

MSDE Office of Science Weekly Newsletter

September 30, 2020

Contents

Six Maryland Public Schools Named National Blue Ribbon Schools.....	2
You're Invited to the Fall 2020 Virtual First Lady's Gallery	2
Readout of the U.S. Department of Education’s Virtual Panel on Successful Strategies to Reopen Schools This Fall	3
Science	3
Free NGSS classroom materials for Maryland HS science teachers	3
Article - How Teachers and Families Can Work Together During Remote Instruction.....	4
Environmental Literacy	4
2021 U.S Department of Education Green Ribbon Schools Award Application	4
Resources.....	4
Outdoor learning is essential: resources to aid planning – Project Green Classrooms.....	4
Article - Turning school inside-out can make schools safer this fall—and improve kids’ lives permanently.....	6
Article - Anti-racism in the Outdoors: Resources related to inclusion, diversity, equity and access ...	6
School's Out(doors): Place-based Education (PBE) Responds to COVID-19 and Beyond	7
Wave of Plastic.....	7
New Rethink Outside Stories Feature Outdoors Alliance for Kids and Natural Learning Initiative.....	7
Yo Cuento.....	7
Professional Learning.....	8
Register now for WE NEED TO TALK – National Park Service	8
Science for Citizens	9
An Afternoon with Dr. J. Drew Lanham – Virginia Conservation Network.....	9
MAEF TO HOST FALL VIRTUAL PROFESSIONAL DEVELOPMENT COURSES FOR MARYLAND TEACHERS	10
Rethink Outside Workshop: Strategic Storytelling for Social Change	10
Rethink Outside: The Power and Potential of Stories.....	10

[Go to Table of Contents](#)

[Go to Science Contents](#)

[Go to Environmental Literacy Contents](#)

Six Maryland Public Schools Named National Blue Ribbon Schools

BALTIMORE (September 25, 2020) — U.S. Secretary of Education Betsy DeVos has recognized six Maryland public schools as National Blue Ribbon Schools for 2020. National Blue Ribbon Schools are public and private elementary, middle, and high schools recognized for overall academic performance or progress in closing achievement gaps among student subgroups.

The Maryland schools honored as National Blue Ribbon Exemplary High Performing Schools are:

- Cash Valley Elementary School, Allegany County;
- Jacksonville Elementary School, Baltimore County;
- Hampstead Elementary School, Carroll County;
- Mount View Middle School, Howard County;
- Lucy V. Barnsley Elementary School, Montgomery County;
- Bayside Elementary School, Queen Anne's County.

Now in its 38th year, the National Blue Ribbon Schools Program has recognized the performance of more than 9,000 schools with some schools winning multiple awards. To see the full press release, [click here](#).

You're Invited to the Fall 2020 Virtual First Lady's Gallery

Please join us for the Fall 2020 Virtual First Lady's Gallery as we celebrate the artwork of students from Maryland's 24 local school systems! The opening reception will be on Friday, October 9th, 2020 from 4:00 p.m. to 5:00 p.m. in Remo. The opening reception is open to all invited guests and their friends, families, and teachers. All guests must register ahead of time as space is limited.

During this reception, we will hear from Mrs. Yumi Hogan and other guest speakers, view all of the student artwork together, and announce three student winners before moving to the virtual exhibition space (link to be shared at the event and emailed to students, teachers, and supervisors afterwards).

The link to join the reception is <https://live.remo.co/e/first-ladys-gallery>. Please register ahead of time at that link to confirm your attendance and add the event to your calendar.

[Go to Table of Contents](#)

[Go to Science Contents](#)



[Go to Environmental Literacy Contents](#)

YOU'RE INVITED!
First Lady's Art Gallery
Proudly presents
**2020 FALL VIRTUAL
STUDENT ARTWORK
EXHIBITION**
October 9th, 2020
4:00p.m. to 5:00p.m.
Remo Link:
<https://live.remo.co/e/first-ladys-gallery>

Maryland's First Lady, Yumi Hogan, is pleased to announce the bi-annual exhibition of artwork by Maryland students. The exhibition will be adjudicated and three awards will be given for outstanding accomplishments in visual arts.

Presented by the Office of First Lady Yumi Hogan, MSDE Fine Arts Office, Maryland State Arts Council, and Maryland Arts Education Association



[Readout of the U.S. Department of Education's Virtual Panel on Successful Strategies to Reopen Schools This Fall](#)

09/24/2020 02:49 PM EDT

WASHINGTON –U.S. Secretary of Education Betsy DeVos and Assistant Secretary of Elementary and Secondary Education Frank Brogan hosted a geographically diverse group of education practitioners to discuss successful strategies and innovative ideas they have implemented to reopen schools, rethink education and improve student outcomes during the Coronavirus pandemic. [Learn More](#)

Science

[Free NGSS classroom materials for Maryland HS science teachers](#)

An inspiring science documentary featuring Nobel Laureate Dr. Jim Allison has been made free to high school educators to inspire future scientists. [Jim Allison: Breakthrough](#) is a moving, true story of a warm-hearted, stubborn scientist, and his visionary quest to find a cure for cancer. (We've been featured on PBS Independent Lens and have hosted screenings with NIH, NABT, USA Biolympiad to name a few).

Over the summer we convened a talented team of teachers that co-created a robust accompanying [Educator Toolkit](#) with lesson plans, lab activities, career exploration activities, and more, all aligned with NGSS and AP Bio standards.

Since the move to distance learning last spring, many high school and undergraduate educators around the country are using the film already and their students are really getting a lot out of it. [See what they're saying.](#)

[Go to Table of Contents](#)

[Go to Science Contents](#)

[Go to Environmental Literacy Contents](#)

Anne Phillips | Manager, Market Development | Uncommon Productions | Boston, MA & Los Angeles, CA | mobile 443.570.9188 | anne@uncommonproductions.com

Screen *Jim Allison: Breakthrough* for free with your virtual or in-person classroom. [Learn more](#)

[Article - How Teachers and Families Can Work Together During Remote Instruction](#)

Brian Caine, coordinator of science at the Tennessee Department of Education, shares how teachers can support families in facilitating science learning for their children at home. Caine notes, "In working together as a classroom learning community or a family learning community to build on these shared experiences, we can develop deep understandings of science ideas." [Read more.](#)

Environmental Literacy

[2021 U.S Department of Education Green Ribbon Schools Award Application](#)

ED-GRS recognizes schools taking a comprehensive approach to greening their school. A comprehensive approach incorporates environmental learning with improving environmental and health impacts. Becoming a U.S. Department of Education Green Ribbon School is a two-step process. The first step is to complete and submit this form to be selected as a nominee by Maryland State Department of Education (MSDE). Find attached to this email the application for the 2020 ED-GRS award. Submissions are due to MSDE by **January 4, 2021**.

Resources

[Outdoor learning is essential: resources to aid planning – Project Green Classrooms](#)

Outdoor learning and outdoor classrooms have always been a priority of the environmental education (EE) community, and these topics are rising to more widespread awareness as vital for education, in particular as we navigate the realities of teaching and learning during the pandemic. For the immediate situation, while schools are in remote learning mode, the EE community is helping teachers and schools to adapt, to find creative and engaging ways to include EE in learning even while students can't get to outdoor spaces together. It is important to keep this learning moving to meet academic requirements such as the [Maryland Environmental Literacy Standards](#) as well as to continue to build students' awareness of and excitement for their surrounding natural world. Given the varied venues in which learning is taking place, this is a great time to consider novel ideas for integrating outdoor learning for now and the future. How can time outdoors be promoted within the community, utilizing nature at hand, even (for now) observing safely through windows? Schools can integrate green schoolyards as part of the routine learning environment, to benefit academic achievement as well as physical and mental health. Maryland has a rich network of environmental education providers who are ready, able, and willing to help schools -- both during remote learning and once we return to fully in-person instruction -- by providing teacher professional development, lessons and content material, virtual classroom "visits" and field experiences, and providing support for in-person experiences in the future. Let's reimagine how EE happens!

[Go to Table of Contents](#)

[Go to Science Contents](#)

[Go to Environmental Literacy Contents](#)

Here are some of the many resources available. Please share them widely, and use them as needed to support local efforts.

Why outdoor learning is important:

[Opinion: The Need for Outdoor Environmental Education in Maryland's Remote Learning Curriculum](#), by Chesapeake Bay Foundation

[Making the Case for Children and Nature](#), Children & Nature Network's Research Library

A local example:

[Anne Arundel teachers adapt for virtual environmental literacy](#) - Baltimore Sun, 9/13/2020.

Guidance:

- [Guide to Advocating for Outdoor Classrooms in Coronavirus-Era School Reopening](#), from the North American Association for Environmental Education and the National Wildlife Federation
- [Maryland Together: Maryland's Recovery Plan for Education](#), Maryland State Department of Education
- [Green Schoolyards for Healthy Communities](#), Children & Nature Network

Learning resources:

- [Bay Backpack](#) supports hands-on environmental learning by providing educators with information about funding, field studies, student activities, and lessons related to Chesapeake Bay; and helps educators find tools for providing their students with Meaningful Watershed Educational Experiences (MWEEs). The [blog](#) includes links to online EE resources for educators, caregivers, and students.
- [MAEOE](#), the Maryland Association for Environmental and Outdoor Education, provides support through professional development, the Maryland Green Schools program, [environmental literacy resources](#) online library, newsletters, and connecting educators through an annual conference and monthly online meetings.
- Environmental education providers such as nonprofit organizations, outdoor education centers, agencies, and others are available to partner with schools to assist with environmental education, including providing content and planning assistance for environmental literacy programs at all grade levels, guiding site-based experiential learning, facilitating student stewardship projects, and assisting with green practices for sustainable schools certification. Most EE providers have also developed and posted virtual and at-home learning resources since spring 2020. Many of the partners can be found through Bay Backpack's [Field Studies map](#) and MAEOE's [Green Centers](#).

Funding opportunities:

Funders are making accommodations in their programs to support virtual learning contexts in some form or fashion, to help prepare teachers, support schools, and bring about more equitable access to quality learning for all students. Here are some current opportunities (not an exhaustive list):

[Go to Table of Contents](#)

[Go to Science Contents](#)

[Go to Environmental Literacy Contents](#)

- The Chesapeake Bay Trust, with support from the U.S Environmental Protection Agency, seeks non-profit organizations to support key Chesapeake Bay Program Goals and Outcomes through Scope of Work #1EE: [Equity and Environmental Education in the Time of Coronavirus Disease 2019 \(COVID-19\) to Support Environmental Education Providers](#). Applications are due October 19, 2020.
- Chesapeake Bay Trust's [Environmental Education Grant Program](#) seeks proposals that advance environmental literacy and prepare students to take responsible actions to protect and restore their local environment. The Trust knows this is a particularly challenging time and welcomes adaptations and alternative approaches to meet COVID-19 restrictions impacting schools throughout Maryland. Eligible projects for this funding opportunity fall under two tracks. For more information, see the [Request for Proposals \(RFP\)](#). Applications are due December 10, 2020.
- National Oceanic and Atmospheric Administration's [Chesapeake Bay Watershed Education and Training grant program](#) (Chesapeake B-WET) supports hands-on environmental literacy programming for students, professional learning for teachers and capacity building efforts throughout the Chesapeake Bay Watershed with the goal of fostering stewardship of the Bay and regional natural resources. The Notice of Federal Funding Opportunity will be released in November and applications due in late winter.
- Maryland Department of Natural Resources offers funding for environmental education, this year including support for integrating alternative arrangements and platforms for learning about the environment. Two opportunities: (1) The [Aquatic Resources Education Grants Program](#), has a rolling deadline for smaller requests for individual schools, school districts and their outdoor environmental education centers; and (2) for larger requests, the [Grants Gateway](#) Outdoor Learning outcome will fund activities through June 2022, including distance learning, with applications due by December 16, 2020.

And remember that schools' [Every Student Succeeds Act](#) (ESSA) funding can be used to support environmental education! School district staff are encouraged to work with their Environmental Literacy Coordinator to include EE, environmental literacy, and outdoor learning in ESSA plans.

This information has been prepared and shared by the [Maryland Project Green Classrooms Initiative](#), an advisory body working collaboratively to promote outdoor learning, discovery, healthy play, and career exploration in Maryland.

Article - Turning school inside-out can make schools safer this fall—and improve kids' lives permanently

By Jay Walljasper

In this special feature article for Finding Nature News, author Jay Walljasper paints a picture of what Back-to-School 2020 could like all across America—with green schoolyards offering a safer, more equitable middle ground in the wrenching decisions over in-person vs. online instruction.

[Read more.](#)

Article - Anti-racism in the Outdoors: Resources related to inclusion, diversity, equity and access
Dr. Don Rakow & Laura Brown

This new guide explores ways that organizations and individuals are shining a light on historic

[Go to Table of Contents](#)

[Go to Science Contents](#)

[Go to Environmental Literacy Contents](#)

discriminatory practices regarding green areas, and ways in which parks, natural areas, and public gardens can be made more accessible, welcoming, and safe for every person. [Read more.](#)

School's Out(doors): Place-based Education (PBE) Responds to COVID-19 and Beyond

This [booklet](#) summarizes the case for Place-Based Education (PBE) and organizes links to current and time-tested research evidence to support those points. It also provides exemplar stories and, importantly, contact information for PBE experts who are willing to help support next action steps for people like you and the people you work with. [Learn more.](#)

[Wave of Plastic](#) is an education partnership program, funded by NOAA's Bay Watershed Education and Training (B-WET) program, that is helping Southern Maryland middle school students understand the connections between actions on land, plastic pollution in local waterways and the Chesapeake Bay, and student environmental stewardship. In 2019, we worked with Jason Haye, Janel McPhillips, teachers from St. Mary's and Calvert County Public Schools, and CBL faculty scientists to write, pilot and refine the curriculum unit. The Wave of Plastic unit is designed to support:

- Next Generation Science Standards (MS-ESS3-4, MS-PS1-3, MS-ESS3-3, & MS-LS2-4)
- Maryland Environmental Literacy Standards (Standards 1, 5, 7, & 8)
- Maryland Service-Learning Graduation Requirements (all 7 best practices)
- The Student Outcome of the Environmental Literacy Goal of the 2014 Chesapeake Bay Watershed Agreement (Meaningful Watershed Educational Experiences).

We started professional development with our second cohort of teachers in 2020, but then the pandemic hit. Since then, we've adapted the curriculum to support at-home learning.

The [Teacher/Facilitator Guide](#) and [Student Workbook](#) for the whole unit are available online for free: <https://www.umces.edu/waveofplastic>.

New Rethink Outside Stories Feature Outdoors Alliance for Kids and Natural Learning Initiative

The Rethink Outside [story bank](#) now includes 20 inspiring stories! Read the latest featuring [OAK](#) and [NLI](#).

Yo Cuento

Latino Outdoors released [Yo Cuento](#), a new short documentary featuring founder José González.

[Go to Table of Contents](#)

[Go to Science Contents](#)

[Go to Environmental Literacy Contents](#)

Professional Learning

[Register now for WE NEED TO TALK – National Park Service](#)

The NPS Chesapeake Bay Office is hosting our fourth "We Need to Talk" session on October 5 at noon with a focus on the nexus of public health, equity, and conservation. [Register today!](#)

To watch the recording of the first three sessions visit www.Youtube.com/Chesapeake



A Conversation on the Intersection of Public Health, Equity, and Conservation

12:00 Noon Monday October 5 2020

The National Park Service Chesapeake Bay and the Chesapeake Conservation Partnership invite you to listen in on a candid conversation among a diverse group of six distinguished professionals working at the intersection of public health, equity, and conservation. We will explore the issues and urgency of solving deep inequities in public health and access to nature and the ways conservationists can and should help.

Duron Chavis
Urban Farmer, Change Maker, Richmond VA

Mark Conway
Chesapeake Conservancy & Baltimore MD

Brett Glymph
Virginia Outdoors Foundation



Vaughn Perry
11th Street Bridge Park, Washington DC

Lydia Martin
Alliance for Chesapeake Bay, Lancaster PA

Sadiya Muqueeth, DrPH, MPH
Trust for Public Lands

REGISTER HERE



Equity • Clean Air & Water • Parks • Nature • Food • Recreation • Community






Photos (left to right): MDDNR, Dumery, BBARD, BBARD

[Go to Table of Contents](#)

[Go to Science Contents](#)

[Go to Environmental Literacy Contents](#)

Science for Citizens is a series of free, public webinars about featured scientific research, presented by UMCES faculty. This fall, we are featuring Chesapeake Bay research. All webinars will be hosted at 7:00pm on Tuesdays via Zoom. Registration is required: <http://www.usmf.org/scienceforcitizens/>

Seminars will include:

- September 29: "Oyster Aquaculture: A boon, competition or neutral for restoration and fishing," presented by Dr. Tom Miller
- October 06: "Striped Bass are Built for Success: Weathering pollution, climate change, and their own charismatic stripes," Presented by Dr. David Secor
- October 13: "Patuxent River Research Cruises: Building on a scientific & educational legacy," presented by Dr. Ryan Woodland
- October 20: "Decades of Change in the Patuxent River and its Tributary Companions," presented by Dr. Jeremy Testa
- October 27: "Reducing Plastic Waste and Pollution," presented by Dr. Helen Bailey

Science for Citizens is appropriate for teachers, adults, and high school students. We've had middle school students attend as well, but adults are the target audience. After you [register](#), a link to join the seminar(s) via Zoom will be sent to the email address you provided.

An Afternoon with Dr. J. Drew Lanham – Virginia Conservation Network

Friday, October 2, 2020

1:30-2:30 p.m.

FREE

[Register here](#)

A native of Edgefield, South Carolina, J. Drew Lanham is the author of *The Home Place: Memoirs of a Colored Man's Love Affair with Nature*, which received the Reed Award from the Southern Environmental Law Center and the Southern Book Prize, and was a finalist for the John Burroughs Medal. He is a birder, naturalist, and hunter-conservationist who has published essays and poetry in publications including *Orion*, *Audubon*, *Flycatcher*, and *Wilderness*, and in several anthologies, including *The Colors of Nature*, *State of the Heart*, *Bartram's Living Legacy*, and *Carolina Writers at Home*. An Alumni Distinguished Professor of Wildlife Ecology and Master Teacher at Clemson University, he and his family live in the Upstate of South Carolina, a soaring hawk's downhill glide from the southern Appalachian escarpment that the Cherokee once called the Blue Wall.

This event is free and open to the public! Registration can be found [here](#) or through the [Facebook event](#).

NOTE: This event is part of VCN's Environmental Assembly/Annual Meeting. Network Partners can sign up for the Environmental Assembly/Annual Meeting [here](#), and will automatically be registered for this event.

[Go to Table of Contents](#)

[Go to Science Contents](#)

[Go to Environmental Literacy Contents](#)

MAEF TO HOST FALL VIRTUAL PROFESSIONAL DEVELOPMENT COURSES FOR MARYLAND TEACHERS

(HAVRE DE GRACE, MARYLAND) – September 17, 2020 – This fall, the Maryland Agricultural Education Foundation (MAEF), in partnership with Goucher College will offer the virtual professional development courses “Infusing Agriculture in the Classroom ” to elementary and middle school teachers throughout the state.

New to the course offerings this year, the “Infusing Agriculture in the Middle School Classroom” has been specifically designed for curriculum instruction for middle school students. Offering lessons in hydroponics, career education, and guest lectures from leaders in the agricultural community, this course will advance student understanding of modern agricultural practices and career pathways.

Running for a third semester, the “Infusing Agriculture in the Elementary School Classroom” course will continue to provide unique, comprehensive, and engaging educational opportunities for elementary school students and teachers to learn more about how agriculture impacts their lives.

“Only seven of Maryland’s counties have more than 50 percent of their land designated as rural, meaning there is a significant number of Maryland students who do not interact at all with farms in their formative years. At MAEF, we aim to teach students the importance of agriculture in their daily lives. Teachers who learn about agriculture often become passionate in teaching their students where their food, clothing, and much of what they touch each day comes from,” said Shannon Brown, elementary course instructor and Elementary Education Director at MAEF.

The middle school course is scheduled to run from Oct. 12 to Nov. 24. The elementary school course is scheduled to run from Oct. 10 to Nov. 23. Each course offers the opportunity for educators to earn 3 MSDE/CPD credits upon successful completion. For more information or to register for the “Infusing Agriculture in the Elementary School Classroom,” contact Shannon Brown at sbrown@maefonline.com. For more information or to register for the “Infusing Agriculture in the Middle School Classroom,” contact Peggy Eppig at peppig@maefonline.com.

Dedicated to increasing agricultural literacy and agricultural education, MAEF is a nonprofit organization with programs serving pre-kindergarten through post-secondary audiences. MAEF signature programs include “Infusing Ag in the Classroom” professional development courses for teachers; mobile science labs; mobile agricultural showcases and Maryland FFA. Funded by the Maryland “ag tag” license plate revenues, gifts, grants and program fees, MAEF promotes the importance of agriculture in everyone’s daily lives. For more information visit www.maefonline.com.

Rethink Outside Workshop: Strategic Storytelling for Social Change

October 20, 22, 27, & 29 | 10 - 11:30 am PT / 1 - 2:30 PM ET

This virtual workshop will support leaders, communicators, and practitioners in harnessing the Rethink Outside shared narrative to craft compelling stories. [Learn more and register here](#).

Rethink Outside: The Power and Potential of Stories

October 22 | 12:30 - 2 pm PT | 3:30 - 5 pm ET



[Go to Table of Contents](#)

[Go to Science Contents](#)

[Go to Environmental Literacy Contents](#)

To mark the one-year anniversary of the [Rethink Outside](#) campaign, join us for a panel discussion on the importance of storytelling for social change. This unique event, moderated by James Edward Mills ([The Joy Trip Project](#)), will feature prominent storytellers who will share insights and inspiration on the power of creative expression as a means to create a future where everyone has positive experiences outdoors and shares the joy, health, growth, and sense of community that come with it. [Register here](#)
