

Waterfowl Advisory Committee
August 8, 2023
Meeting Minutes
Love Farm WMA
1832 Vanboklen Road. Eastover, SC 29044

Members Present:

Chairman Bob Perry, Vice-Chairman John Hilton, Stuart Cochran, Bill Mace, and Ernie Wiggers.

Members Absent:

Jerry Lee.

DNR Staff Present:

WFF Deputy Director Emily Cope, WFF Assistant Deputy Director Ken Prosser, Chief of Wildlife Billy Dukes, Assistant Chief of Wildlife (Statewide Programs) Will Dillman, Assistant Chief of Wildlife (Regions 1 & 3) Willie Simmons, Assistant Chief of Wildlife (Regions 2 & 4) Sam Chappelle, General Counsel Susan Porter, Statewide Waterfowl Biologist Molly Kneece, Regional Coordinator (Region 4) Alicia Farrell, Regional Coordinator (Region 3) Barry Kesler, Region 3A Coordinator Travis Bennett, Wildlife Technicians Corey Baldwin, Gene Price, Sam Moore, and Wildlife Section/Statewide Projects Administrative Coordinator Patty Castine.

Constituents Present:

Tombo Milliken, Marc Johnson, David Gantt, and Patrick Gamble.

Call to Order

Chairman Perry called the meeting to order at 9:30 AM, with notice that the date, time, and place of this meeting was posted on the DNR website in accordance with the Freedom of Information Act.

Introductions and Constituent Comments

Staff and constituents introduced themselves and provided their background and interests.

Constituents who wished to speak: Chairman Perry asked the committee to recognize Dr. Richard Kaminski, who planned to attend the meeting but was unable due to health reasons. Dr. Kaminski forwarded a statement to Chairman Perry entitled the Importance of Knowing Genetic Make-Up of Mallards Wintering in South Carolina, in connection with a multi-state collaborative study to determine the genetic/DNA makeup of harvested mallards. Chairman Perry read the statement; it is appended. Marc Johnson, who is supporting the study, stated the \$50 fee charged per bird covers the variable cost of handling the samples, and investigators presently have commitments of around \$13,000 to cover fixed costs. Dr. Phillip Lavretsky at the University of Texas El Paso is the lead investigator. Statewide Waterfowl Biologist Kneece was informed earlier of the project and the desire to sample harvested mallards from SCDNR waterfowl WMAs. Chairman Perry asked Biologist Kneece if the study design has advanced to the point to where a target sample size has been defined. She was not aware of the target sample size but estimated it would be 100 or less. Marc Johnson stated that he understands the sample goal is 150 to 200.

No others in attendance requested to address the Committee.

Approval of Minutes

Vice Chairman John Hilton moved to approve the minutes as presented for the May 3, 2023, Waterfowl Advisory Committee meeting. The motion was seconded by Bill Mace and passed unanimously.

Comments from DNR Leadership

Chief of Wildlife Billy Dukes referenced the upcoming field day at Samworth WMA, August 22, 2023, stating the public can register ahead of time via EventBrite. Field trip spaces will be guaranteed for committee members.

2023-2024 Migratory Bird Seasons

Statewide Waterfowl Biologist Kneece reviewed the 2023-2024 migratory bird season framework. An Atlantic Flyway meeting is scheduled in September and staff will have a better idea of frameworks for the 2024-2025 season. There has been much public interest in modifying how the season dates are set in the future, and staff are developing a survey to determine waterfowl hunter's preferences. The plan is to have the survey out in early October via Survey Monkey. Molly asked the committee to be sure to have their email preferences set to receive emails from DNR and asked them to contact their constituents to do the same to make sure they have an opportunity to respond. DNR will assess the survey results to evaluate public opinion on any future changes to the waterfowl season dates. The survey would also include an assessment of the teal season which receives high public interest every year. The survey will consist of about twenty questions and take about 10 minutes for a duck hunter to complete. Chairman Perry inquired on the sample size in which Biologist Kneece responded that it should be a 30% response rate and all purchasers of the Migratory Waterfowl Permit will be notified through direct e-mail contact. Chief Dukes stated that the number of hunters reached should be approximately 40,000 and 30% would be a typical response rate. Chairman Perry then requested staff give some consideration for examining harvests by five-day intervals; those data must be mined from HIP. Staff don't know what the process is, but it's not readily available in any common form. Chairman Perry stated the USFWS formerly provided those numbers nationwide. That would be one more harvest data set to complement the opinion survey. Another thought that might be complimentary to this effort is to use drone methodology using areas such as Murphy Island, The Cape, Annandale Plantation, and other places on the coast and some inland areas to see what wintering populations numbers look like at 10-day intervals. Vice Chairman Hilton stated he would like to have a conversation regarding how staff would conduct duck counts at individual WMAs. He feels the counts need to be done weekly by the property managers. He prefers that counts should be done when birds go to roost, not when they are jumped. It is labor intensive, but harvest numbers are not a realistic evaluation of wintering waterfowl numbers.

Category I Lottery Hunt Prospects and Plans for the 2023-2024 Duck Season

Chairman Perry asked about changes and increased hunting opportunities on Cat 1 areas. The Bear Island review team made some recommendations and how they might play in. Chief Dukes replied that hunt schedules have not yet been coordinated with the lottery hunt office; he anticipates little change from last year. However, DNR plans to hunt Samworth with 3 parties and one hunt per week so there will be an additional 30 hunters overall. Santee-Delta East will be hunted this year, but Santee-Delta West is not ready. Deputy Director Cope asked the committee to help spread the word that DNR is not eliminating but adding opportunity. Chairman Perry stated for the record he is opposed to hunting Samworth this year. It might be viewed as not providing opportunity, but he feels the property is not ready, the habitat needs to be better developed, and site fidelity will take a while to re-develop. Deputy Director Cope requested guidance from the committee stating staff would prefer to wait if we could, but members of the General Assembly have been adamant about opening Samworth to hunting. The DNR Board members have been engaged in the legislative dialogue. Discussions ensued regarding public opportunities where hunters have had success and surrounding property owners wanting to know when Samworth will be open for hunting. Vice Chairman Hilton stated the concern should be attracting ducks to Samworth not hunting them. Chairman Perry stated the committee wants to support the waterfowl resource and staff. Ernie Wiggers questioned the preference to not hunt Samworth if public waters surrounding Samworth are being hunted. Chairman Perry stated it is more important now to provide sanctuary and re-develop site fidelity. Stuart Cochran agreed that Samworth doesn't need to be hunted. Deputy Director Cope stated that any conversations

regarding hunting at Samworth during the 2022-23 season should begin with Mike Hutchins, Vice-Chair of the DNR Board. Chairman Perry agreed.

Chairman Perry moved on to discuss burning at Santee-Delta and stated that fall burning is critical. In the past an effort was made to wait until the plant community had fully senesced and had at least a semblance of frost and then catch that best opportunity date to burn. Not hunting on the first opportunity day but wait until the second opportunity will help ensure a good burn. Bill Mace stated the practice in the past was to mow in late October and let the vegetation die, followed by a burn when conditions allow.

DNR Project Updates

Statewide Waterfowl Biologist Kneece gave a presentation regarding all projects and improvements taking place on Beaverdam WMA, Clemson Waterfowl Area, Broad River WMA, Murphy Island at Santee Coastal Reserve, Santee-Delta East, and Bear Island WMAs. Bill Mace commended Biologist Kneece and staff for their efforts on the properties and Deputy Director Cope affirmed the commendation.

June 21 Samworth and Ramsey Grove Inspection Review

Chairman Perry reviewed highlights regarding the inspection of Samworth and Ramsey Grove with Representative Lowe, Chief Dukes, and Region 4 Coordinator Alicia Farrell. On Samworth, the group discussed staffing, equipment, budgets, spring burning of the marshes, and burning that was not able to be accomplished due to conditions being too wet. Habitat management has been going well and better than in past years, however, leaking trunks and leaking dikes on some impoundments continues to be an issue which staff is addressing. Three sites were inspected that day. Ongoing work was observed, and it appeared to be beneficial. Representative Lowe brought up the idea of using pumps and staff explained that pumps are a short-term solution to an ongoing problem and not a long-term management option. Chairman Perry agreed. The tidal range was discussed, and new data appears to demonstrate the tidal range has shifted with sea-level rise. Using gauges near Samworth, the average high tide is higher, and the average low tide is higher. Representative Lowe and Mark Prudhomme, the former property manager of Ramsey Grove, indicated to Chairman Perry that the planting of the marsh at Ramsey Grove looked good and the work had been done by DNR field staff. Deputy Director Cope commented that the inspection results report was forwarded to Representative Lowe and was presented to the DNR Board in July.

Ideas for Evaluating Waterfowl Habitat

Chairman Perry presented ideas for evaluating waterfowl habitat with numerical values. He stated that measurements are essential to demonstrating improvements and annual fluctuations in habitat quality. He would like to pursue a methodology that is quantifiable and can be used to deflect criticism. He presented a handout to the committee and discussed his ideas. Biologist Kneece discussed the USFWS methodology, an established Rapid Habitat Assessment Technique, coupled with limited aerial surveys. The consensus of the Committee is to adopt a valid method of measuring and reporting on habitat conditions.

Overview of Wateree River HP and Love Farm WMAs

Chief Dukes introduced Biologist Travis Bennett who gave a presentation regarding all projects and improvements taking place on Wateree River HP and Love Farm WMAs. Assistant Chief Willie Simmons and Biologist Kneece commended Biologist Bennett on his presentation and on the work he and his staff have done on both properties.

Other, Old and/or New Business

Chairman Perry stated a draft mission statement needs to be created by staff prior to the next committee meeting in November to be included in the WAC's annual report to the General Assembly in December. The vision statement can mirror the agency's vision statement and be simple, but clear. Vice-Chairman Hilton made a motion for staff to create the draft vision statement. The motion was seconded by Stuart Cochran and passed with unanimous approval by the Committee.

Chairman Perry also requested a draft report of the 2021-22 Duck Stamp expenditures be prepared to demonstrate how the funds were budgeted, spent and how duck hunters and the waterfowl resource benefited. Chief Dukes pointed out that duck stamp expenditures are based on the state fiscal year (July 1- June 30); thus, duck stamp expenditure reports included in the WAC's annual report to the General Assembly will be for the prior fiscal year. This report will create a baseline for expenditures prior to the increase in the annual duck stamp budget. Chairman Perry asked that this report be available in draft form by the November meeting.

Chairman Perry presented the 2004-05 Waterfowl Project Annual Report which was passed around to the committee members for review. There was discussion on the benefits of preparing and publishing such a report. Bill Mace moved to approve the creation of an annual Waterfowl Project report after the 2023-24 duck season. The motion was seconded by Ernie Wiggers and passed with unanimous approval by the committee. The Committee asked that the draft report be presented in May 2024.

Date, Time, and Location of Next Meeting

The next meeting of the Waterfowl Advisory Committee will be held at a time to be determined, on Tuesday, November 14, 2023, at the Donnelley WMA lodge, located at 585 Donnelley Drive, Green Pond, SC 29446. The Committee will conclude the meeting with a tour of the Bear Island WMA waterfowl management area.

Adjournment

The meeting was adjourned at 1:33 PM. A site-visit of Wateree River and Love Farms WMAs was conducted after adjournment, where Committee members were able to observe the extensive infrastructure work that has been done to improve water management capability in the impoundments, as well as planted crops and native vegetation present in the impoundments.

APPENDIX

Importance of Knowing Genetic Make-Up of Mallards Wintering in South Carolina

Richard M. Kaminski, Ph.D., Emeritus Waterfowl Ecologist, Mississippi State University and Clemson University

Mallards (*Anas platyrhynchos*) are important game ducks in the Atlantic Flyway, and they exhibited exponential growth in the eastern United States and Canada between the 1970s and 1990s. Since, breeding population estimates of mallards have declined ~20%, and abundance of mallards wintering in South Carolina and other southern states in the Atlantic and Mississippi Flyways has diminished with increasing abundances farther north linked to warming winter temperatures from climate change (Roberts et al. 2023, Meehan et al. 2021, *Journal of Wildlife Management*). Researchers have posited that declining mallard populations in the USA portion of the Atlantic Flyway may be linked in part to the release of millions of game-farm mallards over the past century that lack adaptations for survival and reproduction unlike pure wild counterparts (Lavretsky et al. 2020, *Molecular Ecology*).

Given the above phenomena, determining the genetic makeup of mallards still wintering in South Carolina is fundamental to conserving and managing habitats in locales/regions where wild mallards persist to sustain their fidelity to wintering in the state. We propose to conduct a collaborative study during waterfowl season 2023-2024 to determine the genetic/DNA makeup of harvested mallards around the state of South Carolina. Collaborators include private duck clubs, individuals, Palmetto Waterfowl Association and contacts, Dr. Phil Lavretsky (waterfowl geneticist, University of Texas-El Paso), Clemson University's James C. Kennedy Waterfowl & Wetlands Conservation Center (Dr. James T. Anderson, Director), and

hopefully South Carolina Department of Natural Resources (SC DNR). Molly Kneece has been informed of this project and desire to sample harvested mallards at SC DNR waterfowl WMAs.

Regarding methodology, a small tissue sample will be clipped from the tongue of harvested mallards and preserved in a vial with a buffered solution. The harvested duck will be returned to the hunter. Dr. Lavretsky will supply the vials and sampling instructions prior to the hunting season. The samples will be frozen on site and then sent to Dr. Lavretsky after the hunting season. A like approach was used to sample DNA of mottled ducks (*A. fulvigula*) harvested in coastal South Carolina to determine if they were hybridizing with feral game-farm mallards (Lavretsky et al. 2021, *Journal of Wildlife Management*). This study was supported by SC DNR and Clemson's James C. Kennedy Waterfowl & Wetlands Conservation Center. The researchers reported that 85% of sampled mottled ducks were pure wild birds and thus concluded that South Carolina's mottled duck population was adequately large to absorb current hybridization rates from game-farm mallards (Lavretsky et al. 2021, *Journal of Wildlife Management*). Our proposed mallard study will determine the proportion of pure wild, game-farm, and hybrid mallards harvested by hunters around the state of South Carolina. The genetic make-up of mallards wintering in South Carolina is unknown, hence necessitating this study to identify focal regions where pure wild mallards are wintering. Results from this study would provide geographic insights for SC DNR to capture and apply GPS devices on mallards as part of the ongoing Eastern mallard populations study among Atlantic flyway states and provinces.

Private duck clubs, individuals, Dr. Lavretsky's lab, and Clemson's Kennedy Center have committed to supporting this study. To pledge your fiscal support, contact Dr. Phil Lavretsky (plavretsky@utep.edu) for details regarding a tax-deductible contribution to this project and his laboratory.