Minutes of Williamsburg Bird Club Meeting Wednesday, October 19, 2022 In person at Williamsburg Regional Library Auditorium <u>and</u> by Zoom 6:00 pm

Patty Maloney, VP Programs, opened the meeting and welcomed people who were attending in the Library Theater and those who were attending by Zoom.

- 15 people in Library Theater in person
- 32 people joined in by Zoom

Patty Maloney showed photo of Bird Club members in Mexico: Cindy Hamilton, Nancy Barnhart, Sue Mutell, Bill Williams, Shirley Devan and related the observation of 100,000 Swainson's Hawks migrating in Mexico.

Patty introduced Dr. Shawn Dash, Associate Professor in Department of Biological Sciences at Hampton University.

"Natural History of Halloween"

Spooky Outline:

- Halloween-esque = colors
 - o King Vulture
 - Orange Assassin Bug
 - o Royal Walnut Moth. Caterpillar is Hickory Horn Devil
 - Hooded Pitohut a poisonous bird in New Guinea
- Halloween-esque = biology

What do you expect to find in the darkness?

- Eyeshine
 - White-tailed deer white eye shine
 - Raccoon yellow
 - Screech Owls Red
 - Domestic Cat green
 - Virginia Opossum Orange
 - Coyote yellow green

Nocturnal birds

- Owls large % of skull occupied by eyes numerous and high density of rods
- Also, acute hearing

Fun facts:

- Bats use echolocation; hibernating now
- Moths have evolved ears to hear the bats and click to jam echolocation of bats
- Bats have parasites too. Bat fly lives on the bat and drinks the blood of the bat

Another image of Halloween is that of ravens and crows

CORVIDS OF THE UNITED STATES

- What are Corvids large birds, thick, well-developed bills, intelligent birds
 - Has pest problems
 - o Can manipulate their bills because of their intelligence
- Name that Corvid photos shown:
 - Blue Jay Green Jay Magpie Canada Jay Black-throated Magpie Jay Raven Mexican Jay

North American Species – species most diverse in western US Jays – 10 species Ravens – 2 species Magpies – 2 species Crows – 2 species Clark's Nutcracker – 1 species

Very adaptable birds – much research on crows in urban environments

Crows in Culture:

- Van Gogh painting shows crows
- Alexander the Great some think Ravens with West Nile Virus may have impacted his death
- Halloween scare crows and bird effigies in some places used to scare crows away. But birds habituate to the static images and moving images
- WINE: birds on wine labels. Crows are a common image and theme on wine labels
- Must Read books: Easiest to digest: "Mind of the Raven" and "Ravens in Winter" by Bernd Heinrich

Some would argue that Corvids are the most human-like Birds. Because of this, they have infiltrated our culture for hundreds if not thousands of years.

- Many First Nations peoples have corvids at the center of their creation stories.
- Also, Aesop's fables
- Odin in historic Norse uses Ravens to carry out tasks such as communication
- Plague Classic plague doctor image is thought to be a crow

Reason we tie Corvids to human history:

- Observations on birds' intelligence
 - Mimics plus language
- Vocal repertoire
- Social interactions
- Size
- Adaptability
- Urbanization of crows deep-seated

LIFE HISTORY TRAITS: Intelligence – where does it come from

- Communication
- Foraging
- Social interactions
- Mate finding
- Offspring "cultural transmission" extended care for young to teach skills
- Competition
- Predator avoidance
- Problem-solving
- Disease avoidance
- Thermoregulation
- Pair bonding

Nature vs Nurture – are they clever because they spontaneously learn to be clever or is there some deep-seated genetic basis for their behavior?

Cognitive Evolution – Is intelligence special? Some ethnologists argue intelligence is a basic evolutionary outcome of niches

- Unique abilities
- Problem solving
- Mental plasticity
- Cultural transmission
- Adaptation to the novel

Intelligence in Corvids – what drives cognitive abilities. A few ideas have been suggested:

- Food
- Social Structure
- Parenting extended parental investment
- Brain structure (neocortex in mammals) corvids don't have this

Bird Brains: The cognitive abilities of birds are increasingly appreciated as more complex than presumed:

- Pigeons can memorize more than 725 visual patterns
- Tool-making behavior of New Caledonian crows confronted with a task that required a curved tool
- Tool use, episodic-like memory, and the ability to use one' experience to predict conspecific behavior = intelligence?

Food Driving Thought

- Trial and error learning: animal learns to associate one of its own behaviors with a reward or punishment
- Insight, reasoning manipulating concepts in the mind to arrive at adaptive behavior, mental trial-and-error internal memory stores are used as additional sensory/information source
- Corvids can learn by watching other corvids succeed or fail
- Cache stored food
- Episodic memory memory of a specific object, place, and time. Spacial memory is associated with Hippocampus (like parrots and tits)
- Larder-hoarding a few large caches which it often defends Acorn Woodpecker
- Scatter-hoarding creates multiple caches often with each individual food item stored in a unique place. Blue Jays and crows
- Example: Clark Nutcrackers cache 32,000 Whitebark Pine per individual
- Recovery preference of jays when other jays are around, they will not store food
 Scrub jays remember "when" food items are stored

Self-recognition – "mark test"

Magpies, crows, jays can recognize their reflections

Teamwork makes the dream world – Scrub Jays are a good example of cooperation among corvids

- Appear when environmental constraints present: unpredictability of resources, high competition for resources, limited open territories, low quality habitats, shortage of mates
- Cooperative breeding may be primarily a means which young adults put off the start of their own breeding to maximize reproductive output
- Two types of cooperative arrangement:

- Helpers at the nest: mature nonbreeders help protect and rear young but are not parents of offspring
- Degrees of shared parentage of offspring
 - Florida Scrub-Jay, Mexican Jay, Groove-billed Ani, and Acorn Woodpeckers are common North American examples

Photo examples of corvids:

- Canada Jays steal food; sensitive to warming temperatures because where they store food
- Pinyon Jay cache pine nuts
- Green Jays use tools to get to insects under bark
- Stellar Jay
- Blue Jay
- California Scrub-Jay eat ticks and mites from mule deer
- Island Scrub-Jay found only on Santa Cruz Island, part of Channel Islands off coast of southern California; not have cooperative care seen in other jays
- Yellow-billed Magpies
- Clark's Nutcracker
- Common Raven

How to tell a Raven from a Crow

Common Raven

- Long, fancy throat feathers
- Wedge-shaped tail
- Croaks
- Regularly barrel rolls in flight

American Crow

- Smooth throat feathers
- Fan-shaped tail
- Caws
- Less regularly barrel rolls

61 slides

No questions for Dr. Dash from the people in the library.

Comments from chat box on Zoom:

- 00:56:38 Barbara Creel: Always love Dr. Dash's presentations.
- 01:35:25 Rich Decker: Thank you!
- 01:35:34 Barbara Creel: Thank you!
- 01:35:45 Jeanette & Keith Navia: Really interesting! Great talk, great facts
- 01:35:46 Rich Decker: It was wonderful!
- 01:36:07 Lois Bridger: Thank you, wonderful talk.

After Dr. Dash's presentation, Patty Maloney conducted a short business meeting:

- Patty related a few of the highlights of the Club's field trip to the Eastern Shore October 15. Thirteen people participated. The group stopped at the pull-off just north of the bridge tunnel, then visited the Eastern Shore of Virginia National Wildlife Refuge before heading to Kiptopeke State Park where raptors did not disappoint. The group tallied nine species of warblers and a Blackpoll Warbler with a beak deformity at the park. They had a total of 74 species for the day.
- November 19 field trip will go to Grandview Nature Preserve in Hampton. Nancy Barnhart will be the leader. Plan to meet the group at the entrance to the Preserve at 8 am.
- Scott Hemler will lead the Bird Walk at New Quarter Park this Saturday, October 22 at 8 am.
- Newsletter editor Mary Ellen Hodges reminds all that the deadline for the November issue of the Bird Club newsletter is Wednesday, October 26.
- Still time to register for Project Feederwatch starting in November. Fee is \$18

Cathy Millar described a research project underway by a W&M Grad Student Joey Liberto who is trapping House Sparrows at her property in Williamsburg. Joey is looking for additional locations in the area where he can use mist nets to catch House Sparrows. Please contact Cathy Millar who can pass info along to Joey.

Patty announced that Nature Camp Scholarship Applications are on the Bird Club web site. Scholarships are available for students grades 5 - 12. Please pass the word along to students who might be interested in a scholarship to Nature Camp and encourage them to apply. Applications are due October 31 for 2023 camp sessions.

Minutes prepared October 30, 2022, and revised November 11, 2022, by Shirley Devan from recordings of the Zoom presentation.