

# Citizens Waterfowl Advisory Committee Meeting

1/07/2021

Virtual Meeting, Session 1, Microsoft Teams Live Event

*Citizens Waterfowl Advisory Committee mission: To provide feedback to the DNR-Wildlife Division on existing and proposed waterfowl regulations and wetland management issues. CWAC members must present views and concerns which represent stakeholders from their areas of the state and disseminate information learned at CWAC meetings back to those stakeholders.*

Stathi Kritselis, Chair, called the meeting to order at 6:33PM

## **CWAC members (20):**

**Present:** Stathi Kritselis, Jeff Godi, Brad Quist, Jacob Cook, Steve Allaire, Mike Schutt, Ed Retherford, Trent Bellingar, Eric McGhee, Dale Borske, Dan Villwock, Dan King, Mike Dabrowski, Ryan Kuntze, Mike Zoli, Bob Johnson, John Huffman, Ken Martin, Chris Hillman (late to call), Dan Cleary (late to call)

**Absent (no Proxy):** None

**DNR Waterfowl Workgroup members (10):** Barbara Avers, Brad Johnson, Bruce Barlow, Nik Kalejs, Don Poppe, Jeremiah Heise, Terry McFadden, Don Avers, Zach Cooley, Randy Knapik

**DNR Staff:** Lt. Dave Shaw (Law Enforcement Div.), Jared Duquette (Wildlife Div. Chief), Lt. Todd Szyska (Law Enforcement Div.)

**Other:** Dr. David Luukkonen, Michigan State University

## **Housekeeping:**

- Meeting rules and helpful measures (D. Avers)
- Introduction to MS Teams Live (J. Heise)

**Roll call and introductions:** 20 CWAC members present (2 were late to the meeting due to technical difficulties), 15 needed to pass motions

Approval of February 2020 CWAC meeting minutes

**Motion** to accept minutes (D. Villwock), 2<sup>nd</sup> (D. King). **Vote:** 18 for, 0 against. Motion passes.

**Discussion:** Lt. Dave Shaw: noted there was not a CO recruit school held in July 2020, as stated in the minutes, due to COVID-19 restrictions.

## **DNR Wildlife Division Update:** (Jared Duquette, Chief)

- Grew up in St. Charles, MI. Waterfowl hunter later in life, but grew up deer hunting and hunting other species. Former hunting heritage and R3 coordinator for the Illinois DNR.
- Vested interest in consumptive and non-consumptive wildlife recreation.
- Interest in working with EGLE and WLD to bolster our wetland restoration within Michigan for the benefit of waterfowl, waterfowl hunters, and other wetland-related recreationists.

### **DNR Law Enforcement Division (LED) Updates:** (Lt. Dave Shaw)

- 20% increase in RAP complaints in 2020, likely due to the increase in hunters and outdoor recreationists.
- LED have been in the field throughout the entire pandemic, but in-person meetings were stopped, and no out-of-state travel.
  - Motorboat issues at the early onset of pandemic restrictions
  - LED worked the Freedom March and President-elect Biden's visit to Belle Isle.
- Scaup season split bag limit update.
  - LED didn't have much of an issue with the split scaup regulation.
  - Hunters said scaup season timing seemed well suited when birds were around, at least for the South Zone.
  - 2012 to present, fall migration scaup numbers seem on downward trend.
- Lt. Todd Szyska:
  - Will be assuming the LED role on the CWAC committee in place of Lt. Shaw.
  - Lt. for District 9 (southeast Michigan).
  - Waterfowl hunter and waterfowl history enthusiast.
  - Instructor for Law Enforcement Recruitment Academy, valuable skills related to sea duck hunting and open water duck hunting.
  - Highlighted recent Canada goose over bag case in SE MI with baiting violations on private land.

### **Waterfowl Population Status and 2021-22 Season Frameworks:** (Barbara Avers)

#### Timeline:

- Recommendation memo to NRC January 19<sup>th</sup> 2021
- NRC meeting for information February 11<sup>th</sup> 2021
- NRC meeting for action March 11<sup>th</sup> 2021
- Season selections due to USFWS by April 30<sup>th</sup> 2021

#### Canada Goose Harvest Frameworks and Population Trends

\*\*We do not have estimates of Canada goose breeding population from 2020 due to the cancellation of breeding waterfowl survey due to COVID-19 restrictions

- Temperate nesting geese in flyway are above goal for several years through 2019 with upward trend
- Sub-arctic nesting population is more stable long term with variable with abundances among years (data through 2014)
- 2019 Canada Goose population estimates in Michigan, 240K breeding Canada geese. Estimate is currently above goal, but confidence interval overlaps upper goal limit which means that breeding Canada Geese are at or above goal.
  - 175,000-225,000 is goal range for breeding Canada geese in Michigan
  - Harvest of Canada geese in Michigan is on stable or slightly increasing trend
- Canada goose season framework
  - 107 days which is max allowed, Sept. 1-Dec. 15
  - 5 bird limit for entire 107 days was approved by USFWS for 2021-22 Canada goose season

- Season can be 4 segments
- Other dark geese framework remained unchanged from previous years and allows for concurrent goose seasons in Michigan
- Whitefront: 5 daily in aggregate with dark geese
- Brant: 1 daily, or included in aggregate goose bag
- Light geese framework remained unchanged from previous years and allows for concurrent goose seasons in Michigan
  - 20 bird daily

### Duck Harvest Frameworks and Population Trends

\*\*We do not have estimates of breeding duck population from 2020 due to cancellation of breeding waterfowl survey due to COVID-19 restrictions.

- Reviewed 2019 mid-continent and Michigan duck estimates.
- Adaptive Harvest Management (AHM)
  - Adopted by USFWS in 1995 as process of learning and predicting future population size through modeling and breeding waterfowl surveys
  - Determines framework for duck hunting
  - 2020 AHM approach without population and habitat estimates
    - Adjusted protocol based on model predicted conditions from available information (2019 observations)
    - Used updated time series models with available data to forecast 2020 conditions and populations based on large long-term dataset
      - Strong confidence in using models and data to fill gap in 2020 with no breeding waterfowl and habitat surveys in 2020
    - 2020 model input values based on forecasting and modeling predictions
      - 9.7 million mid-continent mallards
      - 3.40 million prairie Canada May ponds
  - 3 potential duck regulation packages based on AHM
  - Well within liberal season framework based on AHM modeling, same since AHM initiated.
    - 60 days
    - Saturday nearest September 24<sup>th</sup> (Sept. 25<sup>th</sup> 2021) to January 31<sup>st</sup>
    - Bag limits same as 2020
- 2021 Duck Framework
  - No change from 2020
  - Liberal season – 60 days, Sat. nearest Sep. 24 to Jan. 31
  - Duck bag: 6 total; 4 mallards (2 of which can be hens), 3 wood ducks, 2 redheads, 2/1 scaup (2 for 45 days and 1 for 15 days), 2 black ducks, 2 canvasback, 1 pintail
  - Seasons may be set by zone (north, middle, south) allowing one split in each zone
- Early Teal and Veterans and Active Military
  - No change from 2020

### Harvest, Migration, and Hunter Opinion Considerations

- Overall duck harvest and estimated number of duck hunters were very similar between 2018-19 and 2019-20.
  - Wood duck, long-tailed ducks, black duck, and wigeon harvest up
  - Stressed importance of wood ducks in hunters' bags
  - Mallard, bufflehead, green-winged teal, ring-necked duck harvest was slightly down
  - Scaup harvest remained about the same
- Average weekly duck harvest by hunting zone 2005-2015 (Data = USFWS parts collection survey)
  - Duck harvest highest at season opener, declines throughout season
- Average weekly mallard harvest by hunting zone 2005-2015 (Data = USFWS parts collection survey)
  - Mallard harvest generally higher at season opener with decline throughout season
- Average weekly wood duck harvest by hunting zone 2005-2015 (Data = USFWS parts collection survey)
  - Wood duck harvest declines after 2<sup>nd</sup> week in October
- Average duck harvest per hunter trip 2005-2019 for 7 managed waterfowl hunt areas
  - Some variation among areas, but general decline in ducks/hunter trip throughout season
- Average weekly duck harvest 2008-2019 for 7 managed waterfowl hunt areas
  - Weekly duck harvest is highest near season opener and there is a general decline
- Sea duck harvest (2016 and 2018 Waterfowl Harvest Survey)
  - Very crude estimates
  - Number of sea duck hunters is increasing, hunter effort stable with overwhelming majority only hunting 1-4 days
  - Harvest estimate similar between 2016 and 2018
  - Ducks per hunter is at daily bag limit
- 2006-2019 MWA Modeled Duck Abundance (MWA data)
  - Peak abundance for all ducks is 2<sup>nd</sup> or 3<sup>rd</sup> week of October
- 2006-2019 MWA Modeled Mallard Abundance (MWA data)
  - Peak abundance for mallard is 2<sup>nd</sup> or 3<sup>rd</sup> week of October, or slightly later.
  - Abundance trend for Allegan is different, ducks continue numbers build until end of calendar year
- 2006-2019 MWA Modeled Wood Duck Abundance (MWA data)
  - Peak abundance for wood duck is 1st week of October
- Blue-winged teal seasonal abundance data from Shiawassee National Wildlife Refuge
  - Teal abundance is highest in late August and early September
- Diving duck fall abundance estimates from southeastern Michigan 2010-2014
  - Diving duck abundance peak in 2<sup>nd</sup> week of November for Lake St. Clair and western Lake Erie
- Michigan waterfowl hunter satisfaction similar between 2016 and 2018.
  - Survey conducted every two years

S. Kritselis, Chair, ended the meeting session at 8:40PM

# **Citizens Waterfowl Advisory Committee Meeting**

1/09/2021

Virtual Meeting, Session 2, Microsoft Teams Live Event

Stathi Kritselis, Chair, called the meeting to order at 9:00AM

## **CWAC members (20):**

**Present:** Stathi Kritselis, Jeff Godi, Brad Quist, Jacob Cook, Steve Allaire, Mike Schutt, Ed Retherford, Trent Bellingar, Eric McGhee, Dale Borske, Dan Villwock, Dan King, Mike Dabrowski, Ryan Kuntze, Mike Zoli, Bob Johnson, John Huffman, Ken Martin, Chris Hillman

**Absent (no proxy):** Dan Cleary

**DNR Waterfowl Workgroup members (10):** Barbara Avers, Brad Johnson, Bruce Barlow, Nik Kalejs, Don Poppe, Jeremiah Heise, Terry McFadden, Don Avers, Zach Cooley, Randy Knapik

**DNR Staff:** Lt. Dave Shaw (Law Enforcement Div.), Sara Thompson (Wildlife Div.)

**Other:** David Luukkonen (Michigan State University)

## **Housekeeping:**

- Meeting rules and helpful measures (D. Avers)
- Roll Call
  - 19 CWAC members present, 15 needed to pass motions

## **Waterfowl Workgroup Discussion for 2021-22 Waterfowl Seasons Options**

- Early Teal
  - Option 1: Sept. 1 – 16 (Wed. – Thurs.)
    - Maximizes days
    - Captures teal migration
    - Maximum pressure on public areas
  - Option 2: Sept. 1-12 (Wed. – Sun.)
    - Reduces pressure on public areas
    - Participation fairly low later in season
    - Encompasses long holiday weekend and additional weekend
    - Gives a short break (5 days) until youth hunt (Sept. 18-19)
- Youth
  - Sept. 18-19 (3rd weekend in Sept.)
- Veterans and Active Military
  - Sept. 18-19 (3rd weekend in Sept.)
  - Concurrent with youth
  - Offers more opportunity statewide than Dec. days
  - Possibly high participation and pressure on ducks
  - Veterans and youth can hunt together

- North Zone Duck
  - Sept. 25 (Sat) – Nov. 21 (Sun) [58 days] and Nov. 27 (Sat) – Nov. 28 (Sun)
    - Includes Thanksgiving weekend
    - Consistent with 2020
  
- Middle Zone Duck
  - October 2 (Sat.) – Nov. 28 (Sun.) and Dec. 11 (Sat.) – Dec. 12 (Sun.)
    - Middle Zone now includes Saginaw Bay
    - Consistent with 2020
  
- South Zone Duck
  - Oct. 9 (Sat.) - Dec. 5 (Sun.) and Dec. 25 (Sat.)-Dec. 26 (Sun.)
    - Consistent with 2020
    - Christmas weekend may not allow for full participation
  - Oct. 9 (Sat.) - Dec. 5 (Sun.) and Dec. 26 (Sun.) – Dec. 27 (Mon.)
    - Take advantage of vacation days
  - Oct. 9 (Sat.) - Dec. 5 (Sun.) and Jan. 1 (Sat.) - Jan. 2 (Sun.)
    - Harsens Island refuge open on Jan. 2
  
- Duck daily bag:
  - Max allowed under federal framework
  - Duck bag: 6 total; 4 mallards (2 of which can be hens), 3 wood ducks, 2 redheads, 2/1 scaup (2 for 45 days and 1 for 15 days), 2 black ducks, 2 canvasback, 1 pintail
  - Scaup
    - Same structure as 2020 is recommended for 2021
      - North and Middle Zones: 2-bird limit first 45 days, 1-bird limit last 15 days
      - South Zone: 1-bird limit first 15 days, 2-bird limit last 45 days
      - Maximizes scaup harvest opportunity in each zone
  
- North Zone Goose
  - Sept. 1 – Dec. 16 [107 days] (5 daily limit)
- Middle Zone Goose
  - Sept. 1 - Dec. 16 [107 days] (5 daily limit)
    - Consistency
    - Continuous season captures all duck hunting days
  
- South Zone Goose
  - Sept. 1 – 30 [30 days]; Oct. 9 – Dec. 5 [58 days]; Dec. 26-27 [2 days]; and Jan. 22 (Sat.) – Feb. 7 (Mon.) [17 days] (5 daily limit)
    - Consistent with 2020
  - Sept. 1-30 [30 days]; Oct. 9-Dec. 5 [58 days]; Dec. 26-27 [2 days]; and Jan. 29 (Sat.) – Feb. 14 (Mon.) [17 days] (5 daily limit)
    - Maximizes days in February
  
- Allegan Goose
  - Sept. 1-30 [30 days]; Nov. 6-13 [8 days]; Nov. 25 – Dec. 5 [11 days]; Dec. 18 – Feb. 13 [58 days]

- Consistent with 2020
  - More February days desired
  - September days receive positive comments
  - Takes out most of firearm deer season
- Muskegon Goose
  - October 16 through December 23
    - Consistent with 2020
- Other geese:
  - Snow and Ross (light geese):
    - Same as Canada goose season dates in each zone and GMU
    - 20 daily limit
  - Dark geese (brant, white-fronted, and Canada):
    - Dark goose season dates that include Canada, Brant, White-fronted
    - Same as Canada goose season dates in each zone and GMU
    - The daily limit for dark geese is 5 only of which 1 can be a brant

### **CWAC Recommendations for Waterfowl Seasons:**

- Early Teal:
  - **Motion:** Sept. 1-12 (Wed.-Sun.) teal season (D. Borske), 2<sup>nd</sup> (D. King).
    - **Vote:** 3 for 16 against; **motion fails.**
  - **Motion:** Sept. 1-16 teal season (D. Villwock), 2<sup>nd</sup> (S. Allaire)
    - **Vote:** 19 for 0 against; **motion passes**
- Youth Hunt and Veterans and Active Military:
  - **Motion:** Youth hunt following Waterfowl Workgroup option (M. Zoli), 2<sup>nd</sup> (M. Schutt); Sept. 18-19 amended by M. Zoli to have motion be youth and veteran hunt concurrent on Sept. 18-19, 2021
    - **Vote:** 19 for 0 against; **motion passes.**
- North Zone Duck:
  - **Motion** to accept workgroup's option (S. Kritselis), 2<sup>nd</sup> (T. Bellingar); Sept. 25-Nov. 21 then Nov. 27-28
    - **Vote:** 19 for 0 against, **motion passes.**
- Middle Zone Duck:
  - **Motion** to accept workgroup option by (M. Dabrowski), 2<sup>nd</sup> (D. Borske); Oct. 2-Nov. 28 then Dec. 11-12
    - **Vote:** 19 for, 0 against; **motion passes**
- South Zone Duck:
  - Additional option discussed by CWAC members:
    - Oct. 9 (Sat.) - Dec. 5 (Sun.) and Dec. 18 (Sat.) – Dec. 19 (Sun.)
  - **Motion:** Oct. 9 (Sat.) - Dec. 5 (Sun.) and Jan. 1 (Sat.) - Jan. 2 (Sun.) (D. Villwock), 2<sup>nd</sup> (B. Johnson)
    - **Vote:** 15 for 4 against; **motion passes.**

- Duck Bag Limits:
  - CWAC preferred an option for scaup bag limits that had the Middle and South Zones with a 1-bird bag for the first 15 days and a 2-bird bag for the last 45 days. This was primarily because Saginaw Bay is now in the Middle Zone.
  - **Motion** to accept maximum bag limits allowed under Federal frameworks (duck bag: 6 total; 4 mallards (only 2 hen mallards), 3 wood ducks, 2 redheads, 2/1 scaup (2 for 45 days and 1 for 15 days), 2 black ducks, 2 canvasback, 1 pintail)
    - North Zone scaup first 45 days with 2 birds per day, then last 15 days with 1 bird per day; Middle and South Zone first 15 days with 1 bird per day, then last 45 days with 2 birds per day second
    - (D. King), 2<sup>nd</sup> (J. Godi).
    - **Vote:** 19 for 0 against; **motion passes.**
  
- North Zone Goose:
  - **Motion** for Sept. 1 - Dec. 16, (S. Kritselis), 2<sup>nd</sup> (T. Bellinger)
    - **Vote:** 19 for 0 against; **motion passes.**
  
- Middle Zone Goose:
  - **Motion** for Sept. 1 - Dec. 16 (M. Dabrowski), 2<sup>nd</sup> (D. Borske).
    - **Vote:** 19 for 0 against; **motion passes.**
  
- South Zone Goose:
  - **Motion** for Sept. 1-30 (30 days); Oct. 9-Dec. 5 (58 days); Jan. 1-2 (2 days); Jan. 29-Feb. 14 (17 days); (M. Zoli), 2<sup>nd</sup> (E. McGhee).
    - **Vote:** 10 for 9 against; **motion fails.**
  - **Motion** for Sept. 1-30 (30 days); Oct. 9-Dec. 5 (58 days); Jan. 1-2 (2 days); Jan. 22 - Feb. 7 (24 days); (M. Schutt), 2<sup>nd</sup> (B. Quist).
    - **Vote:** 13 for 6 against; **motion fails.**
  - Additional option discussed by CWAC members with more days in February.
  - **Motion** for Sept. 1-30 (30 days); Oct. 9-Dec. 5 (58 days); Jan. 1-9 (9 days); Feb. 5 - Feb. 14th (10 days); (K. Martin), 2<sup>nd</sup> (S. Allaire).
    - **Vote:** 19 for 0 against; **motion passes.**
  
- Allegan GMU:
  - **Motion** for workgroup Option: Sept. 1-30; Nov. 6-13; Nov. 25-Dec. 5; Dec. 18-Feb. 13 (C. Hillman), 2<sup>nd</sup> (B. Johnson).
    - **Vote:** 19 for 0 against; **motion passes.**
  
- Muskegon GMU:
  - **Motion** for workgroup Option 1: Oct. 16-Dec. 23 (C. Hillman) 2<sup>nd</sup> (D. King).
    - **Vote:** 19 for 0 against; **motion passes.**
  
- Other Geese:
  - Snow and Ross (light geese):
    - Same as Canada goose season dates in each zone and GMU
      - 20 daily limit
  - Dark geese (brant, white-fronted):
    - Same as Canada goose season dates in each zone and GMU
    - Daily aggregate limit is 5, only 1 can be a brant
  - **Motion** to adopt the workgroup option above: (M. Zoli), 2<sup>nd</sup> (C. Hillman)



- **Vote:** 19 for 0 against; **motion passes.**

B. Avers reminder that waterfowl regulations to NRC for information is February 11<sup>th</sup>, March 11<sup>th</sup> for action. CWAC representation to the February 11 NRC meeting will be Stathi Kritselis, Chair.

- Next CWAC meeting:
  - **Motion:** January 8<sup>th</sup> 2022 for next CWAC meeting (S. Kritselis), (S. Allaire 2<sup>nd</sup>)
    - **Vote:** 18 for 1 against; **motion passes.**
    - DNR will work on location

S. Kritselis, Chair, ended the meeting session at 12:23PM.

## **Citizens Waterfowl Advisory Committee Meeting**

1/09/2021

Virtual Meeting, Session 3, Microsoft Teams Live Event

Stathi Kritselis, Chair, called the meeting to order at 1:05PM

**CWAC members (20):** Stathi Kritselis, Jeff Godi, Brad Quist, Jacob Cook, Steve Allaire, Mike Schutt, Ed Retherford, Trent Bellinger, Eric McGhee, Dale Borske, Dan Villwock, Dan King, Mike Dabrowski, Dan Cleary, Ryan Kuntze, Mike Zoli, Bob Johnson, John Huffman, Ken Martin, Chris Hillman.

**DNR Waterfowl Workgroup members (10):** Barbara Avers, Brad Johnson, Bruce Barlow, Nik Kalejs, Don Poppe, Jeremiah Heise, Terry McFadden, Don Avers, Zach Cooley, Randy Knapik

**DNR Staff:** Lt. Dave Shaw (Law Enforcement Div.), Sara Thompson (Wildlife Div.)

**Other:** David Luukkonen (Michigan State University)

**Mississippi Flyway Update:** (B. Avers)

- Russ Mason has been the Mississippi Flyway Council (MFC) representative however new Wildlife Chief Jared Duquette will be transferring to that role over the next year.
  - Barb Avers is the Game Bird representative to MFC
  - Sherry MacKinnon is the non-game representative to MFC
  - Lt. David Shaw is Law Enforcement representative to MFC, but he will be transferring duties to Lt. Todd Szyska
- Three states (Alabama, Kentucky, Tennessee) in Mississippi Flyway (MF) currently hunting eastern population Sandhill Cranes
- MFC recommended to the USFWS to modify the MF Canada Goose Management Plan to include a liberal package in the US hunting season framework that consists of 107 days with a 5-bird daily limit
  - Tech Section conducted a 2020 MF Canada goose hunter survey to inform this recommendation
  - USFWS approved recommendation
- Highest priorities for Harvest Management Working Group:
  - Evaluation of Experimental two-tier license system
  - Northern Pintail AHM revision

- Reconsideration of North American Duck Harvest Management
- Development of an Eastern mallard harvest strategy
- Re-invigorating institutional support for AHM
- Minnesota will be initiating a 3-year experimental teal season to attempt establishment of a regular early teal season just as Michigan did several years ago
- MFC letter to Senators expressing support for Bird-Safe Buildings Act of 2019
- MFC letter expressing support of long-standing Migratory Bird Protection Act measures that prevent/penalize incidental take
- Most bird surveys canceled in 2020 due to COVID-19
- Creation of “Winter Distribution Working Group” in Flyway to examine large scale look at wintering duck distribution and influential factors
- USFWS issued Final Environmental Impact Statement on Double-crested Cormorants (DCCO) for comment
  - Take away: states may be able to continue some DCCO management in future under this EIS.

**Female mallard harvest, harvest rates, and survival, before and after changes in daily harvest limits:** (Dave Luukkonen, Michigan State University)

- About 15% of mid-continent mallards originate from the Great Lakes region.
- Harvest rates for mallards in the Great Lakes states were high when compared to other areas at institution of AHM
  - This caused states to look at Great Lakes mallards AND mid-continent mallards separately for last few decades
- Hunting does appear to be additive to mortality of mallards based on breadth of literature and research despite still having liberal seasons and frameworks since AHM inception
  - Impact or scope of additivity is on spectrum of impact to overall population
- Michigan, Minnesota, Ohio, and Wisconsin have had periods of being more restrictive in hen mallard bag limits in past
  - All states now currently back to 2 hen mallard bag limits (maximum allowed by USFWS)
- Study design was to compare Michigan mallard harvest and harvest rates before (2009-13) and after (2014-2018) 2-hen bag limits (data: Federal HIP)
- Study also incorporated banding data for Michigan ( $n = 20,108$  mallards banded 2009-2018)
  - Reporting probability is high and stable (78% of harvested banded birds are reported) based on band reward research
  - Mean mallard harvest increased about 24% after change from 1 hen in bag to 2 hens in bag
  - Mallard sex ratio in Michigan mallard harvest has declined 1965-2018, the allowance of 2 hens in bag slightly increased female to male ratio in bag limit, as expected
  - Survival of juvenile birds unchanged in recent years or by recent regulations. Adult survival (male and female) appears lower in recent years due to human mortality (hunting or otherwise) and/or increases in other mortality sources.
  - Looking at the relationship of harvest rate and survival
    - Slightly decreasing line for adult males, juvenile males, and adult females, but slope is very flat (i.e. close to straight line) – **no effect of harvest on survival rates**

- **Restricting daily limits beyond Federal regulation frameworks was not effective at reducing harvest rates of Michigan mallards (i.e. switch to 2 hen limit didn't have influence)**
- Great Lakes mallards are likely declining for reasons other than excessive harvest
  - Evidence does not suggest harvest is reason, or sole reason, for declining Michigan mallard populations

**Great Lakes Mallard research project update:** (Dave Luukkonen, Michigan State University)

- Project is collaborative effort between MI DNR, Ducks Unlimited, UMGL JV, MN DNR, Wisconsin DNR, Illinois Natural History Survey, Indiana DNR, Franklin College, Michigan State University, Illinois DNR.
- Great Lakes mallards have been declining as mid-continent population increased
- 2001-2007 Great Lakes water levels and breeding mallards (with 1-year time lag) were highly correlated
  - This relationship broke down 2008 moving forward through 2018 even though water levels are high once again.
- Research will try to determine factors influencing mallard trends
- Recent research in Atlantic Flyway has shown that game farm genetics are prevalent in Atlantic Flyway and are potentially infiltrating wild genetic stocks (i.e. wild mallard breeding with farm mallards and farm/wild hybrids)
  - Interested if this is happening in Michigan mallards as well
  - Research will also look at genetic purity of Michigan mallards and examine if mallards in urban areas are different genetically that those not in urban areas.
- Do mallards return to breed or establish territories in Michigan in successive years (i.e., are these really *Michigan* mallards or is it just a different mix of mid-continent mallards each year breeding in Michigan)?
- Objectives: 1) Document post-breeding movements and habitat use of mallards marked during spring (breeding birds) and another sample marked during pre-hunting season banding operations (August); 2) Estimate philopatry rates of adult and hatch-year female mallards to the Great Lakes states; 3) Estimate survival and productivity rates of breeding female mallards in relation to body condition, age, habitat use (including urban vs rural breeding birds) and genotype; and 4) Make recommendations regarding habitat and harvest management to recover mallards in the Great Lakes Region.
- Project was partially funded in May of 2020 for \$191,953 through GLFWRA, UMGL JV also added \$50,000 to project = \$241,953 to get project off of the ground. Still seeking funding.
- If groups want to contribute funds (e.g., sponsor a GPS transmitter on a mallard), contact Dr. Luukkonen.

**Sandhill Crane Hunting Season Discussion:**

- CWAC requested that the DNR schedule a discussion later to focus on sandhill cranes.

S. Kritselis wanted to recognize Lt. David Shaw and CWAC member Bob Johnson for the help and assistance with the committee through the years.

S. Kritselis, Chair, moved to close the meeting at 3:24PM.