

Williamsburg Bird Club
January 15, 2025

Hybrid meeting conducted in person at Quarterpath Rec Center, Room 2, Quarterpath Rd, Williamsburg
and via Zoom hosted by Ann Carpenter at 6:30 pm

Attendance: 48 in person; 47 via Zoom.

President's Remarks: President Nancy Barnhart welcomed everyone present and online at our annual joint meeting with the Historic Rivers Chapter of the Virginia Master Naturalists. She announced that there would be a brief period of announcements by both club presidents after the presentation. Nancy invited HRC members to participate in any of our club activities and to join our membership.

Program: Shirley Devan introduced our January speaker: the faculty director for the W&M Institute for Integrated Conservation and Professor of Biology, Dr. John Swaddle. He is trained in behavioral and sensory ecology and studies human/wildlife coexistence and how we can solve environmental problems in ways that are good for both wildlife and people. He has received 28 million dollars in external funding for his research.

Dr Swaddle first described to us the concept of One Health being the integration of human, environmental, and animal health. There is a lot of evidence to show there are genuine health benefits from interacting with nature. Human health is influenced by the quality or lack of quality of our environment. To illustrate this, he reported on a research project that he participated in that showed the blood of house sparrows accurately predicts the exposure risk for people, esp. children, living in the same area. This is important because lead is a toxic, 'forever' heavy metal that can cause permanent neurological development problems in children. The research was focused in Broken Hill in New South Wales where for many years, significant amounts of lead have been released into the environment via lead ore extraction, processing, and transport. House sparrows were chosen for the study because they hang around humans and are faithful to location within a few hundred meters. They also forage on the ground and take dust baths making their exposure to lead similar to that of children playing on the ground. Over 30 years, blood samples were taken from house sparrows throughout Broken Hill and compared with those of children. The results showed an almost 1:1 match. Plus, the blood levels in both subjects decreased at the same rate in additional samples collected further from the mining site. Children were delighted that by using sparrows for blood samples meant that they were now being stuck with needles less often.

Then, researchers collected blood samples from sparrows in Mount Isa, Queensland, a location with lead contamination levels similar to those in Broken Hill. This time, they used the patterns discovered in Broken Hill to successfully predict the blood lead levels in Mount Isa, later confirmed by data from the child blood lead monitoring program.

Dr Swaddle commented that the results of this research demonstrated the strength of connections between wildlife and people. Living things inhabiting the same area are intimately linked and are going to be exposed to the same risks. Researchers can use wildlife as sentinels for all kinds of toxins and organisms causing human diseases. Pigeons have been used as a sentinel of lead toxicity in NYC.

He noted that Covid 19 is an example of a disease that crossed over from wildlife to humans. Currently, Avian Flu (H5N1) is being monitored for flu particles in the environment, wild and domestic animals, and humans. It has spread rapidly in the last several months to all 50 states. Public risk remains low because it has infected mostly livestock and other mammals; esp. wild birds and poultry. But, to date, there have been 66 confirmed cases in humans and 1 death. Among wild birds, it's been seen mostly in large birds like pelicans, vultures, and waterfowl but also being found in songbirds. The viral

particles shed in droppings from these birds can infect cattle and humans. Close to a thousand herds in the US have been infected. All cats: feral, pet, and big cats in zoos and in the wild, are also susceptible to avian flu. He stressed that with Covid, we got concerned too late, but with avian flu, we are at the beginning where we can minimize the risk of avian flu becoming a big problem.

His recommendations were as follows:

- Use current available technology to minimize interactions between wild birds and cattle.
- Encourage elected officials to support farming communities to help implement bird control and prevent a big crossover point.
- Keep cats indoors. Avian flu kills cats (to date, not dogs). Cuddling with an infected cat that has come in contact with an infected bird can be a public health human crossover point.
- Use gloves and masks when cleaning bird feeders to prevent contact with and inhaling viral particles in fecal matter.
- Build a groundswell of public understanding about contact points via public/social media, etc.

Dr. Swaddle concluded by returning to W&M's Integrated Solutions program of the Institute of Integrated Conservation (IIC). To limit the biodiversity crisis we are in, people have to and should interact with nature, but in a way that protects nature and lets nature survive. Solutions should not threaten job opportunities or economic development. It should be led by local communities, so that whatever happens is because they want it to happen and not because they were dictated to by conservation groups who don't consider the local culture. Dr. Swaddle emphasized that ecosystems are the life support system of ALL life on Earth. With decreasing biodiversity, ecosystems collapse, and then, so do we. More than half of global GDP is directly dependent on nature. With increasing or stable biodiversity, life and society can flourish. To do this, IIC is working with communities around the world to co-create solutions that work for people and the planet. The program is only 4 years old, and IIC already has built a network of 100 partners on many continents doing conservation from the communities' point of view. IIC is nurturing and growing conservation talent in those communities, as well as here, at W&M, within the student body. IIC has the first in the world undergraduate major/minor in integrated conservation that is now being copied by other institutions. W&M students have worked in Mexico, Mongolia, Honduras, Philippines, Nepal, Kenya, and South Africa on solutions with their students and professionals. The program brings people here from around the world to learn and spread the word. Maasai warriors were at W&M last summer learning about community-led conservation. A lot of life-changing information is learned from each other and more impactful than sitting in a classroom. Most of IIC's Kenyan partners are forming conglomerates of land conservancies that encompass 25 % of Kenya, and take the power away from the government and put it in the hands of local communities. He invited us to participate by signing up for IIC's email listserv at www.wm.edu/iic that shares ongoing programs as well as opportunities for volunteers like us. He welcomed folks suggesting partnerships and projects, and to help to sponsor a conservation student.

Announcements:

WBC Field Trip: Nancy reported on following field trips:

Saturday, January 18, to Dutch Gap. We'll meet in the parking lot of Henricus Historical Park at 9:00 a.m. Rose Ryan will lead.

Saturday, February 15, Colonial Parkway /Yorktown. Rexanne Bruno will lead.

Next WBC Membership Meeting: Nancy reported the following:

Wednesday, February 19. Presentation by Bill Williams who will talk about the recently published Birds of Virginia's Colonial Historic Triangle, an Annotated Checklist (Second Edition).

The Flyer: Nancy reported that Mary Ellen Hodges (Editor) has set a deadline of Monday, January 27th for submissions to the February newsletter.

Bird Counts: Shirley announced the following:

Sunday, April 27: Spring Bird Count: Shirley reported that most of the same CBC rules and sectors and field teams/feeder watchers applied to the spring count. Ony difference is that there is no keeping track of time or distance spent. She invited everyone to participate.

Shirley thanked all the Christmas Bird Count volunteers and reported that, including feeder watchers, there were 132 participants. Tentatively, 110 species were reported with 4 rarities. Nancy added that she photographed one of the rarities: a mystery hummingbird (probably Rufous) that has been and is still here since Dec. 14th. She brought the homeowner a heated hummingbird feeder. There are plans to band the bird but not while it is so cold.

Historic Rivers Chapter Report: President Janet Harper reminded the members of the Martin Luther Day of Service held on the same day. There will be trash pickup at four sites. Janet shared further details.

End of Meeting: A free raffle was held and refreshment organized by Bill William's family were offered.

Nancy Barnhart adjourned the meeting at 7:51 pm

Respectfully submitted,
Cathy Millar, Secretary Williamsburg Bird Club