# Wisconsin Legislative Council MINUTES



## STUDY COMMITTEE ON SANDHILL CRANES

Room 412 East, State Capitol Madison, WI October 1, 2024 10:00 a.m. - 3:30 p.m.

#### CALL TO ORDER AND ROLL CALL

Chair Tittl called the meeting to order and determined that a quorum was present.

Committee Members Present:	Rep. Paul Tittl, Chair; Sen. Romaine Quinn, Vice Chair; Rep. Dave Considine; Sen. Mark Spreitzer; and Public Members Rick Gehrke, Tamas Houlihan, Meleesa Johnson, Anne Lacy, David Mickelson, Benjamin S. Sedinger, and Paul Wait.
Committee Member Excused:	Public Member Todd Schaller.
COUNCIL STAFF PRESENT:	Ethan Lauer, Senior Staff Attorney, and Ben Kranner, Senior Staff Analyst.
Appearances:	David P. Scott, Mississippi Flyway Representative, Division of Migratory Bird Management, U.S. Fish and Wildlife Service (USFWS); Benjamin S. Sedinger, Assistant Professor of Wildlife Ecology, University of Wisconsin (UW)-Stevens Point; Jeb Barzen, Lecturer, Nelson Institute for Environmental Studies, UW- Madison; Jennifer Lazewski, Executive Director, Wisconsin Society for Ornithology; and Bruce Ross, Executive Director, Wisconsin Waterfowl Association.

#### APPROVAL OF THE MINUTES OF THE SEPTEMBER 4, 2024 MEETING

*Mr.* Mickelson moved to approve the minutes of the study committee's September 4, 2024 meeting. The motion was seconded by Senator Quinn and passed by unanimous consent.

## PRESENTATION BY DAVID P. SCOTT, MISSISSIPPI FLYWAY REPRESENTATIVE, DIVISION OF MIGRATORY BIRD MANAGEMENT, USFWS

Mr. Scott delivered a presentation on the role of federal law and his agency in managing migratory birds. He highlighted key protections of the federal Migratory Bird Treaty Act of 1918. He described the four administrative flyways and Flyway Councils that are utilized in the management of migratory birds. He noted that USFWS appoints a representative to work with each Flyway Council and the

associated technical committees in developing management recommendations. He drew committee members' attention to the two key documents that inform the work of USFWS in sandhill crane management in the flyway to which Wisconsin belongs: the Management Plan for the Eastern Population of Sandhill Cranes ("2010 management plan"); and the Status and Harvests of Sandhill Cranes, a report prepared annually.

Mr. Scott then described the process by which a state could obtain federal approval for a sandhill crane hunting season. This process requires that a state possess the authority to set a hunting season and develop a hunting proposal consistent with the 2010 management plan. If this proposal is approved by the relevant flyway committees, it is submitted to USFWS. If approved by USFWS, that agency and the state enter a Memorandum of Agreement for an experimental hunting season. After three years of experimental seasons, the state would repeat the process in order to obtain approval for a regular hunting season.

Finally, Mr. Scott outlined the federal constraints that would apply to any sandhill crane hunting season in Wisconsin, including the maximum number of permits that could be issued, the maximum length of a season, and the need to address potential impacts to whooping cranes. Based on recent experience in the three states in the Mississippi Flyway with sandhill crane seasons, Mr. Scott estimated that approximately 150 to 200 sandhill cranes would be harvested during a hunting season in this state.

Mr. Scott responded to a variety of questions from committee members. In response to questions relating to depredation permits and crop damage, he noted the following: federal depredation permits to kill cranes causing crop damage are available even if a state also conducts a crane hunting season; the number of cranes taken under federal depredation permits within a state does not figure into the total number that may be taken during that state's hunting season; he was unaware of any data correlating a hunting season with a reduction in crane-related crop damage; and that prohibitions on the use of cranes taken under depredation permits are due to the fact that the permits are not intended to be a substitute for a hunting season.

In response to questions relating to sandhill crane hunting in other jurisdictions, Mr. Scott noted the following: Alabama was the last state in the Mississippi Flyway to establish a sandhill crane season; to his knowledge, Alabama, Kentucky, and Tennessee have not had to adjust their seasons based on declining crane populations; and the province of Ontario, Canada, is currently considering initiating a sandhill crane hunting season.

In response to more general questions relating to sandhill crane hunting, Mr. Scott noted the following: a state must take into consideration harm to whooping cranes when formulating its sandhill crane hunting season; based on the growth of the sandhill crane population since the adoption of the 2010 management plan, there is no biological reason not to hunt them in a sustainable manner; if a state conducts a hunting season, the state's Department of Natural Resources (DNR) must conduct an afterseason survey of the harvest; a state may issue hunting permits for up to 10 percent of the peak number of sandhill cranes observed in that state in the previous five years, and that percentage can be reduced if crane populations decline; crane population within a state is based on observations during a 10-day window in October at locations where cranes are known to gather before migration; even though permits may be issued for 10 percent of the peak crane population, states routinely report a 20 percent success rate on issued permits; the low success rate on issued permits is likely based on the difficulty of finding a crane in the right location at the right time; and, depending on the timing of a proposal, the soonest Wisconsin might be able to establish a season is fall of 2027, given the annual cycle of meetings of the Flyway Councils and their committees and the federal agency rulemaking process.

#### PRESENTATION BY BENJAMIN S. SEDINGER, ASSISTANT PROFESSOR OF WILDLIFE ECOLOGY, UW-STEVENS POINT

Mr. Sedinger delivered a presentation discussing the North American model of wildlife conservation, wildlife population ecology, life history theory, density dependence, and harvest dynamics.

Mr. Sedinger described the North American model of wildlife conservation as a set of principles used to guide wildlife management decisions on this continent. Keys to this model include that wildlife is a public trust resource to be managed by state and federal governments, science is the proper tool for the discharge of wildlife policy, and the democracy of hunting, which is the notion that the creation of wildlife habitat and hunting opportunities benefits society as a whole.

Mr. Sedinger noted that principles of population ecology can be used to calculate the future abundance of a species by taking current abundance, adding births and immigration, and subtracting deaths and emigration. Very generally, the inputs to this formula over the past several decades have resulted in growth of the Eastern Population of sandhill cranes.

Mr. Sedinger explained that life history theory provides insight into wildlife population dynamics. Based on evolutionary history, certain species allocate time and energy to maximize production of young, whereas other species do so to maximize survival of the young that are produced. Generally, smaller species of waterfowl have shorter lifespans and produce larger clutches of eggs, while larger species, including cranes, have longer lifespans and produce smaller clutches of eggs. Regarding sandhill cranes, breeding age individuals survive year-to-year at a high rate, but recruitment of new individuals to the breeding age population is low.

Mr. Sedinger next described how density dependence, the diminishing availability of per capita resources as the population of a species increases, affects population. He explained that as a species reaches carrying capacity, its population growth rate slows. Conversely, harvest of a species at the maximum sustainable yield results in high population growth rates.

Using the Mid-Continent Population of sandhill cranes as an example, he noted that the crane population has increased along with an annual increase in harvest over several decades. For the Eastern Population, modeling indicates that the population could sustain a harvest rate of approximately five percent. He noted that a hunting season in Wisconsin should be timed to minimize the take of territorial, breeding cranes, and that the second week of October through the third week in November may be the optimal window because that is usually the peak abundance of cranes in the state.

Finally, Mr. Sedinger speculated as to whether a sandhill crane season might have benefits for whooping cranes, given that crane populations overall have reached a high density in Wisconsin.

Mr. Sedinger responded to questions from committee members on the following: determining the age of a harvested bird; factoring birds taken under a depredation permit into harvest quotas; structuring a hunting season to match peak Wisconsin crane abundance and whether climate change will alter the timing of that peak; the meaning of the democracy of hunting; the reasons for the notable population increase of sandhill cranes in 2009; his hypothesis that sandhill crane hunting may benefit whooping cranes; and the trigger for the timing of sandhill crane migration.

#### **PRESENTATIONS BY INVITED SPEAKERS**

#### Jeb Barzen, Lecturer, Nelson Institute for Environmental Studies, UW-Madison

Mr. Barzen delivered a presentation overviewing crane ecology, migration, breeding distribution, winter distribution, and changes in the timing of fall migration over time. He noted the difference in size between the home range of territorial cranes, which breed, versus nonterritorial cranes, which do not breed.

Mr. Barzen discussed several findings and projections derived from research on banded sandhill cranes in the research study area in Briggsville, Wisconsin. First, he noted that the fledging rate at the study area declined between 1993 and 2023. Second, he said that the population grew between 1993 and 2000, then held steady between 2000 and 2014, and that part of the reason for the lack of growth was dispersal of cranes from Briggsville to neighboring states. Finally, he described how various harvest scenarios impacted models of the abundance and growth rate among 450 cranes at Briggsville over a 100-year period. He developed models using harvest rates of one, three, five, seven, and 10 percent, and applied those rates to the following three scenarios: (1) harvest of nonterritorial cranes only; (2) random harvest where the survivor of a territorial pair would soon form a new pair and reproduce; and (3) random harvest where the survivor of a territorial pair would take a few years to form a new pair and reproduce. In the first scenario, the population initially declines, but then stabilizes at every harvest rate. In the second scenario, the population initially declines, but then stabilizes only at harvest rate except 10 percent. In the third scenario, the population declines, but then stabilizes only at harvest rates of one and three percent.

Mr. Barzen noted that territorial cranes might be more likely to be harvested in a hunting season based on their pattern of remaining in the breeding area longer than nonterritorial cranes. He said that a recent hunting season in Minnesota may have taken a disproportionate number of territorial cranes and that the population of cranes in that area reduced dramatically as a result.

Mr. Barzen concluded by exploring the possible ramifications of a four percent harvest rate of Eastern Population cranes. Spread over the states and Canadian provinces in the Mississippi Flyway, each state and province would harvest about 293 cranes, but that this would not raise significant funds to offset crane-related crop damage. He also noted that crane-related crop damage was reported in 1975 with an estimated crane population of 14,000 birds, and thus, using a harvest to reduce the crane population would not eliminate crane-related crop damage.

#### Jennifer Lazewski, Executive Director, Wisconsin Society for Ornithology

Ms. Lazewski delivered a presentation focusing on birders as stakeholders in Wisconsin's natural resources. She noted that birdwatchers travel throughout the state for birding opportunities, stressing the traditions and multi-generational appeal of the pursuit.

Ms. Lazewski clarified that although her organization is not opposed to all forms of hunting, it opposes hunting sandhill cranes in Wisconsin. In the context of a tremendous decline in the overall bird population in North America, she asked the committee to view the rising sandhill crane population as a conservation success story.

Ms. Lazewski noted that decisions on whether a species should be hunted require significant time and effort, including consideration of scientific metrics and modeling. In general, the process for establishing a hunting season includes convening an advisory committee, developing a management plan, and utilizing a rulemaking process over several years. In some cases, additional research may be

necessary to create or support metrics for decisions. She described the various ways in which birders contribute to bird science, including reporting bird sighting and supporting the Breeding Bird Atlas.

Ms. Lazewski noted that decisions on whether a species should be hunted also include social factors. She highlighted public opinion polling that demonstrates the lack of support for a sandhill crane hunt in Wisconsin. She also indicated that DNR's Fish and Wildlife account is running a deficit, and that revenue from a sandhill crane hunting season might not offset added agency costs of managing that season. Finally, she said that bird watching is experiencing growth in Wisconsin and cited various estimates of the economic impact of birders.

Mr. Barzen and Ms. Lazewski responded to a variety of questions from committee members.

In response to questions relating to population models, Mr. Barzen noted the following: the models shown during his presentation regarding the effect of harvest rates integrate mortality by depredation permits and other human-caused fatalities; the models assume a static harvest rate over the 100-year period, and the models do not account for hunter preference for harvesting juveniles, if such a preference exists.

In response to other questions, Mr. Barzen noted the following: comparisons to the carrying capacity of snow geese might not apply to sandhill cranes, given that sandhill crane populations are limited by the availability of suitable wetlands; approximately three million acres of corn are susceptible to crane damage in Wisconsin based on their proximity to cranes, however, territorial cranes are unlikely to cause damage across a large area; Avipel is as effective a nonlethal deterrent as he has seen used for any species of wildlife; and there are not any effective nonlethal repellants available to reduce crane-related potato crop damage, but lure crops might help. Finally, he also indicated that although it is not possible to distinguish a territorial crane from a nonterritorial crane, an open season could be adjusted through timing and location to minimize the chances of harvesting territorial cranes, noting, for instance, that a crane at the edge of a cornfield near a wetland might be a territorial crane, but a large group in the middle of the field might be nonterritorial cranes.

In response to questions, Ms. Lazewski noted the following: her organization is exploring a range of options to raise funds to offset crane-related crop damage, whether through voluntary contributions by birders, a wildlife stamp, as is used in Tennessee, or other methods; she does not believe that a sandhill crane season is the correct answer to the crop damage problem; and with the information available, she does not envision a scenario where sandhill crane hunting would be acceptable to her organization, given that Wisconsin contains breeding locations and most other Eastern Population states do not.

### PRESENTATION BY BRUCE ROSS, EXECUTIVE DIRECTOR, WISCONSIN WATERFOWL ASSOCIATION

Mr. Ross delivered a presentation discussing hunters as conservationists, reasons for initiating a sandhill crane hunting season, and recommendations for the committee.

Regarding hunters as conservationists, Mr. Ross noted that hunters support science-based game management by reporting harvest data and by providing funding for conservation and habitat restoration through the federal Pittman-Robertson Wildlife Restoration Act, federal and state waterfowl stamps, and voluntary contributions.

Mr. Ross then highlighted the following nine reasons to support a sandhill crane hunt in Wisconsin: the 2010 management plan includes hunting as one of its goals; the population of cranes justifies it; hunters support it, as evidenced by decades of sandhill crane hunting in other jurisdictions and opinion

surveys of hunters; crane tourism and crane hunting are compatible activities; hunting is a management tool to help reduce crane-related crop damage; the presence of whooping cranes in Wisconsin is not a deterrent to a sandhill crane hunt; DNR has the capability to successfully manage a hunt; public opinion does not clearly oppose it; and Article I, Section 26 of the Wisconsin Constitution espouses a right to fish, hunt, trap, and take game subject only to reasonable restrictions as prescribed by law.

Mr. Ross concluded his presentation with recommendations for the committee as it considers draft legislation. He urged the committee to develop legislation to direct DNR to take the following three steps: develop a crane management plan that considers crane-related crop damage, crane tourism, and crane hunting; apply to USFWS for an experimental hunting season without waiting for completion of the management plan; and develop a user fee structure that would cover DNR's administrative expenses.

Mr. Ross responded to a variety of questions from committee members. In response to questions, he noted the following: reducing the sandhill crane population through hunting will help reduce crane-related crop damage; he does not advocate that the Eastern Population of sandhill cranes be reduced to the target of 30,000 to 60,000 birds listed in the 2010 management plan; the federal Farm Bill creates habitat for both hunters and nonhunters through general tax revenue; and that the state should consider use of general purpose revenue to support the state's damage abatement and claims program.

#### **DISCUSSION OF COMMITTEE ASSIGNMENT**

After the final presentation, Chair Tittl invited committee members to discuss their ideas for a framework for legislation to recommend to the Legislature.

Senator Spreitzer suggested separating the question of a harvest from the issue of helping farmers deal with crane-related crop damage. He predicted that the latter issue could receive broad committee support, but that the former may get hindered in the political process. In response to committee member questions, he clarified that he is not proposing making sandhill crane damage eligible under the Wildlife Damage Abatement and Claims Program (WDACP) in the absence of a hunting season. Ms. Johnson supported the Senator's approach, but Mr. Wait expressed opposition to separating one species out of WDACP. Ms. Lacy reminded the committee that cougar damage is eligible under WDACP without a cougar season.

Chair Tittl noted that although the current WDACP surcharge is \$2 for a regular license and \$4 for a conservation patron license, these amounts could be increased to provide additional revenue. He indicated that he was preparing a chart of proposed fee revisions.

In response to a question from Chair Tittl, Legislative Council staff gave the committee an overview of eligible uses of funding under the federal Pittman-Robertson Wildlife Restoration Act, as well as restrictions imposed by that act on a state's use of its own hunting license fee revenue. Ms. Lacy asked Legislative Council staff if they could provide the committee with additional information on these issues.

Chair Tittl urged the committee to place trust in USFWS and DNR to manage game by means of a harvest.

Mr. Mickelson expressed support for finding separate funding outside of WDACP to assist farmers with purchasing Avipel. Mr. Gehrke, however, wondered whether Avipel is a temporary solution that does not help farmers with other crops that are damaged by cranes.

In response to a question from Chair Tittl regarding the committee's next steps, Legislative Council staff suggested that he could issue them direction to have draft legislation prepared for the committee to consider at the next meeting.

## ADJOURNMENT

The meeting adjourned at 3:30 p.m.

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