. Reyna, NBTC Science Subcommittee | | | |

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| | Disease and Insecticides | Bobwhite Restoration - Translocation | PARLOUR 6 Bobwhite Ecology |
|---|---|---|---|
| Moderator: Wes Winton Northern Bobwhite Nest Site Selection in Field Borders Danielle Berger | Retrospective Summary of Free-Ranging, Northern Bobwhite Submissions to the Southeastern Cooperative Wildlife Disease Study (1982-2015) Roger D. Applegate | Moderator: John P. Carroll Contributions of Translocation to Northern Bobwhite Population Recovery D. Clay Sisson | Moderator: John T. Edwards Home Range and Movements of Northern Bobwhite on South Texas Rangelands Katherine S. Miller |
| Use of Extinguish Plus™ to Reduce Red Imported Fire Ants and Increase Northern Bobwhite Abundance <i>Nova J. Silvy</i> | Geographic Survey of Oxyspirura Petrowi Among Northern Bobwhites in the United States <i>Bradley Kubecka</i> | Experiences in Quail Translocation in Ohio, 1978-2012 <i>Mark J. Wiley</i> | Northern Bobwhite Habitat Management: Vegetation and Arthropod Responses to Brush Reduction by Grubbing and Stacking Carter G. Crouch |
| Impacts of Red Imported Fire Ants on Northern Bobwhite Nest Survival <i>Angelina M. Haines</i> | A Brief History of Insecticides and Quail Amanda Gobeli | | Habitat Space Used by Northern Bobwhites and Texas Tortoises on South Texas Rangelands <i>Ross O. Couvillon</i> |
| BREAK | | BRI | EAK |
| MEDALLION ROOM | | | |
| | Selection in Field Borders Danielle Berger Use of Extinguish Plus™ to Reduce Red Imported Fire Ants and Increase Northern Bobwhite Abundance Nova J. Silvy Impacts of Red Imported Fire Ants on Northern Bobwhite Nest Survival Angelina M. Haines BRE MEDALLIC | Northern Bobwhite Nest Site Selection in Field Borders Danielle Berger Use of Extinguish Plus™ to Reduce Red Imported Fire Ants and Increase Northern Bobwhite Abundance Nova J. Silvy Impacts of Red Imported Fire Ants on Northern Bobwhite Nest Survival Angelina M. Haines Northern Bobwhite Submissions to the Southeastern Cooperative Wildlife Disease Study (1982-2015) Roger D. Applegate Geographic Survey of Oxyspirura Petrowi Among Northern Bobwhites in the United States Bradley Kubecka A Brief History of Insecticides and Quail Amanda Gobeli BREAK | Northern Bobwhite Nest Site Selection in Field Borders Danielle Berger Use of Extinguish Plus™ to Reduce Red Imported Fire Ants and Increase Northern Bobwhite Abundance Nova J. Silvy Impacts of Red Imported Fire Ants on Northern Bobwhite Nest Survival Angelina M. Haines Break Break Northern Bobwhite Submissions to the Southeastern Cooperative Wildlife Disease Study (1982-2015) Roger D. Applegate Contributions of Translocation to Northern Bobwhite Population Recovery D. Clay Sisson Experiences in Quail Translocation in Ohio, 1978-2012 Mark J. Wiley Bradley Kubecka A Brief History of Insecticides and Quail Amanda Gobeli BREAK BRI MEDALLION ROOM |

Closing Remarks: The Importance of Ecological, Landscape, and Social Context to Quail Management

Frank R. Thompson, III

Conference Closing

NBCI Staff

Frank R. Thompson, III, PhD, is a Research Wildlife Biologist for the U.S. Forest

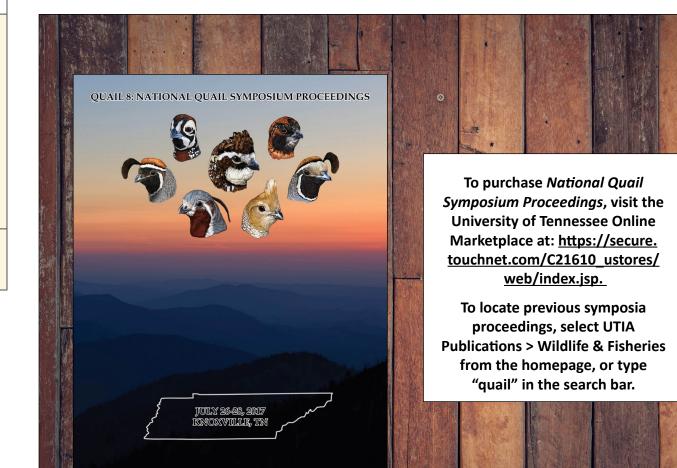
Service Northern Research Station in Columbia, Missouri. Dr. Thompson's

research focus is on avian ecology and conservation, with an emphasis on early successional birds, forest song birds, and gamebirds. Dr. Thompson has published over 200 journal articles and co-edited books on wildlife conservation. He is an avid upland bird hunter, and he and his wife raise

3:15 PM

4:15 PM

English Setters.



Quail 8 Proceedings Editors



Dr. Thomas V. Dailey *National Bobwhite Conservation Initiative*



Dr. Leonard Brennan *Caesar Kleberg Wildlife Research Institute*



Dr. C. Brad Dabbert *Quail-Tech Alliance*

Quail 8 Associate Editors



Dr. Stephen J. DeMaso *Gulf Coast Joint Venture*



Roger D. Applegate Tennessee Wildlife Resources Agency



Kenneth Duren
Pennsylvania
Department of
Conservation and
Natural Resources



Dr. Dwayne Elmore *Oklahoma State University*



Dr. Joseph FontaineNebraska Cooperative
Fish & Wildlife Research
Unit, USGS, University
of Nebraska



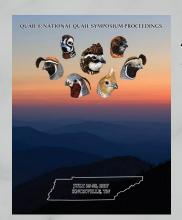
Dr. Robert J. Gates *Ohio State University*



Dr. James A. Martin *University of Georgia*



Dr. Mark D. McConnell *University of Georgia*



Kathleen Ingraham Allen Press, Managing Editor





Dr. Theron M. Terhune, IITall Timbers Research
Station & Land
Conservancy





Dr. Christopher K. Williams *University of Delaware*

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Missouri Department of Conservation

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Forestry Coordinator Steve Chapman

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Communications Director John Doty

Accounting Specialist Penny Barnhart

Communications Specialist Alyssa Merka

National Bobwhite Conservation **Initiative** Staff Members

Quail 8 | author index

| Title | Author | Day | Time | Room | |
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| Evaluation of Land Restoration Practices on Northern Bobwhite Productivity in North-Central Texas - Preliminary Results | Belleny, Danielle | Poster Session | | | |
| Northern Bobwhite Nest Site Selection in Field Borders | Berger, Danielle | Fri. | 2:00 PM | CR | |
| Factors Influencing Northern Bobwhite Hunter Success on a Public Wildlife Management Area in Kentucky | Brooke, Jarred M. | Fri. | 8:00 AM | LR | |
| The Efficacy of GoPro Cameras to Account for Northern Bobwhites Flushed but Undetected During Aerial Surveys | Bruno, Andrea | Fri. | 8:40 AM | CR | |
| Comparing the Accuracy of Egg Candling and Egg ation to Estimate the Hatching Date of Northern Bobwhite Clutches | Buckley, Byron R. | Th. | 3:30 PM | LR | |
| Effect of Temperature and Wind on Metabolism of Northern Bobwhite in Winter | Burger, Jr., L. Wes | Th. | 3:30 PM | CR | |
| Response of Northern Bobwhite to Longleaf Pine Ecosystem Enhancement Through the State Wildlife Grant Program | Butler, Adam B. | Fri. | 8:20 AM | SR | |
| Update on Western Quail Management Plan | Cardinal, Casey J. | Th. | 9:30 AM | MR | |
| Landscape Features Affecting Northern Bobwhite Predator-Specific Nest Failures in the Southeastern United States | Carroll, John P. | Fri. | 10:30 AM | CR | |
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| Survival Demographics of Montezuma Quail in Southeast Arizona | Chavarria, Pedro M. | Fri. | 9:20 AM | Р6 | |
| Summer Survival of Translocated Northern Bobwhite in the New Jersey Pine Barrens - Preliminary Results | Coppola, Phillip | , | Poster Session | | |
| Habitat Space Used by Northern Bobwhites and Texas Tortoises on South Texas Rangelands | Couvillon, Ross O. | Fri. | 2:40 PM | P6 | |
| Northern Bobwhite Habitat Management: Vegetation and Arthropod Responses to Brush Reduction by Grubbing and Stacking | Crouch, Carter G. | Fri. | 2:20 PM | Р6 | |
| Response of Northern Bobwhites to Habitat Improvement on Private Lands in the Rolling Plains of Texas | Dabbert, C. Brad | Th. | 1:30 PM | MR | |
| A Method for Setting Northern Bobwhite Population and Habitat Objectives for Large Landscape Partnerships | DeMaso, Stephen J. | Poster Session | | | |
| The Role of Joint Ventures in Northern Bobwhite Conservation | DeMaso, Stephen J. | Th. | 3:30 PM | SR | |
| Effects of Tanglehead Expansion on Bobwhite Habitat Use in South Texas | Edwards, John T. | Fri. | 11:30 AM | LR | |
| Habitat, Climate, and Raptors as Factors in the Northern Bobwhite Decline: A Multi-Scale Analysis | Edwards, John T. | Fri. | 10:50 AM | CR | |
| Fall Quail Densities on Public Land in Missouri: A Decade of Monitoring | Emmerich, Beth A. | Th. | 11:30 AM | MR | |
| National Bobwhite Conservation Initiative Focus Area Monitoring in the 2C Focus Area, Missouri | Emmerich, Beth A. | Fri. | 8:00 AM | SR | |
| Landscape-Scale Geospatial Assessment of Open Pine and Natural Grassland Condition for Northern Bobwhite in the Gulf Coastal Plains and Ozarks | Evans, Kristine | Poster Session | | | |
| Conservation Status of the Masked Bobwhite in Sonora, Mexico | Garcia-Solorzano, David | Fri. | 8:20 AM | P6 | |
| Temporal and Spatial Assessment of Usable Space and Cover Type Interspersion for Northern Bobwhites on Private Farmlands in Southwestern Ohio | Gates, Robert J. | Th. | 3:50 PM | CR | |

| Title | Author | Day | Time | Room |
|--|-----------------------|----------------|----------|------|
| Horizontal Integration of Strategic Habitat Conservation for Declining Grassland Wildlife Population in the Oaks and Prairies Joint Venture | Giocomo, James | Th. | 3:50 PM | SR |
| Utility of Fine Resolution Land Cover Data for Modeling Northern Bobwhite Abundance in the Oaks and Prairies of Oklahoma | Giocomo, James | Poster Session | | |
| A Brief History of Insecticides and Quail | Gobeli, Amanda | Fri. | 2:40 PM | LR |
| Population Response of Three Quail Species to Habitat Restoration in South Texas | Grahmann, Eric D. | Th. | 2:00 PM | MR |
| Impacts of Red Imported Fire Ants on Northern Bobwhite Nest Survival | Haines, Angelina M. | Fri. | 2:40 PM | CR |
| Effect of Meso-Mammal Nest Predator Activity on Northern Bobwhite Nest Successes | Jackson, Alexander L. | Fri. | 11:10 AM | CR |
| Lessons Learned and a Five-Year Plan to Move Masked Bobwhite Conservation Forward | Johnson, Lacrecia A. | Fri. | 8:00 AM | Р6 |
| Data-Driven Planning for the Conservation of Grassland Birds in the Central Hardwoods Bird Conservation Region | Heggemann, Larry | Poster Session | | |
| Evaluating Temporal Differences in Land Cover: Implications for Managing Bobwhite at the Landscape-Scale in Virginia | Puckett, Marc | Poster Session | | |
| Evaluation of Population Indices and Estimators for Scaled Quail in the Rolling Plains of Texas | Kubecka, Bradley W. | Fri. | 10:50 AM | P6 |
| Geographic Survey of Oxyspirura Petrowi Among Northern Bobwhites in the United States | Kubecka, Bradley W. | Fri. | 2:20 PM | LR |
| An Analysis of the Interactions between Weather and Land Use on Midwestern Gamebird Populations Using Historical Data | Lipinski, Amanda R. | Poster Session | | |
| Changes in Habitat Use of Montezuma Quail in Response to Tree Canopy Reduction in the Capitan Mountains of New Mexico | Luna, Ryan S. | Fri. | 9:00 AM | P6 |
| The Effect of Age-at-Release on Survival of Bobwhite Parent-Reared Chicks | Lunsford, Kyle D. | Fri. | 10:50 AM | SR |
| Monitoring Northern Bobwhite Populations Reduces Uncertainty About Management Effectiveness: A Paradigm of Empiricism and Hope | Martin, James A. | Th. | 10:30 AM | MR |
| Refining the Hunting Zone of Hunter-Covey Interface Models | Martin, James A. | Fri. | 8:20 AM | LR |
| Translocation as a Population Restoration Technique for Northern Bobwhites: A Review and Synthesis | Martin, James A. | Th. | 2:30 PM | MR |
| Uncertainty and Entanglement of Habitat Loss and Fragmentation Effects in the Management of Northern Bobwhite | Martin, James A. | Fri. | 9:00 AM | SR |
| Response of Grassland Birds to Varying Agricultural Effort at Different Spatial Scales in 20 Texas Counties from 2013 to 2016 | Matthews, Anna | Poster Session | | |
| The Law of Interspersion and the Principle of Edge: Old Arguments and a New Synthesis | McConnell, Mark D. | Fri. | 9:40 AM | SR |
| Using First Passage Time Analysis to Identify Foraging Patterns of the Northern Bobwhite | McGrath, Diana J. | Th. | 4:30 PM | LR |
| Progress of the National Bobwhite Conservation Initiative | McKenzie, Donald F. | Th. | 9:00 AM | MR |
| Genetic Diversity and Relatedness of Northern Bobwhite Coveys in South Texas | Miller, Katherine S. | Th. | 3:50 PM | LR |
| Home Range and Movements of Northern Bobwhite on South Texas Rangelands | Miller, Katherine S. | Fri. | 2:00 PM | Р6 |
| Population Trends and a Revised Management Plan for Quail in California | Miller, Katherine S. | Fri. | 11:30 AM | P6 |
| Impacts of Habitat Fragmentation on Northern Bobwhites in the Gulf Coast Prairie Landscape Conservation Cooperative | Miller, Katherine S. | Poster Session | | |
| A Focused Habitat Approach to Northern Bobwhite Restoration in Kentucky | Morgan, John J. | Th. | 11:00 AM | MR |

| Title | Author | Day | Time | Room | |
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| Partnering for Quail in South Carolina: A Cooperative Approach Making a Difference | Nanney, Jordan S. | Poster Session | | | |
| Foraging Behavior of Northern Bobwhites in Relation to Resource Availability | Palmer, William E. | Fri. | 10:30 AM | LR | |
| An Evaluation of Northern Bobwhite Conservation Research: A Call for Large-Scale Studies | Reyna, Kelly S. | Fri. | 8:40 AM | SR | |
| Connecting Land Ethics and Entrepreneurship Through Experiential Learning in a Quail-Centric Outdoor Education Program | Reyna, Kelly S. | Poster Session | | | |
| Retention and Efficacy of Citizen Scientist Volunteers of the Texas Quail Index | Reyna, Kelly S. | Fri. | Fri. 9:20 AM CR | | |
| Influence of Northern Bobwhite Nest Site Selection on Nest Survival in an Agricultural Landscape | Richardson, Andy D. | Poster Session | | | |
| Effects of Growing Season Fire on Northern Bobwhite Nest Site Selection and Survival | Rosche, Sarah B. | Poster Session | | | |
| Efficacy of a Soft Release Strategy for Translocating Scaled Quail in the Rolling Plains of Texas | Ruzicka, Rebekah E. | Fri. | 10:30 AM | Р6 | |
| Effects of Source Population and Release Strategy on Survival and Dispersal of Translocated Scaled Quail in the Rolling Plains of Texas | Ruzicka, Rebekah E. | Poster Session | | | |
| Genetic Structure of Northern Bobwhite in the Rolling Plains | Schlichting, Peter E. | Fri. | 11:10 AM | LR | |
| Use of Extinguish Plus™ to Reduce Red Imported Fire Ants and Increase Northern Bobwhite Abundance | Silvy, Nova J. | Fri. | 2:20 PM | CR | |
| Patch Size and Nest Density Influence Nest Survival | Simonsen, Victoria | Fri. | 11:30 AM | CR | |
| Contributions of Translocation to Northern Bobwhite Population Recovery | Sisson, D. Clay | Fri. | 2:00 PM | SR | |
| Effect of Field Trials on Northern Bobwhite Survival and Hunt Quality on Dixie Plantation | Sisson, D. Clay | Fri. | 9:40 AM | LR | |
| Use of Spring Whistle Counts to Predict Northern Bobwhite Relative Abundance | Sisson, D. Clay | Fri. | 9:00 AM | CR | |
| Triple Brood Production by Northern Bobwhites | Sisson, D. Clay | Poster Session | | | |
| Distance Sampling to Assess Post-grazing Northern Bobwhite Recovery in South Texas | Smith, Rachel A. | Poster Session | | | |
| Winter Survival and Habitat Selection of Translocated Northern Bobwhite in the New Jersey Pine Barrens and Eastern Shore of Maryland | Stevens, Kaili R. | Poster Session | | | |
| Comparison of Dog Surveys and Fall Covey Surveys in Estimating Fall Population Trends of Northern Bobwhite | Tanner, Evan P. | Fri. | 8:20 AM | CR | |
| Breeding Season Space Use and Habitat Selection of Adult Female Scaled and Gambel's Quail in West Texas | Temple, Richard | Fri. | 9:40 AM | P6 | |
| Survival and Nesting Ecology of Scaled Quail in the Trans-Pecos, Texas | Temple, Richard | Fri. | 11:10 AM | Р6 | |
| Estimates of Northern Bobwhite Neonate Survival | Terhune, II, Theron M. | Fri. | 9:40 AM | CR | |
| Evaluating Two Trap-and-Release Methods for Bobwhites | Terhune, II, Theron M. | Fri. | 11:30 AM | SR | |
| Hunter-Covey Interactions Using Pointing Bird Dogs | Terhune, II, Theron M. | Fri. | 8:40 AM | LR | |
| Long-Term Population Stability in the Greater Red Hills Region Amidst Range-Wide Declines: A Case for Integrated Management | Terhune, II, Theron M. | Th. | 4:10 PM | SR | |
| Statistical Population Reconstruction Using Wings from Harvested Northern Bobwhites Can Inform Management | Terhune, II, Theron M. | Fri. | 8:00 AM | CR | |
| Parent-Reared Bobwhite Survival in the Texas Rolling Plains | Thomas, Mark A. | Fri. | 10:30 AM | SR | |
| The Importance of Ecological, Landscape, and Social Context to Quail Management | Thompson, III, Frank R. | Fri. 3:15 PM MR | | | |
| Breeding Season Survival and Nesting of Northern Bobwhite on Native Prairie Versus Traditionally Managed Conservation Areas in Southwestern Missouri | Thompson, Thomas R. | Th. | 4:10 PM | LR | |

| Title | Author | Day | Time | Room |
|--|--------------------------|----------------|----------|------|
| How Many Are There? Estimating the North American Northern Bobwhite Population Size for Conservation Planning Purposes | Vermillion, William | Poster Session | | |
| Effects of Supplemental Feeding on Breeding-Season Home Ranges and Resource Selection of Northern Bobwhites | Wellendorf, Shane D. | Fri. | 10:50 AM | LR |
| Automated Identification and Mapping of Woody Habitat Using Digital Ortho Imagery | Wethington, M. Keith | Poster Session | | |
| Detecting Northern Bobwhite Habitat in Semi-Arid Rangeland Using LANDSAT Imagery | Whitt, Jeffrey G. | Fri. | 9:20 AM | SR |
| Experiences in Quail Translocation in Ohio, 1978-2012 | Wiley, Mark J. | Fri. | 2:20 PM | SR |
| Do Movement Patterns and Habitat Use Differ Between Optimal and Suboptimal Sized Northern Bobwhite Coveys? | Williams, Christopher K. | Th. | 4:30 PM | CR |
| Testing Northern Bobwhite Reintroduction Techniques in the Northern Edge of Their Range | Williams, Christopher K. | Fri. | 11:10 AM | SR |
| Molecular Genetics of New World Quails: Messages for Managers | Williford, Damon | Th. | 4:30 PM | SR |
| Evaluating the Impacts of Hunting Paths on Northern Bobwhite Survival, Economic Costs, and Hunter Satisfaction | Wood, W. Seth | Fri. | 9:00 AM | LR |
| Effects of Broad-Scale Conservation on Northern Bobwhite Populations in Agricultural Landscapes | Yeiser, John M. | Th. | 1:00 PM | MR |
| Evaluating Hunting Success of Pen-Reared and Wild Northern Bobwhite in a Reclaimed Kentucky Mineland | Yeiser, John M. | Fri. | 9:20 AM | LR |
| Breeding Season Microclimate Assessment for Northern Bobwhite in Areas of Experimental Habitat Manipulation on a Reclaimed Surface Mine Site | Yow, Donald M. | Th. | 4:10 PM | CR |

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