

Williamsburg Bird Club

Wednesday, November 15, 2017

Integrated Science Center, W&M, 7:00 pm

Attendance: 57

President's Remarks: President Bill Williams opened the meeting and greeted the assembly thanking everyone for their understanding and patience as we were all had to move at the last minute from Andrews Hall to Integrated Science Center due to double booking. He thanked Dan Cristol for helping us to so quickly relocate. He shared the exciting news that the Western Tanager that has spent the last 9 winters in his yard returned on Tuesday, November 7th and has been there every day since! At the very least he was hatched in 2008 and the known longevity record for this species is 6-7 years.

Program: Cheryl Jacobson, VP and Program Chairperson, introduced tonight's speaker Dr. Bryan Watts, Director of the Center for Conservation Biology of the College of William and Mary and the Virginia Commonwealth University, has been interested in birds since he was a young child. He is the author of more than 250 publications on avian ecology and conservation and has conducted more than 500 research projects focused on solving conservation issues primarily in the Mid-Atlantic. Tonight's presentation to our bird club will be his 6th.

Noting the title, *Hitting the Waterbird Lottery*, Dr. Watts declared that we have entered a golden age in the last 20 years where the population of many waterbirds has reached high levels not seen in a couple hundred years.

He noted that much of the data in his presentation was collected from annual flight observations made over 25-30 years with Mitchell Byrd and pilot, Captain Fuzzzio. Dr. Watts reported on the recovery from DDT (banned in 1972) of the Bald Eagle, Osprey and Great Blue Heron, who are the three big fish eaters in the Chesapeake Bay. The Center for Conservation Biology has been conducting much longer term monitoring of the recovery of these birds than other groups that stopped in the 1990s, which has yielded surprising results in the last 10 to 20 years.

Establishing a background for these studies, he explained that the Chesapeake Bay's rich productivity is largely due to its long shoreline and the bay containing approximately 600,000 acres of shallow water where sunlight can reach the bottom creating underwater gardens that support sea life key to sustaining these waterbirds. It wasn't until around the 1960s, when as a culture we became more aware of other species, that we began to recognize the importance of the bay's fisheries to other consumers rather than ourselves. He also described the importance of salinity distribution in the bay and its tributaries. The salinity gradient along the James River is incredibly steep because the fresh water inputs are within 100 miles of the salt water input. As a result, the James is a fantastic place to study these species.

We were shown graphs of the recovery of the Bald Eagles in the Virginia portion of the Chesapeake Bay starting just before the ban of DDT when the population was at the lowest point with little over 20 pairs of Bald Eagles. Maintenance levels wherein there are a correct number of chicks to offset adult mortality were reached in 1980. The population has grown exponentially since and has exceeded all expectations with well over 1,000 pairs recorded in 2016.

The Osprey had reached a low of 1400 pair in the early 1970s and had more than doubled by the mid-1990s. In early 1970s, there were no Osprey or Bald Eagles on the James River. It is believed that the current population is in the 10 – 12,000 range with most of the growth in the lower salinity waters of the tributaries.

The Great Blue Heron also reached a low in the early 1970s when the only active colony Dr. Watts could find was on the James River at Powhatan Creek where the colony is still active. Over the next 20 years the Great Blue Heron population exploded with an average doubling time of 3 ½ years. Surveys of the Great Blues have been done every 10 years since the 1970s.

Graphs showed an estimate of how many fish are being taken annually from the bay by these three species. At a total of 15 metric tons of fish, it is only a fraction of what is taken commercially of menhaden alone. So the increase in population of these birds has had no significant impact on the fisheries.

Dr. Watts proceeded to review findings made since the population of the three species reached saturation. One was that Bald Eagles are not sensitive to human disturbance as was assumed until the mid- 1990s. Now they can even be viewed as ‘yard’ birds, as the fastest growing population of Bald Eagles is in suburban and urban areas. In 2016 there were 263 pairs along the James River. Since 2000 the saturation population of eagles has led to huge numbers of breeding age birds who don’t have territories to settle in. This leads to fights between eagles and combats are becoming the leading cause of injuries and mortality. Another consequence is that male Bald Eagles are now spending much more time guarding the female and brood than hunting for fish to feed the youngsters, which results in reduction of successful productivity of chicks. This is expected to continue leading to an eventual balance. Interest in these behavioral interactions is the prime reason that population surveys are being continued.

Eagle expansion has started to impact other species. In the last 20 years, there has been a decrease in the number of Great Blue Herons but a substantial increase in the number of colonies, resulting in the average colony size dropping by half since 1993. In 1993 there were 9,514 pairs in 145 colonies averaging 67 pairs per colony. In 2013 there were 7,800 pairs in 258 colonies with average of 30 pairs per colony. Since 1993, there has been an increase in number of Bald Eagles nesting in Great Blue Heron colonies. Over the next few years, as many 300 heron colonies that had been colonized by eagles were abandoned. It is thought that the large colonies of Great Blue Herons are splintering to smaller colonies to avoid the eagle predation.

Dr. Watts ended his discussion by his observation of changes of salinity in the bay. Eagle breeding density is higher in waters that are less than one part per thousand salinity. Great Blue Heron and Osprey density is also higher in the lower salinity waters. 70% of the fish consumption by these 3 species is focused in these low salinity tidal fresh sections of the tributaries implying that these areas are of tremendous conservation value to their populations. There is concern that sea level rise is reducing the size of the lower salinity waters. A great deal more research is needed.

Dr. Watts concluded by emphasizing the true value of long term monitoring, giving the example of how it has shown these behavioral changes over time. He noted that ecology shifts with the context, and the context is shifting all the time, which make these surveys so important.

Announcements:

- Bill noted that it was time for our annual election for the Williamsburg Bird Club Board of Directors for 2018. Nancy Barnhart, Jeanette Navia and Sue Mutell were the members of the Nominating Committee. Nancy read the following proposed slate for 2018:
 - President - Cheryl Jacobson
 - Vice-President, Programs – Judy Jones
 - Vice-President, Editor of *The Flyer* – Melinda Cousins
 - Secretary – Cathy Millar
 - Treasurer – Ann Carpenter
 - Past President - Bill Williams
 - Members at Large – Gary Carpenter, Shirley Devan

There were no nominations from the floor. A motion was made that this slate of officers be approved. The motion was seconded. The slate was unanimously elected by the members without further discussion.

- Bill recognized Cindy Baker who was just elected Newsletter Editor for the Virginia Society of Ornithology.
- Bill announced that the last 2017 Board of Directors meeting will be held on November 27th and invited the membership to submit to him or Cheryl any concerns/ideas they'd like considered at the meeting in the interim. He stressed that the board is always interested in what the membership feels that the club should be doing.

Field Trips: Shirley Devan, Field Trip Coordinator, was absent. Nancy Barnhart reported on the upcoming field trip:

- **Sunday, November 19:** Hog Island Wildlife Management Area in Surry. Carpooling and leaving no later than 7:00am from Old Colony Square on Richmond Rd. to catch the 7:30 ferry. To facilitate passing through security at the Surry Nuclear Power Station, Nancy will be collecting via email the names and driver's licenses of attendees ahead of time. Drivers are also requested to submit the model, make, year and color of the vehicle.

Programs: Cheryl Jacobson, VP and Program Chairperson, reported on the following upcoming meeting programs in 2018:

- **Wednesday, January 17:** Matt Anthony will talk about warblers, esp. the Kirtland's Warbler, of the Magee Marsh situated on the southern shore of Lake Erie in Ohio.
- **Wednesday, February 21:** Our annual joint meeting with the Master Naturalists will feature birds from Busch Gardens.

Christmas Bird Count: Jim Corliss, Bird Count Chairperson, reminded us of the Christmas Bird Count on Sunday, December 17th. He encouraged new folks to participate. The goal is for at least 100 participants. Bill added that the Christmas Bird Count is protocol driven and provides an opportunity for us to contribute toward collecting a valuable body of data for determining avian trends. The CBC was started in 1900 and this will be our club's 41st year of participating.

At the end of the meeting a free raffle was held.

Bill adjourned the meeting at 8:15 pm.

Refreshments were provided by Christina Clarke and Jeanne Millin.

Respectfully submitted,
Cathy Millar, Secretary Williamsburg Bird Club
November 17, 2017