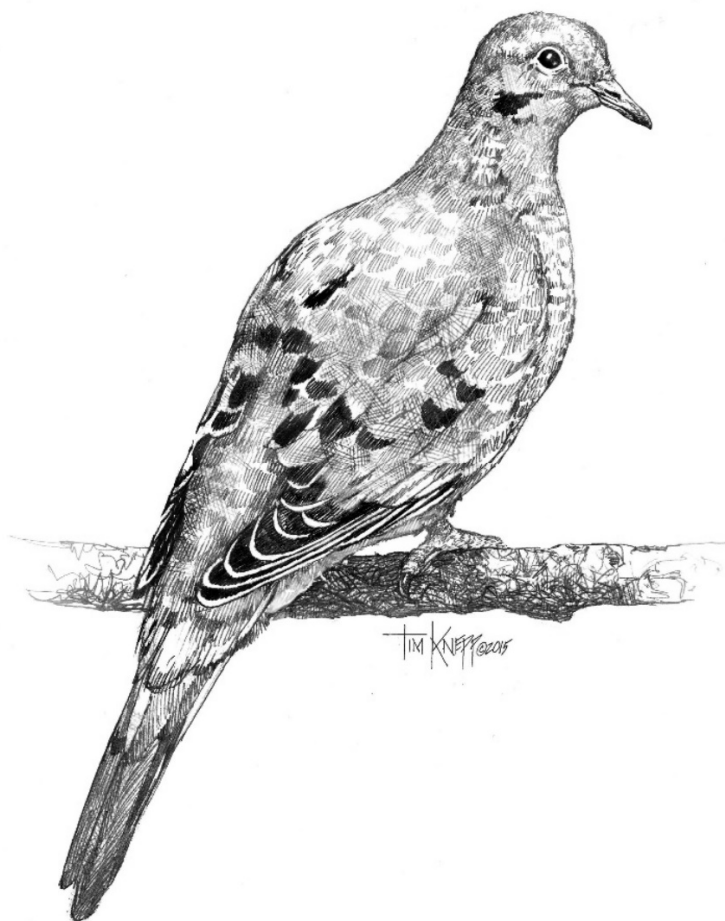


National Dove Task Force

2025 Annual Meeting Report



3-4 June 2025

Fort Collins, Colorado

National Dove Task Force, 2024 Annual Meeting Report

PREFACE

This report summarizes presentations and discussions that occurred at the 2025 National Dove Task Force (NDTF) Meeting. The main topics covered at the 2025 meeting were revision of the national mourning dove harvest strategy, harvest management of white-winged doves in the Central and Pacific Flyways and assessing existing monitoring programs.

Citation: National Dove Task Force. 2025. National Dove Task Force annual meeting report. A report submitted to the Atlantic, Central, Mississippi, and Pacific Flyway Councils. ##pp.

ACKNOWLEDGEMENTS

The National Dove Task Force (formerly the National Mourning Dove Task Force) was established in 2006 under the auspices of the Association of Fish and Wildlife Agencies. At the time of its founding, the primary purposes of the NDTF were to (1) foster implementation of the Mourning Dove National Strategic Harvest Plan and coordinate activities related to its implementation (e.g., banding, wing collection, and wingbees) and (2) facilitate communication and information sharing among Mourning Dove Management Unit technical committees and their respective flyway councils, USGS–Biological Resources Division, and the USFWS. The NDTF still performs these tasks along with new tasks such as facilitating communications regarding white-winged dove harvest management among flyways and the USFWS.

We thank the Department of Natural Resources, Colorado State University, for providing space on campus for the 2025 NDTF meeting.

The 2025 NDTF meeting report was compiled by the USFWS, Division of Migratory Bird Management based on contributions from meeting participants. Mark Seamans (USFWS) was the principal compiler of this report and Owen Fitzsimmons (Texas Parks and Wildlife) coordinated the annual meeting.

Cover Illustration: Mourning Dove drawing by Tim Knepp ©

Table of Contents

FLYWAY AND U.S. FISH AND WILDLIFE SERVICE UPDATES	4
Atlantic Flyway	4
Mississippi Flyway	4
Central Flyway	4
Pacific Flyway	4
U.S. Fish and Wildlife Service (Mark Seamans).....	5
DOVE TASK FORCE BUSINESS	5
DOVE TECHNICAL AND MANAGEMENT UPDATES.....	5
Mourning Dove Integrated Population Models	5
Mourning Dove Harvest Management Strategy	6
Mourning Dove Monitoring Programs Present and Future	8
Eastern Management Unit Mourning Dove Population Decline.....	8
White-winged Dove Management.....	9
Western Management Unit	9
Central Management Unit	9
IPM Central Management Unit	10
DOVE TASK FORCE PRIORITIES 2025–2026	10
2025 NATIONAL DOVE TASK FORCE ATTENDEES	11

FLYWAY AND U.S. FISH AND WILDLIFE SERVICE UPDATES

Atlantic Flyway (Josh Homyak, Michael Hook, Sarah Pesi)

Dove hunting states in the Atlantic Flyway are planning to continue normal mourning dove trapping and banding operations and should be able to accommodate any changes to data collection and reporting that may come out of this meeting or as a result of changes to other dove monitoring (parts collection, diary, etc.). As far as is known, dove hunting states continue to plant and manage crops for doves and other ground foraging birds although staff turnover and loss of institutional knowledge is always an issue. The states that attended the last EMU meeting (Delaware, February 2025) have been thinking about how they might contribute to any project that would look to investigate the dove decline although interest seemed to be highest in better utilizing easily accessible data (i.e. dove wing collection) than embarking on a large-scale dove ecology project.

Mississippi Flyway (Jamie Feddersen, Nathan Stricker)

No substantial update was provided because the Mississippi Flyway Council Technical Section generally does not address mourning dove-related issues at their meetings, although they are committed to discussing more dove-related topics in the future. It was mentioned that in Ohio more of their management areas have changed their dove field management practices by planting less expensive crops. It appears their dove fields are no longer considered as productive as previously planted sunflower fields or other “properly” managed dove fields.

Central Flyway (Owen Fitzsimmons, Paxton Smith)

The Central Flyway provided a brief update on ongoing white-winged dove research from Texas, including the development of an integrated population model for white-winged doves in Texas in collaboration with Colorado State University, and a satellite telemetry project investigating the annual ecology of urban-associated white-winged doves in Texas in collaboration with Texas A&M University-Kingsville. Texas plans to continue to work to fill information gaps that will aid in the development of a harvest management plan for eastern white-winged doves, or potentially a larger range-wide plan. Oklahoma plans to expand white-winged dove banding efforts in coming years.

Pacific Flyway (Larisa Harding, Russ Woolstenhulme)

Changes adopted by the Flyway in 2023 standardized the season frameworks in 2024 to allow harvest of both white-winged and mourning doves during the entirety of the dove season in the WMU. With the standardization, the harvest of white-winged doves was legalized in Arizona during the late season, with a harvest limit of 10 birds/day. The Flyway also adopted a significant revision to the Western White-winged Dove Management Plan in 2023. The updated abundance model in the revised plan allows for the take of up to 15 white-winged doves in the aggregate daily bag of 15 birds/day when abundance thresholds are met or exceeded. As such, in 2024 the Flyway proposed and the SRC approved an aggregate bag of 15 doves/day for California and Arizona in both the early and late seasons during the 2025 season, thus removing the 10 bird/day limit in California and Arizona.

The Flyway is currently reviewing the management plan for mourning doves, but the states elected to wait until the new IPMs were in place for the WMU before adopting any revisions to the plan.

U.S. Fish and Wildlife Service (Mark Seamans)

Leadership in the USFWS directorate and DOI secretary's office are changing as the new administration fills these positions. Doug Burgum has been confirmed as the new Secretary of DOI, Katharine MacGregor has been confirmed as the Deputy Secretary of DOI, and Brian Nesvik has been nominated to serve as the Director of the USFWS. Leadership at headquarters for the Migratory Bird Program (divisions of Migratory Bird Management [DMBM], Bird Habitat Conservation, and Conservation, Permits and Regulations) is also changing. Noah Matson, the Deputy Assistant Director for the Migratory Bird Program, will be leaving the USFWS at the end of June. Ken Richkus, Chief of the DMBM, has left the USFWS and Eric Kershner is now the acting chief for DMBM. Jennifer Miller is now the acting chief for the Division of Bird Conservation and Permits.

Within DMBM, Kathy Fleming has retired, and Tom Cooper is now the acting chief of the Branch of Monitoring and Data Management (BMDM). Tom continues to serve as the Central Flyway Representative for the USFWS. Emily Silverman, statistician, has left BMDM and now works under the Secretary of DOI. Mark Seamans has left the acting chief role for the Branch of Assessment and Decision Support (BADS) and was replaced by Pat Devers. Pat continues to serve as the Atlantic Flyway Representative for the USFWS, while Mark is again a fulltime biologist in the Assessment Branch. The Raptor Group, comprised of 5 biologists, was placed in BADS during May 2025. At the time of the NDTF Meeting the 2024–25 budget for Migratory Birds was unknown, and it was unclear the total number of staff that had left the program during the previous months.

DMBM continues to work with the Flyway Councils, Office of Management and Budget, and the Office of the Solicitor in DOI to craft a simpler process for setting annual migratory bird hunting regulations. This proposed new rule may be published during 2025.

DOVE TASK FORCE BUSINESS

Guidance Document - The Chair introduced the need for a guidance document for the NDTF. One has existed in the past and has not been updated since perhaps the inception of the NDTF in 2006. The Chair will take the lead on this update.

Research – The Chair reminded NDTF members of previous discussions about the need to improve coordination of dove studies within and across management units (MUs). Discussions included the possibility of standardizing and consolidating state harvest estimates as a way to collect harvest information in the absence of the Harvest Information Program. It was decided there is a need to inventory each state for what and how they collect dove harvest and any population survey data. Nathan Stricker (OH) will set up a survey through Qualtrics that should be distributed to all MU Chairs.

DOVE TECHNICAL AND MANAGEMENT UPDATES

Mourning Dove Integrated Population Models (Mark Seamans)

An integrated population model (IPM) for the CMU was completed in 2023 by Drs. Dave Koons and Dave Otis. Borrowing from this work, IPMs were developed by the USFWS for the EMU and WMU.

The IPM for the CMU was used fall 2023 to inform harvest management decisions for the 2024–25 hunting season and will be used hereafter to inform regulatory decisions. The IPMs for the EMU and WMU were used to inform harvest management decisions for the 2025–26 season.

The IPMs make use of multiple data sources available from 2007–2024: band-encounter data from the national mourning dove banding program; parts or wing data collected as part of USFWS harvest surveys; harvest from the Harvest Information Program; and annual abundance indices from the All-bird Breeding Bird Survey. Demographic estimates were presented at the NDTF for each of the management units. To better appreciate the magnitude of annual changes (and their uncertainty) results for annual survival and fecundity were modeled without enforcing linear temporal trends.

Linear and loglinear patterns of density dependence were explored for survival and fecundity for each MU. A negative linear correlation was observed between fecundity and population size after the previous harvest period suggesting a density dependent response in the CMU ($r = -0.54$) and EMU ($r = -0.33$). There was no such pattern in the WMU for fecundity ($r = 0.00$). However, adult survival during the non-harvest period was negatively correlated with post-season population size ($r = -0.65$). These density dependent relationships were used to create yield curves for each management unit (equations and graphs that depict expected equilibrium population sizes given constant harvest rate values).

The yield curves for each management unit rely on an estimated density dependent relationship that included only narrow ranges of possible population sizes. In other words, to create the yield curves the density dependent associations were used to estimate population responses to harvest over occurring at population sizes that were not observed. This was especially problematic for the CMU and EMU with the density dependent relationship resulting in unreasonably high average estimates of fecundity at small population sizes. For this reason, a ceiling (cap) was placed on fecundity for the CMU and EMU based on a literature review and observed high estimates of fecundity (2.2 young per adult in the CMU, and 2.4 in the EMU). After applying the cap, the resultant yield curves appeared more realistic and suggested that harvest rates of 30 to 40% were required to achieve maximum sustained yield in the CMU and EMU. This was not the case for the WMU yield curve, which suggested much lower harvest potential in the population and that a harvest rate around 8-9% was required to achieve maximum sustained yield.

Mourning Dove Harvest Management Strategy (Mark Seamans)

During the 2024 NDTF Meeting multiple priorities related to the mourning dove harvest strategy revision were identified that needed to be explored: (1) assess bias in HIP harvest estimates; (2) update banding needs and parts collection assessments; (3) use of data from EMU non-hunt states in the IPM; (4) revisit the definition of dove habitat used for weighting estimates in the IPM; (5) explore different forms of density dependence; and (6) explore additional constraints on harvest policy. Staff in the DMBM Branch of Monitoring and Data Management, the branch responsible for conducting HIP, are completing a study that evaluates the use of information provided by hunters during the HIP registration process to estimate the direction of non-response in the USFWS harvest diary survey. They are also comparing the direction of non-response in the last two years of the paper-based survey (2020-21 and 2021-22 hunting seasons) to the two first two years of the online survey (2022-23 and 2023-24), looking at changes in nonresponse bias in the online survey. Updated assessments for the mourning dove banding and parts collection programs still need to occur.

Estimates of survival and fecundity are made for each state in the IPMs. These state estimates are then 'weighted' to estimate demographic rates for the management unit, with weights being a function of BBS values and dove habitat (land area) in the states. The NDTF discussed refining the definition of dove habitat by using data from the National Landcover Database. A preliminary assessment limiting the definition to vegetation cover classes thought to be of high value for doves was completed but found little difference in the relative weights among states, except for in the EMU. In the EMU agricultural states in the Midwest (Illinois, Indiana, and Ohio) saw their weighting factors increase while states in the south saw their weighting factors decrease. The NDTF agreed that broader input was needed to help define dove habitat at the population scale. In addition, the NDTF discussed the possible use of BBS data from non-hunt states in the IPM. When weights were recalculated assuming non-hunt states were included in EMU estimates (and using the BBS x Dove Habitat Area approach), the non-hunt states accounted for 14% of the total weight in the EMU. BBS from non-hunt states could also directly be included in the EMU IPM. However, demographic estimates in the IPM are based on data collected in the hunt states, and this data (banding, parts, or harvest) is not available for non-hunt states.

Only linear forms of density dependence (i.e., relationship between demographic rates and population size) for mourning doves had been previously considered. Loglinear forms of density dependence were implemented and discussed at the NDTF. These loglinear forms fit the same or worse compared to linear forms. Thus, it was generally agreed to move forward with the linear forms but continue to revisit the form of density dependence as we gain more experience with the populations and more data become available.

The two objectives for mourning dove harvest management are to provide maximum hunting opportunity now and into the future, and to conserve mourning dove populations. Managing the mourning dove populations for maximum sustained yield can address both these objectives. Options for adaptive harvest management strategies were presented at the NDTF with the goal of bringing something to the Flyway Technical Committees to consider during their summer 2025 or winter 2026 meetings. The general structure of the balance equations used in the IPMs, and the demographic parameter and density dependent relationship results from the IPMs, were used to evaluate optimal policy decisions using stochastic dynamic programming. Three harvest package (policy) structures were considered: (1) status quo with a single season length but 3 bag limits of standard/restrictive/closed; (2) a two-policy approach of standard/closed bag limits; and (3) the status quo approach with a hard closure boundary at $\frac{1}{2}$ population at MSY. In addition, 98% shoulder-strategies were considered with the status quo policy. The NDTF agreed that the status quo package, with no other constraints, was the preferred alternative. Results from the modeling of shoulder-strategy constraints appeared unreasonable because assumed harvest rates (based on observed rates over the past 20 years) could not approach what was needed to reach harvest at MSY, resulting in extreme knife edged analyses.

The NDTF discussed what the status quo package should consist of. Unless the season is closed, season length matters little in the estimation of expected harvest. Mourning dove seasonal harvest depends on bag limit and having open seasons early in September. Thus, it was agreed to leave season length as it now currently stands. It was also agreed that a bag limit of 15 should remain the same for the standard package. It was less clear what a restrictive bag limit should be. Because observed harvest rates have been so low, reducing them further using a restrictive package may have little effect on the population response. However, in the future if the situation arises where a reduction in harvest is needed, the NDTF expects that we will have gained additional experience with the dynamics of the dove

populations and have more information to determine what reduction in harvest would be required to meet objectives. The NDTF did agree on a restrictive daily bag limit of 10 doves. However, the NDTF also agreed that the restrictive bag limit could be revised as we learn how each of these populations reacts to harvest when they are much smaller.

Mourning Dove Monitoring Programs Present and Future (Mark Seamans)

To make informed annual decisions to meet the objectives of providing maximum hunting opportunity and conserving mourning dove populations, mourning dove harvest management relies on 4 data streams: band-encounter data from the national dove banding program, parts collection data as part of national harvest surveys, the Breeding Bird Survey, and the Harvest Information Program. State natural resource staff and citizen science participation are responsible for collecting much of this data. However, the USFWS and USGS are critical for collecting and storing some data (USFWS for parts and HIP; USGS for BBS data) for data analyses. Reduced federal support for some or all programs is possible in the near future. For this reason, the NDTF began discussing potential alternatives to obtaining monitoring data.

The NDTF recommends that, in addition to data normally recorded, all banders begin recording molt and within-season recapture data and enter this data into the BBL database. This information could possibly be used to augment or replace the national parts collection program. A comparison of fecundity estimates from data obtained while banding with fecundity estimates from the traditional parts collection program will need to be completed. The NDTF also discussed re-starting the Mourning Dove Call Count Survey (MDCCS) in case of lost monitoring programs. The MDCCS was done in all 3 management units 1966–2013. A study was completed during 2015–2017 using the MDCCS but with distance sampling to obtain absolute estimates of population size. The NDTF recommends that a fuller analysis of this 2015–2017 data be completed. In addition, the NDTF discussed the use of eBird data and eBird model estimates for informing annual harvest decisions for mourning doves. Nothing was decided about the use of eBird, but it should be considered for use in the future if existing monitoring programs are terminated.

The NDTF suggested that information on state harvest data programs be compiled. Information would include a list of states that produce annual mourning dove harvest estimates, and the methods used.

Eastern Management Unit Mourning Dove Population Decline (Jamie Feddersen, Nathan Stricker, Josh Homyak, Michael Hook, Sarah Pesi)

EMU representatives reported no real progress on identifying a project to investigate an apparent long-term decline in mourning doves in the EMU. An Ad Hoc Committee was formed and engaged in a few discussions but nothing tangible has resulted. Possible causes for decline were discussed by the Ad Hoc Committee (habitat loss, neonicotinoids early September hunting seasons) with partial consideration for advancing a late breeding season study to identify possible impacts of production so close to the bulk of harvest (September 1). Mark Seamans indicated more information on banding season survival could provide some indication of September 1 hunting season framework date impacts on mourning dove production. The discussion led to Mark Seamans encouraging ALL dove banders to begin recording and submitting all recapture data (even within-year recaptures). This information can be informative to survival estimates for the IPMs. With slight increases in EMU

mourning dove populations over the past two years, the EMU will continue discussing the need for further discussion of a large -scale research project.

White-winged Dove Management

Western Management Unit (Larisa Harding)

The Pacific Flyway Council Study Committee has finalized revisions to the 2004 management plan for western white-winged doves (*Zenaida asiatica mearnsi*) to reflect current numbers and the Pacific Flyway Council will vote to adopt the Plan in August 2024. The revised plan has implemented a harvest strategy that uses an annual index of abundance from the North American Breeding Bird Survey (BBS) to set harvest limits. Although most of the white-winged doves in the WMU occur in Arizona and California, index data for all states in the WMU are used. BBS abundance indices suggest that white-winged dove numbers have been relatively stable over the past 50 years in the WMU. Using these data to manage western white-winged dove populations also aligns with management strategies for other columbiform birds in the WMU, i.e., mourning doves (*Zenaida macroura*) and Pacific Coast band-tailed pigeons (*Patagioenas fasciata monilis*).

The harvest management objective is to maintain hunting regulations that meet the overall objectives of the proposed plan and align with the National Mourning Dove Harvest Strategy as part of an aggregate dove bag limit. The white-winged dove harvest strategy involves four regulatory alternatives: Standard, Restrictive, Very Restrictive, and Closed. Threshold values for each alternative will use the most recent moving 3-year average BBS index value as a percentage of the long-term average index of abundance (birds/route) modeled from BBS data for white-winged doves in the WMU during 1968–2022.

- a. The Standard alternative of 60 days and 15 white-winged doves daily bag limit will be prescribed when 85% confidence (lower 70% credible interval) in the most recent moving 3-year average BBS index is $\geq 50\%$ of the long-term average.
- b. The Restrictive alternative of 60 days and 10 white-winged doves daily bag limit will be prescribed when 85% confidence (lower 70% credible interval) in the most recent moving 3-year average BBS index is $\geq 30\%$ of the long-term average.
- c. The Very Restrictive alternative of 60 days and 2 white-winged dove daily bag limit will be prescribed when 85% confidence (lower 70% credible interval) in the most recent moving 3-year average BBS index is $\geq 20\%$ of the long-term average.
- d. The Closed season alternative will be prescribed when either the above conditions for an open season are not met or when the season for the WMU population of mourning doves is closed.

Central Management Unit (Owen Fitzsimmons)

A brief update was provided with background on long-term WWDO harvest and monitoring in Texas including an annual banding program and distance-based annual surveys. Possible upcoming work includes using band recovery data to explore the delineation of geographic management boundaries for

eastern and western WWDO and the refinement of WWDO wing-aging classification that would expand on previous published work by Collier and Pierce in 2015.

IPM Central Management Unit (Rachael Vanausdall)

Preliminary results from a project developing an IPM for WWDO in Texas were presented. WWDO have rapidly expanded in range and abundance across Texas in recent decades with much of the current population occupying urban areas, raising questions about future harvest management. The IPM aims to estimate vital rates (survival and fecundity) and abundance using band-recovery data, banding age-ratio and recapture data, and BBS, point count, and harvest data. Band-recovery data across the 3 dove zones (north, central, south) indicate an increasing proportion of recoveries in urban (vs rural) counties from south to north. Preliminary results showed a higher survival probability for adults than juveniles (i.e., hatch-years) and relatively stable survival probabilities across years (2007-2022). Survival probability for adults ranged between 0.50 and 0.60. Juvenile survival probability was generally highest in rural areas in the north zone (~0.50), while it was lowest in urban areas in the north zone (~0.40). Adults and juveniles in rural counties were more susceptible to harvest than other types of mortality in the southern and central zones. In urban areas, adults were more susceptible to other sources of mortality than harvest, particularly in the north zone, while juveniles were most at risk to harvest in all zones. Work on the survival analysis is ongoing, as are sub-models for abundance and fecundity.

DOVE TASK FORCE PRIORITIES 2025–2026

I. Mourning dove harvest strategy

- A. Complete writeup of strategy for flyway technical committees to review
- B. Create and give a presentation regarding the strategy to each flyway
- E. Continue examining the definition of dove habitat for weighting estimates within IPM
- F. Updated banding needs assessment, and maybe updated parts collection assessment

II. Data

- A. Reanalyze data collected as part of the modified call count survey data collected 2015–2017
- B. Collect and analyze molt, age, and recapture data from the banding program

IV. White-winged dove management

- A. Continue development of IPM in Texas
- B. Investigate making improvements to existing wing-aging classification criteria
- C. Identify additional priority information needs specific to white-winged dove management across range

2025 NATIONAL DOVE TASK FORCE ATTENDEES

State Representatives from each Flyway

Josh Homyak (Atlantic Flyway, Maryland Department of Natural Resources)

Michael Hook (Atlantic Flyway, South Carolina Department of Natural Resources)

Sarah Pesi (Atlantic Flyway, South Carolina Department of Natural Resources)

Jamie Feddersen (Mississippi Flyway, Tennessee Wildlife Resources Agency)

Nathan Stricker (Mississippi Flyway, Ohio Department of Natural Resources)

Owen Fitzsimmons (Central Flyway, Texas Parks & Wildlife Department; NDTF Chair)

Paxton Smith (Central Flyway, Oklahoma Department of Wildlife Conservation)

Larisa Harding (Pacific Flyway, Arizona Game and Fish Department)

Russel Woolstenhulme (Pacific Flyway, Nevada Department of Wildlife)

U.S. Fish and Wildlife Service

Mark Seamans (Division of Migratory Bird Management, Branch of Assessment and Decision Support)

Todd Sanders (Pacific Flyway Representative)

David Scott (Mississippi Flyway Representative; virtual attendance)

Invited Guests in Attendance

Jim Gammonley (Colorado Parks and Wildlife)

David Otis (USGS emeritus)

Rachel Vanausdall (Colorado State University)