

The Osprey

Newsletter of the Southern Maryland Audubon Society

President's Perch



Northern Cardinal fledgling
Photo by Scott Clark

In This Issue

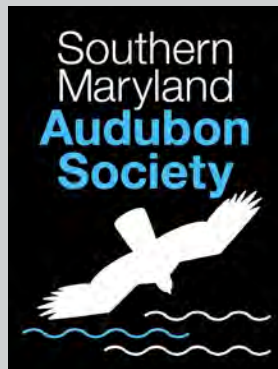
**Hummingbirds Navigate an
Ultraviolet World
We Never See**

**Singing In A Silent Spring: Birds
Respond To A Half-Century
Soundscape Reversion During
The COVID-19 Shutdown**

121st Christmas Bird Count

Massive Bird Die-Off In The West

**Western Yellow-billed Cuckoo
Remains Federally Protected
after Delisting Threat Falls Flat**



<http://somdaudubon.org/>

During this month of gratitude, Southern Maryland Audubon Society is thankful for every one of you, our members and friends who share a love for birds. Thank you especially for standing by SMAS during this challenging time. Thank goodness, also, for nature's comforts.

Already Autumn has assumed her full splendor: golden leaves are falling and migration is, as I write, still unfolding. A hummingbird just visited my salvia and cardinal vines---a full two weeks after the residents departed. What a delightful surprise! Her arrival reminds us to keep hummingbird feeders replenished and clean through at least October, some say even until Thanksgiving! Their travels are long and arduous, so every bit of nectar along the route helps. Similarly, bird-friendly gardeners leave all flowering plants intact, even if dried and brown. That way seed heads and dried berries continue to feed wildlife, and beneficial insects have cover this winter.

Savoring the best weather of the year, I set aside chores and head outside. Yet the difficulties of fall birding soon emerge. Walking for long stretches without song or calls is disorienting. A brief sighting of a thrush on a shadowy path---without time for binoculars---challenges ID skills. Was it a migrating Swainson's or a newly arriving Hermit Thrush? And who hasn't been flustered by immature warblers in dull plumage? Even so, a rush of adrenaline kicks in when, as happened today, a male Black-throated Blue Warbler busily gleaned insects from my tomato plants. In such moments, I reap the reward of patience or pure serendipity. These "a-ha!" experiences keep us hooked on birding.

For the same reasons, our board members are committed to serving this Audubon chapter. Let's applaud our volunteers who have been busy, among other things, planning virtual programs. On November 4, we will host Dr. Amanda Gallinat, who will talk about fall migration and climate change. Gwen Brewer and George Jett will bring the wildlife of Ghana to us on December 2. Please join or view those recordings online (<https://www.somdaudubon.org/our-work/program-archive/>). Meanwhile, other board members are mentoring our new Southern Maryland Youth Birders. Our volunteers' generosity and longstanding service are tremendous assets. I am grateful to them all.

Despite the trials of 2020, this season of harvest and bounty provides sustenance and hope. Happy Thanksgiving to you and yours.

Tiffany Farrell
President, SMAS



Hermit Thrush
Photo by Bill Hubick

Hummingbirds Navigate an Ultraviolet World We Never See

by Veronique Greenwood
June 19, 2020

Hummingbirds were already impressive. They move like hurried insects, turn on aerial dimes and extract nectar from flowers with almost surgical precision. But they conceal another talent, too: seeing colors that human eyes can't perceive.

Ultraviolet light from the sun creates colors throughout the natural world that are never seen by people. But researchers working out of the Rocky Mountain Biological Laboratory reported on Monday in Proceedings of the National Academy of Sciences that untrained Broad-tailed Hummingbirds can use these colors to help them identify sources of food.

Testing 19 pairings of colors, the team found that hummingbirds are picking up on multiple colors beyond those we can see. From the bird's-eye view, numerous plants and feathers have these as well, suggesting that they live in a richer-hued world than we do, full of signs and messages that we never notice.

Compared with the color vision of many other animals, that of humans leaves something to be desired. The perception of color relies on cone cells in the retina, each of which responds to different wavelengths of light. Humans have three kinds of cone cells, which, when light reflects off an apple, a leaf or a field of daffodils, send signals that are combined in the brain to generate the perception of red, green or yellow. Birds, however, have four types of cones, including one that is sensitive to ultraviolet light. (And they are far from the most generously endowed — mantis shrimp, for instance, have 16.)

In lab experiments, birds readily pick up on UV light and UV yellow, a mixture of UV light and visible yellow wavelengths, says Mary Caswell Stoddard, a professor of evolutionary biology at Princeton University and an author of the new study. Likewise, researchers have long known that UV colors are widespread in the natural world, though we can't see them. However, experiments to see whether wild birds would use UV colors in their daily lives had not yet been performed.

To find out, she and her colleagues spent three summers in a mountain meadow near Gothic, Colo., watching hundreds of hummingbirds. Among the wildflowers, the researchers planted an experimental setup: two tripods, each topped with a saucer filled with liquid and a colored LED light. The lights attached to the tripods often looked identical to the human eye. But in many of the pairings, one was actually a mixture of visible light, like green, red or yellow, and ultraviolet light, while the other produced just the visible light version. To the hummingbirds, the two LEDs would look completely different.

The team tracked around 6,000 visits by passing hummingbirds, which sampled the fluids of these man-made blossoms. They swapped the tripods' positions when the birds were away, to keep them from simply returning to the same location for a dose of sugar, and kept track of how many times birds chose the saucer with sugar water.

To the researchers' excitement, it rapidly became clear that distinguishing the colors and learning which signaled food posed no problem for the hummingbirds. "Even though we expected birds to tell these colors apart, seeing them do it with my own eyes was really remarkable, because these two color light tubes look identical to me," Dr. Stoddard said. "Watching the birds reveal to us some truth about their visual world was really amazing."

To quantify how common UV colors are in the natural world, the researchers looked at the light reflected off nearly 1,000 samples of bird plumage and more than 2,000 plants. In both cases, they found, around 30 percent of the samples would have a UV color for hummingbirds, and likely for other birds as well — and other creatures. Many fish and reptiles have four cones, including one sensitive to ultraviolet light, said Dr. Stoddard, and this ability has deep evolutionary roots. "Dinosaurs almost certainly had four color cone types," she said. "Did they see colors like UV green and UV red? Probably."

In future research, Dr. Stoddard hopes to understand more about how the behavior of species like hummingbirds is affected by the perception of colors that people cannot see. For instance, these experiments revealed that not all color pairings were equally easy for the birds to learn to tell apart. "What if the birds are better able to learn using certain colors because they are experiencing those colors to a high degree in their environment?" she speculates. "Maybe the week the scarlet gilia flowers are in bloom, hummingbirds are better able to learn and distinguish red colors." She added, "There are likely to be all kinds of interesting complicating factors."

<https://www.nytimes.com/2020/06/19/science/hummingbirds-color-vision.html>

The New York Times Company, 620 Eighth Avenue, New York, NY 10018

Singing In A Silent Spring: Birds Respond To A Half-Century Soundscape Reversion During The COVID-19 Shutdown

This is what Liz Derryberry and her fellow researchers did earlier in the pandemic in the San Francisco Bay area when the region went on strict lockdown in April and May. The researchers' findings were published in Science last month: "Singing in a silent spring: Birds respond to a half-century soundscape reversion during the COVID-19 shutdown" (by Elizabeth P. Derryberry, Jennifer N. Phillips, Graham E. Derryberry, Michael J. Blum, and David Luther).

These researchers reported that male White-crowned Sparrows in the area seemingly used the sudden drop in human noise (e.g., cars, trucks, planes, etc.) to their advantage during the spring lockdown. Studying their field observations from previous years, they concluded that the urban birds clearly had sacrificed song quality for higher volume. In a soundscape dominated by such noise as traffic, they had simplified their song to compete with, and be heard over, the competition.

Continued on page 3

But when the din that constituted loud background noise suddenly died down, the sparrows switched to songs that more closely resemble the softer, higher-quality calls of their nearby rural counterparts. With less of a racket around them, they could afford to focus on more complex sounds.

What's more, "They double their communication distance," said Derryberry. "And they... have these really wide-bandwidth songs, which means they contain a lot of information."

As expected, the rural bird vocalizations for White-crowned Sparrows were the same before and during the pandemic. The researchers also assumed that the traffic noise-levels resembled those of the mid-1950s.

In summary, the researchers concluded that "behavioral traits can change rapidly in response to newly favorable conditions, indicating an inherent resilience to long-standing anthropogenic pressures like noise pollution."

The loss of human life during the pandemic has been horrendous and staggering; the impact on our economy has been grim. In one way, however, the pandemic has provided us a sample of a slower, quieter, and simpler world; it's actually given some ecologists a unique chance to view what happens when human activity comes to a stop, a phenomenon that at least one group of researchers has termed the "anthropause."

You can access the original article here:
<https://science.sciencemag.org/content/early/2020/09/23/science.abd5777.full>

And also read a good summary here:
<https://apple.news/AKPNOo5IFQeCNxWASGdt8kA>



You can access all the past E-bulletins on the National Wildlife Refuge Association (NWRA) website:
<http://refugeassociation.org/news/birding-bulletin/>

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Pine Siskin photo by Bill Hubick

Major irruption of Pine Siskins this fall. Watch your feeders!
Send the editor your photos for the December/January issue:
jtylerbell@yahoo.com

121st Christmas Bird Count



**Please join us and help count birds.
Participate in one of the largest
and oldest citizen science programs.**

Dec 20 – Port Tobacco, MD
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Jan 3 – Point Lookout, MD
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WELCOME, NEW MEMBERS!

Peggy Jones, Avenue
Allen Grant, Chaptico
Barbara Herbert, Hughesville
Suzanne Coffey, Huntingtown
Martine Warren, La Plata
Judith Caruso, Pomfret
Elizabeth Helms, Solomons
Robena Keatley, Valley Lee
Peggie H. Davis, Temple Hills
Cindy Feldman, Dunkirk
Michael Clare, Dunkirk
L. Nelson, Accokeek
Betty Wadding, Bryans Road
Laura Hammett, Drayden

Massive Bird Die-Off In The West

Last month, an unprecedented number of dead birds was reported across New Mexico, and some other parts of the southwest. The estimated numbers were in the hundreds of thousands, and the national media took notice. Most of these were migratory insect-eating songbirds (e.g., warblers, swallows, and flycatchers), with some seed eaters also included.

Biologists at New Mexico State University were engaged in collecting the dead birds and investigating possible causes. Martha Desmond, a professor at NMSU's Department of Fish, Wildlife and Conservation Ecology was among them. "It is terribly frightening," Desmond said. "We've never seen anything like this."

Additionally, some living birds during the event were observed behaving oddly, sickened on the ground, disoriented, or lethargic. The birds appeared extremely emaciated, with little to no fat reserves and barely any muscle mass.

There are a number of individual theories concerning the cause for the die-off. Some of these theories are linked to a combination of factors.

One of the factors some biologists suggest is that the wildfires burning in California and other Western states, may have forced the birds to migrate early before they were ready. By "ready" the scientists suggested that the birds had not yet accumulated enough fat to successfully engage in the physical stresses of migrations.

A second fire-related theory had to do with smoke or particle inhalation, and a third idea was that fire reduced the abundance of available insects for birds to eat.

And finally, another potential reason could be an unseasonal cold snap that passed through New Mexico for one week. But as Desmond added, observers we were witnessing the die-off prior to the cold-snap and continuing beyond it.

The investigation has grown into a collaboration that includes NMSU, the University of New Mexico, Department of Defense, Los Alamos National Laboratory, and many other state and federal agencies and non-governmental organizations in New Mexico, as well as the Cornell Lab of Ornithology. The bird samples have been sent to the U.S. Fish and Wildlife Service Forensics Laboratory in Ashland, Oregon for further analysis.

It could be some time before results come back, depending on the findings, there could be serious ecological implications, especially if they somehow involve insect populations, fire, and changing weather.



You can access all the past E-bulletins on the National Wildlife Refuge Association (NWRA) website:
<http://refugeassociation.org/news/birding-bulletin/>

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Western Yellow-billed Cuckoo Remains Federally Protected after Delisting Threat Falls Flat

Another example of the Audubon network delivering a victory for birds.

Although we wish we were celebrating a major increase in the population or thousands of restored acres of habitat, Audubon is applauding the U.S. Fish and Wildlife Service's (USFWS) recent decision to retain federal protections for the Western Yellow-billed Cuckoo under the Endangered Species Act. Habitat loss and other threats to this bird in the West continue with less than 2,000 breeding pairs of the Western Yellow-billed Cuckoo throughout its range.

A group representing the mining and ranching industries and other business interests petitioned the USFWS to remove Endangered Species Act protections from the Western Yellow-billed Cuckoo, part of a coordinated attempt to chip away at the 1973 law species by species.

In response to these efforts, Audubon opposed the effort to remove the western distinct population segment (DPS) of the Yellow-billed Cuckoo from the protections it currently has under the Endangered Species Act and nearly 25,000 of our members echoed that concern—we submitted their comments to the USFWS. In our 2019 comment letter, we shared information on population levels and projected trends, priority habitats, and continued threats, including the potential effects of climate change on the species and its habitat.

Within the last 50 years, primarily because of habitat loss along streams and rivers, the population size and distribution of Western Yellow-billed Cuckoo have declined substantially. Found in only a fraction of its former range in the American West, the Western Yellow-billed Cuckoo is listed as endangered in California, critically imperiled in Nevada, sensitive in Utah, and of concern or of greatest conservation need in seven additional western states. A restricted range, combined with a low population makes this species highly vulnerable to environmental stressors, such as habitat loss, invasive species, and drought.

We are happy to report that the USFWS announced their finding on the petition to remove the DPS of the Western Yellow-billed Cuckoo from the List of Endangered and Threatened Wildlife. The USFWS notice states, "After a thorough review of the best available scientific and commercial information, we find that it is not warranted at this time to delist the DPS of the western yellow-billed cuckoo."

At this time, the USFWS is also considering changes in designated critical habitat for the Western Yellow-billed Cuckoo, which inadequately addresses portions of its range as Audubon pointed out in our letter earlier this year. Particularly when the majority of the species' range has not been surveyed on a regular basis, more information is needed for improved conservation of this species. Both Audubon and the USFWS welcome any new

information relevant to the Western Yellow-billed Cuckoo or its habitat. Audubon encourages a federally funded, multi-state, coordinated strategy to study and improve conditions for this bird. There is an urgent need for leadership from the USFWS to help address declining and vulnerable species by protecting, creating, restoring, and reconnecting habitat that will contribute to species recovery, adaptation, and resiliency in the face of climate change.

Audubon is pleased that this bird will continue to enjoy federal protections as it struggles for survival against all the threats it faces. Thanks to everyone who contributed science information and spoke up for this bird!

Downloadable Resources:

[ybcu_western_dps_findings-delisting_letter_from_audubon_1_27_19.pdf](#)



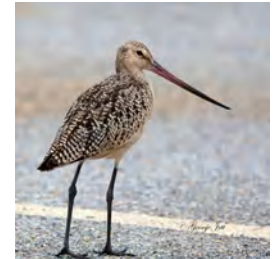
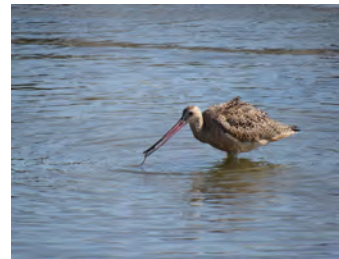
Western Yellow-billed Cuckoo
Photo by: Karen Showalter



Eurasian Collared-Dove
Photo on left by Scott Clark; right by Steve Arthur



Kingbird photos
Photo on left by Patty Craig; photo on right by Jane Kostenko showing Eastern and Western Kingbirds for comparison



Marbled Godwit
Rod 'n' Reel, Chesapeake Beach, Calvert County
Photo on left by Jane Kostenko; right by George Jett

NEW!

**SOUTHERN MARYLAND AUDUBON SOCIETY
YOUTH BIRDERS CLUB**



Calling on all 5th - 12th graders!

While our club is brand new, and we are still planning things, please join NOW.

Send us an email with your name, age, and describe your interest in birding. We will add you to our email distribution list so we can communicate upcoming planned activities. Due to Covid-19 our initial events will be online until it is safe for field trips.

Send your email to: southernmarylandyouthbirders@gmail.com

Our goal is to provide a friendly environment for young birders to get together, to learn about birds, and build friendships.



www.SoMdAudubon.org



Blue Jay upper and undertail compilation by Scott Young
Note that the variation of spots could lead one to believe they are looking at a Yellow-billed Cuckoo!



Monthly Meeting Program Upcoming Zoom Lectures

Covid-19 Friendly!

Instead of in-person meetings this fall, SMAS is launching virtual lectures using Zoom. We will send invitations via email which will have information and a link for joining the meetings. If you do not get our Osprey newsletter via email you need to sign up. Please go to our website SoMdAudubon.org and sign up at the bottom of the homepage.



CLIMATE CHANGE IN AUTUMN FRUIT AVAILABILITY FOR MIGRANT BIRDS

November 4 @ 7:00 p.m.

Dr. Amanda Gallinat is an ecologist who studies how environmental change affects plants, birds, and their interactions. Her recent research focuses on the effects of climate change on the timing of seasonal biological events in the northeast, including fruit ripening and bird migration, and how these climate-driven changes alter food availability for birds in autumn.



BIRDS, BUTTERFLIES AND MAMMALS GHANA, WEST AFRICA

December 2 @ 7:00 p.m.

Ghana is home to almost 800 species of birds and over 900 species butterflies. Enjoy the flora and fauna of Ghana's grasslands, forests, and wetlands as experienced by Gwen and George during their three-week January 2019 trip. Bird highlights include the unique yellow-headed picathartes; colorful turacos, bee-eaters, and sunbirds; impressive hornbills; and 11 species of kingfishers. Many insects and mammals are also discussed.

MEMBERSHIP APPLICATION

Please enroll me as a member of the **Southern Maryland Audubon Society**. All of my membership dollars will help support local conservation initiatives and enable us to provide southern Maryland teacher education scholarships to attend Hog Island, Audubon Camp in Maine.

- Individual/Family: ___1year \$20 ___2year \$35 ___3year \$45
 Lifetime Membership: ___ \$500
 Donation: _____

Please enroll me as a first time member of the **National Audubon Society**. You will automatically become a member of the Southern Maryland Audubon Society. You will receive six issues of National's award winning *Audubon Magazine*. A fraction of my dues will be received to our chapter. Your renewal information will come directly from the National Audubon Society.

Introductory Offer: ___1 year \$20

Name: _____
 Address: _____
 City: _____ State: _____ Zip: _____

Please enroll me for electronic delivery of our monthly newsletter *The Osprey*.

___ Email me a link to download the pdf,
 ___ Email me a notice it is available on the website. My email address is:

 _____ No thank you, please mail me a paper copy.

Please make your check payable to Southern Maryland Audubon Society or National Audubon Society.

Mail to: *Southern Maryland Audubon Society, P.O. Box 181, Bryans Road, MD 20616.*

GREAT NEWS!! You can now go online and join SMAS via **PayPal**. Go to our website at smdaudubon.org for this new option.



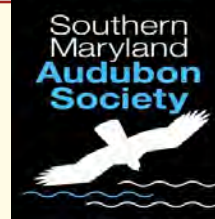
Osprey
 Photo by Bill Hubick

EDITOR: Tyler Bell E-mail: jtylerbell@yahoo.com

The deadline for the Osprey is the fifth of each month. Please send all short articles, reports, unique sightings, conservation updates, calendar items, etc. to the above address.

2020-2021 Officers

President, Tiffany Farrell - smdaudubon.president@gmail.com
 Vice-President, Margarita Rochow - margarita@usa.net
 Treasurer, Julie Daniel - juliemdaniel@hotmail.com
 Secretary, Julie Simpson - jsimps@runbox.com



Southern Maryland Audubon Society Adopt-a-Raptor

Foster Parents Needed!

Southern Maryland Audubon Society sponsors the banding of nesting birds of prey, or raptors, with serially numbered aluminum bands in cooperation with the Bird Banding Laboratory of the U.S. Department of the Interior. Limited numbers of Osprey, Barn Owl, Northern Saw-whet Owl and American Kestrels become available each year for adoption. Your donation will be specifically utilized for raptor research and raptor conservation projects such as:

Barn Owl Nest Boxes Osprey Nesting Platforms
Kestrel Nest Boxes Mist Nets or Banding Supplies

Please indicate which raptor you wish to adopt. You may adopt more than one:

- Osprey, \$10 each Total Amount: _____
 Barn Owl, \$25 each Total Amount: _____
 Northern Saw-whet Owl, \$30 each Total Amount: _____
 American Kestrel, \$35 each Total Amount: _____

General Donation to Raptor Fund Donation Amount: _____

The foster parent receives:

- A certificate of adoption with the number of the U.S. Department of the Interior band and the location and date of the banding.
- Information on the ecology and migration patterns of the species.
- A photo of a fledgling and any other available information on the whereabouts or fate of the bird.

Name: _____
 Street Address: _____
 State, Zip Code: _____
 City: _____
 Email: _____
 Phone: _____

If this is a gift, please include the recipient's name for the certificate: _____

Mail To: *Southern Maryland Audubon Society*
Carole Schnitzler
 3595 Silk Tree Court, Waldorf, MD 20602