

Williamsburg Bird Club

February 21, 2024

Hybrid meeting; conducted in-person at Quarterpath Rec Center, Room 2, 202 Quarterpath Rd, Williamsburg and via Zoom hosted by Ann Carpenter, at 7pm

Attendance: 20 in person; 49 via Zoom

President's Remarks: President Nancy greeted everyone present and on Zoom. She reported that there would be a brief business meeting at the end of the presentation followed by a raffle and refreshments which she hoped would encourage folks on Zoom to come in person at future meetings.

Program: Patty Maloney, Vice President, Programs, introduced tonight's speaker. No one knows more about Bald Eagles than Dr Bryan Watts and we were privileged to his presentation of '*Eagles of the Chesapeake*' at our February meeting. Dr Watts, Director of the Center for Conservation Biology and Mitchell A Byrd Research Professor at W&M, noted the importance of bird clubs as he'd started studying birds as a youngster in W Virginia where he was mentored by the local bird club. He reported that the Center for Conservation Biology has studied many bird species from Argentina to the high Arctic but there are about 100 species that the Center has had a multi-decade commitment to; one of those being Bald Eagles in the Chesapeake Bay area, whom they've monitored for over 60 years. The Chesapeake Bay is one of the world's largest and most unique estuaries. It has a shoreline of 19,000 km (11807 miles) and average depth of 6 m (20 ft). That shallow water allows light to penetrate to the bottom creating a highly productive habitat attractive to many forms of life, and creating a convergence area for breeding, migrating, and wintering birds.

Bald Eagles depend on large bodies of water and are the only species of the family of sea eagles in NA, with none found in Central and SA. They are large birds with the females weighing typically 10 -12 lbs. and males 8-10 lbs. They build huge automobile-size nests starting with a platform of large dead limbs in the broad crowns of big trees near water. The availability of large trees was a limiting factor in the 1960-70's due to Virginia having been largely cleared of trees needed for wood by armies during the Civil War. Now, more secondary tree growth has become large enough to host them. In Dec and Jan, eagles collect soft material, like grass, to line the nest and create a raised cup to hold 1-3 eggs. Incubation time is about 36 days. The hatchlings can't maintain their own temperature until over 15 days old. At 8 weeks old, they reach full size and their legs become strong enough to hold them upright. The next 4 weeks in the nest allows for neural development and coordination, resulting in first efforts to fly. Dr. Watts described the change in plumage from year to year until they sport the white hood and clear yellow bill and eye iris at age 5, which marks the beginning of their breeding age. There's a steep learning curve to learn how to hunt and protect their breeding territory, and the older more experienced eagles are the most effective parents. The female typically stays to care for the chicks while the male does most of the hunting. 94% of the brood's diet is fish. They also like aquatic turtles, esp. the musk (stinkpot) turtle that can't completely close its shell. They eat a variety of different mammals, but the preferred one is the muskrat. They also catch waterfowl and gulls.

The DDT era of the 1960's saw eagles plummet to 60 – 80 pairs in the entire Chesapeake Bay area and 20 -30 pairs in Virginia's part of the bay. There were none on the James River for 5 years until a breeding pair arrived in 1979. Most of this data was collected via aerial surveys starting in 1962. These Virginia surveys were the first aerial surveys in NA. In 1977, Dr. Mitchell Byrd took over that survey, and Dr. Watts joined him in 1991. They flew 150 hours each spring (first to map where the active nests were,

and later to count the number of chicks), with Dr Byrd flying until he was 91. They documented that the Bald Eagle recovery began around 1980 when fledglings exceeded adult mortality, and by mid-1980's, barely 20 years after the DDT era, they'd nearly reached pre-DDT numbers. From then, their population grew by 8-12% per year, and in 2007, Bald Eagles were removed from the endangered species list. In the late 1990's – early 2000's, it was noted that the eagles had no problem cohabitating with humans with the fastest growing population now in residential areas. Today, Bald Eagles have far exceeded the recovery goal with more than 3,000 breeding pairs in the entire bay area.

The Center's current focus of study is why the population has been declining since the population peaked in 2000. They've found that there are 40,000 juveniles of breeding age outnumbering the 3,000 breeding pairs. There are not enough suitable nesting sites to accommodate them, and the juveniles are harassing the breeders. Prior to late 1990's, the male spent 36% of the time guarding the nest during the first 4 weeks of the hatchlings' lives but now spends 70% with much less time to hunt. Dr Watts pointed out that the brood size reflects the availability of food. If food is plentiful, the chicks are evenly fed. Otherwise, a dominance hierarchy forms with the alpha chick getting most of the food to insure that at least one survives. Due to the male not being able to provide enough food, the average brood size has dropped from two to one. This will eventually bring the population into balance with the available nesting sites.

Also, some of these breeding-age juveniles are successfully starting to colonize further afield in the Mid-Atlantic to NC, WV, PA, and western VA. The food supply limits the density of Bald Eagles in those areas but they are managing.

Currently, there is great concern about new contaminants, esp. pharmaceuticals like hormones that we take and that can't be filtered by our sewage plants, ending up in the rivers and bay, and effecting Bald Eagle reproduction. Lead poisoning from ingesting ammunition remnants in deer carcass is a leading cause of mortality of adults. Despite the successful return of Bald Eagles, we need to remain vigilant.

Announcements:

Bird Walks – Scott Hemler:

- **Saturday, February 24:** Scott will lead the 4th Saturday bird walk at NQP. Meet in the parking lot at 8 am.

Field Trips – George Martin, Field Trip Coordinator:

- **Saturday, March 16th:** Deborah Humphries will lead a field trip at Machicomoco State Park. We will meet at the parking lot inside the pay station. There will be no car pools organized.
- **Saturday, April 20th:** A field trip is being organized to Newport News Park. More details to come.

The Flyer: Nancy announced for Mary Ellen Hodges that the deadline for submissions is Feb 26th and that there still is space for photos and articles, including the recent Great Backyard Bird Count experiences.

Programs – Patty Maloney, Vice President (Programs): Patty announced the following hybrid programs to be held at Quarterpath Rec Center:

- **March 20th:** Dan Cristol presenting *How Does the Superfund Law Protect Birds?*
- **April 17th:** Ornithology Research Grant grad student reports on their research.

- **May 15th:** Nancy Barnhart will deliver a presentation about her recent birding in India

Membership Dues: Nancy reminded folks that dues are due and can be renewed online.

Purple Martin Program – Cheryl Jacobson, Conservation Committee: Cheryl reported that martins, traveling at 200 miles/day have arrived in N.C. They slow down when they reach a point where insects are scarce and wait for it to warm-up further north. Locally, we expect scouts around the first week of April. She has enough monitors ready for all the gourds our club hosts at 5 different sites. Last year, 130 babies fledged. All 23 gourds were successfully used at Chickahominy Riverfront Park. An extension of 7 more gourds has been added. There is concern that there has been major landscape changes around the gourd site with many trees removed and dirt piled six feet high in the area.

New Members: About 5 new members were in attendance. We took turns introducing ourselves.

College Creek Hawk Watch: Nancy reported that the watch officially starts March 1st through the end of May. It is held at the pullout that sports the orientation map on the Jamestown Colonial Parkway. The site looks southward toward Hog Island. Someone is usually there from about 9am to 1pm and they all welcome visitors joining them.

End of the meeting: A free raffle was held, and refreshments, organized by Catherine Flanagan, were offered.

Nancy Barnhart adjourned the meeting at 8:30 pm

Respectfully submitted,
Cathy Millar, Secretary Williamsburg Bird Club
February 25, 2024