**2019 Proceedings**

**Midwest Deer & Wild Turkey Study Group Meeting**

# August 12-14, 2019 Nashville, Indiana



Submitted by:

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#### Background

The Midwest Deer and Wild Turkey Study Group (MDWTSG) meeting is an annual gathering of wildlife managers sanctioned by and affiliated with the Midwest Association of Fish and Wildlife Agencies.

Primary objectives of the meeting include dissemination of deer and wild turkey management strategies, discussion of emerging or existing issues associated with deer and wild turkey management, and coordination of regional deer and wild turkey management or research efforts. The meeting location rotates among the Midwestern states that are active within the group.

Forums such as the MDWTSG meeting provide valuable opportunities for state deer and turkey biologists to become acquainted with emerging issues and exchange information and ideas related to deer and turkey research and management. The need for state fish and wildlife agencies to establish and maintain deer and turkey biologist positions and support travel of these biologists to the annual MDWTSG meeting is imperative for exchanging information to promote quality wildlife management and research in each state. It is more important than ever that state agencies are at the forefront of issues related to deer and turkey management in order to protect the heritage and recreational opportunities of hunting for future sportsmen and sportswomen.

#### Meeting Time and Place

The Indiana Department of Natural Resources (DNR) hosted the 2019 MDWTSG meeting at the Abe Martin Lodge, Brown County State Park in Nashville, Indiana on August 12-14. The MDWTSG appreciates the financial support provided by the National Wild Turkey Federation (NWTF) and the logistical support provided by Mr. Brian MacGowan and the Indiana Chapter of The Wildlife Society.

#### Attendance

A total of 56 participants and speakers attended the 2019 meeting including state deer and wild turkey biologists from 11 Midwest member states (Illinois, Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Missouri, Nebraska, Ohio, and Wisconsin) and biologists and researchers from the NWTF, QDMA, Indiana University, Purdue University, and Qualtrics. Representatives from North Dakota, Ontario, and South Dakota were unable to attend.

#### Executive Summary

Attendees at the 2019 MDWTSG meeting were welcomed by John Davis, Deputy Director, Indiana Department of Natural Resources. Following the meeting introduction, there were seven presentations during the joint session on topics related to human dimensions in wildlife, including:

* The effects of cognitive bias on the decision making process
* Diversity and inclusion in hunting culture
* Including survey data from the public in wildlife management
* E-regulation compliance
* QDMA’s successes and failures of getting people involved

The human dimensions theme continued during the afternoon joint session with presentations on the following topics:

* Citizen based monitoring surveys
* Assessing public perceptions of deer
* Basics of qualitative research with children
* Engaging stakeholders in CWD management
* Qualtrics – a survey and data collection software

On day two, the deer and wild turkey break-out sessions occurred, including discussion on the following:

* + Deer Study Group
    - Setting yearly deer harvest
      * Discussion on the various approaches to setting harvest limits, methods and techniques used, and successes and failures.
    - Important topics for the next 10 years of deer management for Midwestern states
      * The group created a list of topics and chose the top two: declining hunter numbers and management of chronic wasting disease. A letter was drafted explaining the anticipated challenges over the next decade and will be submitted to the AFWA Director’s meeting in June 2020 (Appendix 4).
    - Venison donation programs
    - Cultural and management aspect of deer hunting in Europe
    - Data on crossbow users
* Wild Turkey Study Group
  + Indiana’s web based Brood Survey and Illustrative Guide
  + Forest management implications of songbird studies on the Hoosier Hardwood Ecosystem (HHE) project
  + Fifty-year assessment of Indiana Spring Turkey Harvest parameters
  + Wild Turkey harvest trends in the Midwest
  + Urban wild turkey issues
  + Shot size and material composition (density) as it relates to the intent of 2005 National Wild Turkey Hunter Safety Task Force recommendations
  + Michigan Wild Turkey Habitat Enhanced Management Initiative (THEM)
  + NWTF year in review

**Business Meeting**

The business meeting was conducted as a joint session involving both deer and wild turkey program leaders. The Southeast Deer Study Group is interested in hosting a joint meeting with the Midwest Deer Study Group. The group discussed this possibility including logistics, potential topics, and whether to extend an invitation to the Southeast Wild Turkey Group. Both deer and wild turkey leaders were supportive of this opportunity. Kentucky and Ohio will look into it more.

#### Director Actions Items

The MDWTSG does not have any action items for directors to report from this meeting.

#### Director Information Items

The MDWTSG would like to inform the Midwest Directors of the following items:

* The MDWTSG meeting was focused on human dimensions topics to broaden knowledge of the use of social science in wildlife management.
* The Midwest Deer Group created a list of key issues that are likely to be significant challenges for the future of Midwest deer management. A letter was drafted to the Midwest Directors focused on the top two issues: declining hunter numbers and management of chronic wasting disease. The goal of this communication is to allow for understanding of current deer biologists’ recommendations related to these issues and to provide context for future action items. The letter is in Appendix 4.
* States in the Midwest Wild Turkey Group agreed to share harvest and production data to identify common trends while pursuing factors that may explain the decline in harvests. This was a continuance of the multi-state collaborative effort initiated in the Midwest and Southeast study groups several years ago.
* The Southeast Deer Study Group is interested in hosting a joint meeting with the Midwest Deer Study Group next year.

#### Time and Place of Next Meeting

The next MDWTSG meeting will be hosted by the Ohio Department of Natural Resources August 17-19, 2020, at the Maumee Bay Lodge and Conference Center, Maumee Bay State Park in Oregon, Ohio.

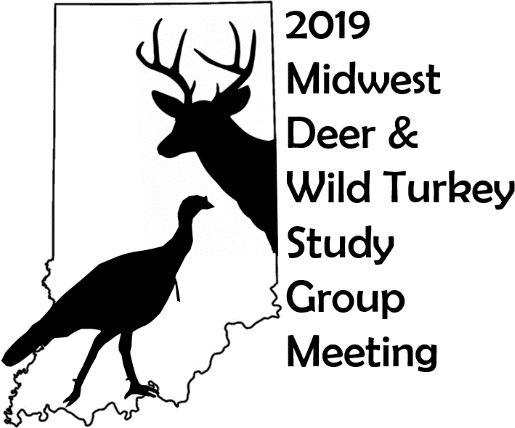
#### Appendix 1: Attendance List

List of participants: 2019 Midwest Deer & Wild Turkey Study Group meeting, Nashville, Indiana.

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#### Appendix 2: Meeting Agenda

**Midwest Deer and Wild Turkey Study Group Meeting**

August 12-14, 2019 Abe Martin Lodge at Brown County State Park

Nashville, IN

***AGENDA***

**Monday, August 12, 2019**

4:00-8:00 p.m. Arrival and Registration *(Cabin #905);* Check into your cabin or hotel room up at the Hotel Lobby.

6:00-8:00 p.m. Light social *(Cabin #905)*

**Tuesday, August 13, 2019**

8 -8:45 a.m. Registration continued *(outside of Melodeon)*

7:30-8:30 a.m. Breakfast *(Allison Peabody)*

8:30-9:00 a.m. Welcome, Announcements, Introductions *(Melodeon)* John Davis, Deputy Director, IN Dept. of Natural Resources Joe Caudell, Deer Biologist, IN Dept. of Natural Resources Steve Backs, Turkey Biologist, IN Dept. of Natural Resources

9:00-10:15 a.m. Joint Meeting - Topic Human Dimensions of Wildlife *(Melodeon)*

* Joe Caudell, Indiana DNR - Cognitive Bias and how it Affects the Decision Making Process of Both Customer and Wildlife Managers
* Norman Makoto Su, Indiana University – Diversity and Inclusion in Hunting Culture: Ethnography and the Design of Technology
* Colleen Hartel, Indiana DNR – Beyond Polls of Public Opinion: Survey Data and Wildlife Management

10:15-10:30 a.m. Break (*snacks available in Melodeon*)

10:30-12:00 p.m. Joint Meeting - Topic Human Dimensions of Wildlife *(Melodeon)*

* Joe Caudell, Indiana DNR – Incorporating Public Opinion and Data into Deer Management Decisions
* Emily McCallen, Indiana DNR – Making the Most of What We Have: Utilizing Biological and Human Dimensions Data to Support Management Decisions
* Brian Dhuey, Wisconsin – E-regulation compliance: Assessing Compliance with Electronic Deer Harvest Regulation
* Matt Ross, QDMA - QDMA’s Successes and Failures at Getting Folks Involved: A Trip Down Memory Lane 12:00-1:00 p.m. Lunch *(Allison Peabody)*

1:30-3:00 p.m. Joint Meeting - Topic Human Dimensions of Wildlife *(Melodeon)*

* Brian Dhuey, Wisconsin DNR – Citizen Based Monitoring Surveys: The Good, the Bad, the Ugly
* Taylor Stinchcomb, Purdue University – Assessing Public Perceptions of Deer: Qualitative vs Quantitative Approaches
* Alexis B. Peirce Caudell, Indiana University – The Basics of Qualitative Research with Children
* Jacob M. Peterson, Purdue University – Engaging Stakeholders in CWD Management Through Agent-based Models
* Tommy Hoschouer, Qualtrics – The Advanced Capabilities of Qualtrics as a Survey and Data Collection Platform

3:00-3:30 p.m. Break

3:30-4:30 p.m. Joint Business Meeting *(Melodeon)*

6:00-10:00 p.m. Dinner and Social *(Lower Shelter)*

**Wednesday, August 14, 2019**

8:00-9:00 a.m. Breakfast *(Allison Peabody)*

9:00-12:00 p.m. State Status Reports & Individual Group Meetings *(Deer in Melodeon, Turkey in Priness)*

12:00-1:00 p.m. Lunch *(Allison Peabody)*

1:00-4:00 p.m. Breakout Sessions and Discussions Continue *(Deer in Melodeon, Turkey in Priness)*

6:00-9:00 p.m. Dinner and Social *(on own, but group reservations at Big Wood Pizza in Nashville, IN)*

#### Appendix 3: Meeting Dates and Location History

Previous Midwest Deer & Wild Turkey Study Group meeting locations.

|  |  |  |  |
| --- | --- | --- | --- |
| **Year** | **State** | **Location** | **Date** |
| 1977 | Missouri | Missouri Fountain Grove Wildlife Area | January 17-19 |
| 1978 | Wisconsin | Wisconsin Wyalusing State Park | January 16-17 |
| 1979 | Iowa | Iowa Rathburn Fish Hatchery | January 15-18 |
| 1980 | Minnesota | Minnesota Whitewater State Park | January 21-24 |
| 1981 | Indiana | Indiana Harrison-Crawford State Park | January 19-22 |
| 1982 | Ohio | Ohio Lake Hope State Park | January 18-21 |
| 1983 | Nebraska | Nebraska Louisbille 4-H Camp | January 17-21 |
| 1984 | Kansas | Kansas Camp Aldrich | January 16-19 |
| 1985 | South Dakota | South Dakota Black Hills | May 7-10 |
| 1986 | North Dakota | North Dakota Camp-of-the-Cross | January 20-23 |
| 1987 | Michigan | Michigan Kellogg Biological Station | January 27-29 |
| 1988 | Illinois | Illinois Touch of Nature | February 1-4 |
| 1989 | Missouri | Missouri YMCA Camp of the Ozarks | January 23-26 |
| 1990 | Wisconsin | Wisconsin Bethel Horizons Prairie Center | January 15-18 |
| 1991 | Iowa | Iowa Conservation Education Center | January 14-17 |
| 1992 | Minnesota | Minnesota Whitewater State Park | January 13-16 |
| 1993 | Indiana | Indiana Harrison-Crawford State Park | January 11-14 |
| 1994 | Ohio | Ohio Canter's Cave 4-H Park | January 30-February 2 |
| 1995 | Nebraska | Nebraska Mahoney State Park | January 15-18 |
| 1996 | Kansas | Kansas Camp Pecusa | January 14-16 |
| 1997 | South Dakota | South Dakota Camp NeSoDak | August 24-27 |
| 1998 | North Dakota | North Dakota Camp Grafton | August 9-12 |
| 1999 | Ontario | Ontario Blue Springs Scout Reserve | August 15-18 |
| 2000 | Michigan | Michigan Thunder Bay Resort | August 20-23 |
| 2001 | Illinois | Illinois Dixon Springs Ag. Station | August 19-22 |
| 2002 | Missouri | Missouri Conception Abbey | August 18-21 |
| 2003 | Wisconsin | Wisconsin Bethel Horizons Prairie Center | August 24-27 |
| 2004 | Iowa | Iowa Conservation Education Center | August 22-25 |
| 2005 | Minnesota | Minnesota Eagle Bluff Envir. Learning Center | August 21-24 |
| 2006 | Indiana | Indiana Camp Ransburg, BSA | August 20-23 |
| 2007 | Ohio | Ohio Canter's Cave 4-H Park | August 19-22 |
| 2008 | Nebraska | Nebraska Fort Robinson State Park | September 14-17 |
| 2009 | Kansas | Kansas Rock Springs 4-H Camp | September 14-17 |
| 2010 | North Dakota | North Dakota Camp Grafton | August 22-25 |
| 2011 | Michigan | Michigan Ralph A. MacMullen Center | September 25-28 |
| 2012 | South Dakota | South Dakota Custer State Park | October 16-19 |
| 2013 | Illinois | Illinois Allerton Park | August 18-21 |
| 2014 | Missouri | Missouri YMCA Camp of the Ozarks | September 9-12 |
| 2015 | Wisconsin | Wisconsin Perlstein Conference Center | September 8-11 |

|  |  |  |  |
| --- | --- | --- | --- |
| 2016 | Kentucky | Kentucky General Butler State Resort Park | August 22-25 |
| 2017 | Iowa | Iowa Honey Creek State Park Resort | August 28-31 |
| 2018 | Minnesota | Minnesota Camp Ripley | August 27-30 |
| 2019 | Indiana | Indiana Brown County State Park | August 12-14 |

#### Appendix 4: MAFWA Director Letter: Challenges facing Midwestern deer management

December 16, 2019

To: Directors, Midwest Association of Fish and Wildlife Agencies From: Midwest Deer Study Group

Subject: Challenges facing Midwestern deer management over the next 10 years

Esteemed Directors of Midwest Fish and Wildlife Agencies:

The Midwest Deer and Turkey Study Group is an annual gathering of wildlife managers sanctioned by and affiliated with the Midwest Association of Fish and Wildlife Agencies (MAFWA). This group represents each state’s designated experts on deer and turkey population management responsible for the sustainable future of each resource. Historically, the group dates to around 1949, with the development of a statement of purpose in 1958. The Great Lakes Deer Group, as they were called then, identified four primary reasons for meeting: 1) to promote better interchange of information and engage in discussions on matters pertaining to deer and deer range, 2) to improve the understanding of conditions in various territories and states, 3) to supplement the work of the Midwest and North American meetings, and 4) to make recommendations on specific topics, practices, and coordinate research as requested by administrative agencies. These four goals are adhered to with present day meetings.

Following the 2019 Midwest Deer and Turkey Study Group meeting, the deer study group felt it important to provide MAFWA Directors with a short list of key issues that we foresee being significant challenges for the future of Midwest deer management, and to provide context for future action items we may bring to your attention in the coming years. By communicating these concerns, we feel there will be a greater understanding of present-day recommendations from deer program biologists and administrators who are anticipating impacts from these challenges in the future. The top two issues identified by members of the Midwest Deer Study Group are declining hunter numbers and management of chronic wasting disease.

Declining Hunter Numbers

Deer hunters make up the majority, and financial backbone, of most wildlife agencies and routinely make up over 80% of all license buyers. From an operational standpoint, loss of these hunters will contribute to budget shortfalls. In addition, the continual decline of hunters across the Midwest will further limit our ability to effectively manage deer populations. Most Midwestern states are seeing a 2- 4% loss of hunters annually. Over the next 10 years, it’s probable that hunter numbers will be >15% lower than present day numbers, which are already inadequate to manage deer populations in some areas. In turn we can expect an increased risk to the public (deer-vehicle collisions, Lyme and other tick- borne illnesses, etc.), agricultural damage, habitat degradation, and spread of transmissible diseases such as CWD and potentially Bovine tuberculosis where they exist.

Management of Chronic Wasting Disease

There is nearly universal agreement amongst deer biologists that CWD is one of the top priorities facing deer management for generations to come. Driving much of this concern is uncertainty regarding the impacts that CWD will have on deer populations and hunter numbers in the future. Though much is being learned through research in places like Wyoming, Colorado, and Wisconsin about how CWD impacts deer populations over time, many states have responded to CWD by taking preventative action (ex. baiting bans, herd reduction, carcass movement restrictions, etc.) in the face of an uncertain outcome until new information or new management tools become available. Current management strategies have been politically unpopular and have been obstructed before their efficacy could be demonstrated, leading to limited success in eradicating CWD or reducing its footprint on the landscape. Without noticeable improvements, constituents may lose trust in agencies’ ability to manage its resource.

Future Support of Deer Programs

These two threats - declining hunters and CWD - are not independent of one another. As CWD continues to spread across the landscape, it’s plausible that widespread CWD could exacerbate the loss of hunters or the difficulty in managing deer populations with existing hunters. Identifying how agencies function in a “new normal” with fewer hunters and CWD on the landscape is one of the greatest adaptation exercises we face in modern day wildlife management.

There are several ways our group feels that Directors can support deer programs to help ease some of the anticipated effects of declining hunter numbers and presence of CWD:

* Work closely with elected officials to support science-based deer management decisions that are made in the best interest of the resource, while working to prevent legislation that either limits deer management options or is likely to have adverse effects on deer populations.
* Support CWD research that assists managers with determining the effectiveness of disease management strategies.
* Continue dialogue with your deer program staff to ensure that deer program priorities are being addressed by the Department.
* Support your agency’s deer program staff whose recommendations are based on the best, long- term interest of the resource.
* Recognize that deer management recommendations, particularly with respect to CWD, may not always be popular among constituents and may deviate from previous management approaches. However, with an ever-changing culture and landscape, and as new information becomes available, it will be important for deer programs to be adaptable in the future.

We thank you for the continued opportunity to meet as a group and discuss present and future issues associated with Midwest deer management. Should you have any questions, each state’s respective deer program leader would be happy to discuss any of these topics.

Sincerely,

Midwest Deer Study Group