

# Appreciating Several Outstanding Volunteers

By Melinda Fegler, *JBWS Volunteer & Stewardship Coordinator*, and Patricia Delgado, *JBWS Superintendent*

*“I was reminded Saturday why I love and feel privileged to do this job: the weather was cool, the majority of leaves had dropped and were carpeting the ground in various shades of brown, and the air was clear. Serenity.”* – Robert Williams III

## Mel’s Reflections

Giving me the opportunity to brag about my volunteers is like letting me loose to give a six-hour lecture on bumble bees. It is an honor to serve in a profession that allows me to work with such generous and self-sacrificing people. We highlight four volunteers in this article for their exemplary efforts at Jug Bay Wetlands Sanctuary, but we know these three do not stand alone. Jug Bay is a magnet for outstanding volunteers from every possible perspective, and there is no one with more bragging rights than me.

Our first highlight is Jug Bay Wetlands Sanctuary’s very own **Robert Williams III**. This January, Bob received the 2017 Ron Blake Outstanding Volunteer Award. For nearly 15 years Bob has been a diligent, fearless, and tireless volunteer here at Jug Bay. He plays a key role in closing our vast maintenance gap that would leave many of the Sanctuary boardwalks and trails in unsafe conditions. Bob has reported 2,169 volunteer hours to date. However, if Bob reported every hour he volunteered, we are convinced it would amount to twice that value, as it would for most of our volunteers. He is his own supervisor, and sometimes ours. Bob is here so often checking on what might need to be done he reports the problem and the repair in the same e-mail.

On that note, if you have never run across Bob it is likely because he often welcomes us to the office on his way out, having arrived hours before any staff. All of us who have worked directly with Bob know that he has far more physical stamina than the staff or many of the young volunteers.

*“Bob only has one gear, he is always at breakneck speed... and if you see him coming up behind you in his VW bus, just pull over and get out of the way.”*



**Bob Williams flanked by Sanctuary staff members Liana Vitali and Melinda Fegler. Photo by Kris Fegler.**

This is the way Bob lives his life, and we wish we could be more like him. Bob swam his 25th Great Chesapeake Bay Swim in 2017, with his slacker Jug Bay team merely cheering from our kayaks as safety team members—that is a 4.1-mile swim from Sandy Point to Kent Island!

Speaking of Sandy, Bob is so vital to Jug Bay that when another dear volunteer, Sandy Teliak, left us for grandbabies, as so many do (and yes this is said with a little resentment), the staff sat down to discuss what volunteer could possibly be paired with Bob who could keep up, be here at sunrise, be great company, and most of all be an extra set of eyes for the “chainsaw wizard.” The staff chose Chuck McClain, or maybe Bob did, or maybe they chose each other as all perfect matches do.

Chuck jumped in immediately and says of his experience thus far that regardless of whether they are *“...shredding trees, repairing the canoe shed, repairing/replacing at least three sections of boardwalks, removing Bradford Pear trees along the access road (finding a stolen/discarded wallet in process), or repairing the shower stall that Bob is always well prepared and detailed in planning a task. He doesn’t know how to just ‘wing it’...fortunately. He has every tool known to man. I thought I had a lot of tools, but my tool box is dwarfed by his. There are two things he seems to relish: shoving tree limbs into the shredder and listening to the engine moan, testing just how big a limb it can handle; and firing up the chainsaw. Learning of a downed tree or of a tree that needs to be downed is music to his ears, and most of all he is always very diligent and generous with giving credit.”*

We love having Bob here at the Sanctuary, and we all look forward to seeing that VW bus pulling in, or out, as happens more often.

– Chuck McClain

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Jug Bay Wetlands Sanctuary  
 1361 Wrighton Road  
 Lothian, MD 20711  
 410-741-9330  
 e-mail: info@jugbay.org

[www.jugbay.org](http://www.jugbay.org)

Jug Bay Wetlands Sanctuary is operated by the Anne Arundel County Department of Recreation and Parks. It was established in 1985 with the goals of wetlands research, environmental education, and protection. The Sanctuary is a limited-use park. Groups are requested to make a reservation by calling the office before planning a visit.

Jug Bay Wetlands Sanctuary is a component of the Maryland Chesapeake Bay National Estuarine Research Reserve, which along with 27 other Reserves around the country promotes scientific research, public education, resource management and stewardship in estuaries across the nation.

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**Marsh Notes** is produced quarterly by Jug Bay Wetlands Sanctuary.

Comments and suggestions are welcome.

Editor: Darcy Herman  
 Graphic Design: Liz Fisher, EC Fisher Design  
 contact: [liz@ecfisherdesign.com](mailto:liz@ecfisherdesign.com)

This newsletter is printed on recycled paper.

*Volunteers, continued from page 1*

**Dave Perry** is the quintessential example of a man who truly has moved mountains of soil, impacted acres of pollinator habitat, and is a “natural” natural resource manager. Dave’s knowledge of plants and pollinators is inspiring, and we are all green with envy at Dave’s green thumb. Dave has been an active volunteer since 1995, working on a variety of projects such as bird, plant, and habitat monitoring and improvement and also in construction of the boardwalk into the wetlands.

However, his most valuable contribution is the six years of research, planning, and hard work he devoted to creating, expanding, and maintaining the Butterfly Garden, which has become one of the Sanctuary’s most valuable assets. In the beginning, working solo to move mountains of dirt, sod, and trash, Dave transformed the 20 x 75-ft former house trailer site into a pollinator haven. Dave planned the original garden with plants that would meet the needs of multiple stages in a butterfly’s life, including both larval host plants and adult nectar sources. In the 10 years since, Dave has returned every season to manage the beautiful space, purchasing new plants and lifting, bending, digging, weeding, and watering in spring’s chill and summer’s heat. Dave has created quite the following of loyal butterfly gardeners, butterfly phenology monitors, and pollinator lovers who hold the overall record for volunteer (again, reported) hours on a specific project here at the Sanctuary: 725 hours just in 2017 (sorry feather friends; you are second at 572 in 2017, which is still impressive).



**Dave Perry in the Butterfly Garden. Photo by Pollinator Paparazzi.**



**Diane Goebes with her Volunteer Naturalist award. Photo by Liana Vitali.**

**Diane Goebes** is literally worth her weight in gold. Okay, maybe not exactly her weight in gold, but she has been a volunteer at Jug Bay since 2006, and if you were to add up all her hours over the past 11 years and multiply them by the average valuation per hour of volunteer time in the state of Maryland, she would be worth \$40,128! But truth be told, her dedication to the Sanctuary is priceless.

Diane is a prime example of an enormously dependable and creative volunteer. While she tends to get involved in a little bit of everything, most often she wears the hat of Volunteer Naturalist at Jug Bay, leading students of many ages on outdoor adventures throughout the nine different habitats of Jug Bay. In 2016 and 2017 alone, Diane volunteered

304 hours of her time leading 400+ students and their families in outdoors, hands-on explorations at Jug Bay!

Understanding the immense value in reaching out to disadvantaged communities, Diane decided to put her fluency in Spanish to good use by offering to add a Spanish Immersion field trip to our formal education program offerings—the only Spanish Immersion formal education field trip available in the county’s regional parks. She has also been the driving force for integrating ESL students into our Classrooms in the Field

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## Dear Friends,

If you haven't attended our Soup & Science Series that we run every January, February, and March, then you are missing informative, entertaining, and provocative food for thought (pun intended). In January, Mel Fegler, JBWS naturalist and a founder of Pollinators Prospering People (PX3), talked about the importance of protecting pollinators. Her talk hit home with me, because I recently attended a lecture by Fritjof Capra, who spoke on the systems view of life: the idea that one cannot look at an isolated aspect of a system but must look at interconnectedness of the system as a whole.

Pollinators sit at the nexus of the plant world and the animal world. Plants perform a critical ecosystem service for all animals: they transform the sun's energy into food energy, especially for herbivorous and omnivorous animals. For the majority of plants, reproduction requires pollination and more than 20,000 insect pollinators besides bees to perform this ecosystem service. I think most of us take this for granted and assume that all is well in the insect world, since insects constitute the largest biomass of all terrestrial animals.

Most of you have heard about bee colony collapse. Media hype has pushed the need to stem the decline of honeybees as an environmental imperative. The question becomes, is it an environmental prerogative or an agricultural one? The hype diverts attention from the concomitant decline of wild pollinators who perform more than 50% of the pollination of commercial crops.

A recent paper in *Science* (v359, issue 6374, 26 Jan 2018) highlights the unintended consequences of conserving honeybees, and a *New York Times* article had the eye-catching title: "The German Amateurs Who Discovered Insect Armageddon." It describes a 20-year citizen science effort to measure the local biomass of insects. During this time they discovered that within 63 German nature preserves, the insect biomass declined by 75%. It is not an isolated study; others have documented causes of pollinator decline, like that of insect-eating birds, butterflies, amphibians, bats, etc.

More than 75% of the world's important food crops depend on pollinators. The fate of honeybees catches everyone's attention, since they have a huge economic impact on commercial food production and honey by itself is a large source of income. Bees even have their own Congressional lobbyists. Monocultures of nuts, fruit, and grain depend critically on the pollination services of commercial beekeepers for crop production. Butterflies also have cachet and have their own set of supporters (the Friends support the Butterfly Garden at the Glendening Preserve), but the other 18,998 pollinators have neither. Yet other research studies imply that managed bees may have a negative impact on wild pollinators. What are weeds to farmers are meadow flowers to others. Not only do pesticides introduce chemicals into the environment, they eliminate the very source of late-season food—pollen—for all pollinators, managed bees included. Correlative studies have shown that the decline commenced with the intensification of agriculture over a century ago. While millions of research dollars go to the study of honeybees, little to no money is expended for understanding the decline of wild pollinators that support the global ecosystem.

Capra pointed out that the advances in network theory are contributing fundamental insights into the functions of sub-ecosystems. A quick search on "pollination network" shows that this scientific approach is emerging. As with any new scientific method, the theory and observation go hand in hand. Theories advance based on the success of their application. Pollinator networks are large and data intensive and, hence, offer a great opportunity for citizen science contributions, as the German study has shown. In the past FOJB has supported butterfly phenology at Glendening. Perhaps it is time to extend these studies to other pollinators in the Sanctuary. With its various habitats and insect communities, the Sanctuary offers a marvelous opportunity for citizen scientists to be creative and innovative and to engage a larger community to make a contribution to understanding the most important food ecosystem of the planet.

Al Tucker, *President, Friends of Jug Bay*

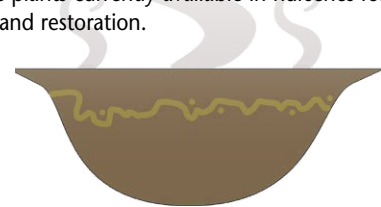
### Soup & Science

**Sunday, March 11, 12:00 pm - 3:00 pm**

Enjoy hearty homemade soup and fresh bread and catch up with friends and colleagues. Then sit back with dessert and enjoy listening to a guest speaker. Don't forget to bring your JBWS Soup & Science crocks and spoons! Don't yet have a crock? Purchase one for \$10 at the event.

**Register online at [www.friendsofjugbay.org](http://www.friendsofjugbay.org).**

Christopher Puttock of Chesapeake Natives, Inc., will discuss coastal plain plants of the Chesapeake Bay watershed, which has been altered by more than 300 years of clearing and cultivation leaving a patchwork of farm-fields, forests and fens. New pressures of different agricultural practices and urban development continue to deplete the native biodiversity of the region. Dr. Puttock will discuss the local ecotype native plants currently available in nurseries for gardens and restoration.



### We welcome new and returning FOJB members:

*Jerry Broggi  
Leo Dilling  
John Diver*

*Rose Jacobius  
David Niersbach  
David Orth-Moore*

# 2017 Jug Bay Accomplishments

## PROTECTED HABITATS

- Treated 60 ash trees against emerald ash borer.
- Partnered with AA County Weed Resistance.
- Built raingarden at education pavilion.
- String of Pearls recognition for land protection.
- Piloted new deer management strategy.
- 5.5 acres of meadow treated with prescribed grazing.
- 3 acres of invasives removed with prescribed grazing.
- 56 bags of trash removed.
- 88 bags of invasive plants removed.
- 22 10 cm+ DBH Ailanthus trees removed and treated.

## SCIENCE

- 3 research interns completed projects.
- 3 new projects from outside scientists.
- 9 Junior STEM Community Challenge students mentored.
- New snakehead research project.
- New otter monitoring program.

## Patuxent River Conference

120 participants from 60+ organizations

## PEOPLE

- First duathlon: 32 participants.
- 158 public programs delivered; 1,098 participants; 8,036 contact hours.
- 61 Classrooms in the Field (CITF) programs; 1,732 students reached.
- 6,972 vol. hours; value \$18.5 K.
- Young Volunteer Ron Blake Award to Matthew Payne.

## PUBLIC ACCESS/FACILITIES

- New trail at the Nature Preserve at Waysons Corner.
- Replacement of swamp blind boardwalk.
- Car counter at Glendening.
- New tractor.

**41,925 Total Visitors**  
**22% at JBWS Proper**

## New in education!

- New stewardship rotation in CITF programs: "Helping Hands for Healthy Habitats".
- First entirely teacher-led field trip.
- Transition to digital field trip applications.

**\$33K**  
**in grants!**

TEACHER: "CAN'T WAIT UNTIL NEXT YEAR! THANK YOU SO MUCH FOR HOSTING US AND PROVIDING SUCH A TOP-NOTCH PROGRAM"

# Hello from new JBWS staff member Diane Benedetti



New JBWS staff member Diane Benedetti at a Jug Bay river clean-up. Photo by Melinda Fegler.

**Hello!** Or, perhaps I should I say hello again! My name is Diane and I recently joined the JBWS team as the Naturalist and Outreach Coordinator. After working across the river at Patuxent River Park as an undergraduate student, I am thrilled to return to Jug Bay to hang out with the ospreys and educate visitors about this awesome ecosystem.

As a high school student I had the opportunity to participate in a Chesapeake Bay Foundation boat tour as part of a science program for young women, and to this day I remember thinking "Wow, you can get paid to drive boats and teach people about fish? What an awesome job!" Since then, I've been fascinated by the Chesapeake Bay and driven to educate people about the environment.

I graduated from Cornell University with a B.S. in Natural Resources and took a position educating child care providers about the benefits of including science education in preschool classrooms (It's never too early to start!). From there, I spent several years working in the residential solar industry where I tried everything from marketing to business development to customer experience.

Knowing that my true passion was still outdoors, I completed an M.S. in Environmental Science and Policy from Johns Hopkins University. Most recently, I've worked as an educator at the National Aquarium in Baltimore. In my free time, I love watching hockey (Go Caps!), practicing yoga, and hiking with my dogs. I'm grateful for the opportunity to return to Jug Bay, and I can't wait to get out on the water this summer!

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## Remembering a friend

# John “Bud” Taylor

John “Bud” Taylor, Jr., a wildlife artist and familiar friend to Jug Bay Wetlands Sanctuary, passed away peacefully on October 28, 2017. A memorial service was held for him at the Sanctuary last November, and it was filled to overflowing with people who knew and loved Bud—his nieces and nephews, naturalists, birders, artists, art students, musicians and others whose lives Bud touched.

Among the remembrances at the memorial service were those of former JBWS Superintendent Chris Swarth. Chris remembered meeting Bud in 1989 and getting to know him on occasional late afternoon birding strolls that they took out to Observation Blind and to the river. He recalled Bud as an excellent and careful birder, and they would talk about bird behavior and abundance as they walked, with Bud describing what things were like around the Chesapeake many years ago. Chris recalled Bud as a positive and quiet person who was a strong conservationist and active advocate for the Bay.

In an article written by National Recreation and Park Association Vice President for Strategic Initiatives Rich Dolesh for *The Bluebird*, Patuxent River Park Naturalist Greg Kearns recalled sharing with Bud a video of Wood Duck ducklings jumping out of one of the nest boxes he had installed along the Patuxent River. Bud was fascinated by the details and patiently spent hours and hours to see it happen for himself. Greg further remarked that there was no one else like Bud who put his heart and soul to painting the definitive portrait of a Sora Rail, spending as much time painting a secretive chicken-like marsh bird as he would his best work for a duck stamp entry.

Longtime Sanctuary friend and resident Judy Burke shared this remembrance: “Some years ago, when Rick and I were walking in the Sanctuary on a quiet evening, we met Bud doing the same. He told us to please ‘remember this day’—that it would be a comfort some day to recall the beauty of those moments. Ever since, when Rick and I are out on a particularly lovely walk, one of us will say, ‘It’s a Bud Taylor kind of day.’”

Jug Bay benefited greatly from Bud’s talent and generosity, and he will be missed.

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## Devil Cats

By Melinda Fegler, Jug Bay Wetlands Sanctuary Volunteer & Stewardship Coordinator and Pollinator Paparazzi

*Teufelskatzen* are not as uncommon as the German word appears. Here at Jug Bay Wetlands Sanctuary the *teufelskatz* or “devil cat” can be found more or less lounging in some of our favorite areas. The name *Megalopyge operculis* (aka Puss Moth Caterpillar, Perrito, or adult Southern Flannel Moth) translates informally, if not literally, to “big butt with a trap door” (insert giggle). The Puss Moth Caterpillar is one of the most venomous caterpillars found in North America; touching it causes a fierce sting that is often accompanied by nausea, vomiting, intense abdominal distress, and in extreme cases, shock. So don’t let this fur baby fool you—under that soft “wool” are piercing tubules waiting to give you more than a warning.

Next time you are wandering around Jug Bay, take time and extreme caution to look for not only this novel critter but other venomous caterpillars that have been found here. Caterpillars are mere eating machines—they remind me of the initial gastrula stage of a human embryo that is essentially a tube of cells connecting a proto-anus and mouth (ask me to tell you a funny joke about this sometime in mature company). However, unlike the human embryo that is nicely tucked away in a womb, the caterpillar is completely naked and afraid. So afraid in many circumstances that these caterpillars have adapted to “take things into their own crochets” and often have one or more defense strategies. Caterpillars can be as harmless as to appear as bird poop or a rotting leaf, have caretaker partner ant nannies, be bitter and unpalatable, cause a stomach ache



**Puss Moth Caterpillar (*Megalopyge operculis*) on the Sanctuary observation deck. Photo by Emily Cope.**

not to be forgotten by would be predators, or as with the subject of this piece, a sting in their ever changing tale.

Caterpillars are fascinating and satisfying to learn to identify, but learning how to identify these particular Sanctuary companions might serve you better than others. In the midst of the Sanctuary you will also find the Saddleback Caterpillar, *Acharia stimulea*, or Slug Moth, on a good number of host trees and shrubs. This caterpillar has a brilliant green saddle blanket with a small, brown English saddle over the middle of its back. Like other stinging caterpillars, the Saddleback Caterpillar has urticating hairs—hollow bristles filled with toxins from poison-gland cells—to ward off predators. Beautiful and dangerous, the Saddleback’s sting can cause similar symptoms as the devil cat with far less severity.

This summer add caterpillars to your ID fun while you are hiking here at Jug Bay and remember, don’t let the appearance of flannel fool you, look with your eyes and not your hands.



**Saddleback Caterpillar (*Acharia stimulea*). Photo by Pollinator Paparazzi.**

# PUBLIC PROGRAMS AT JUG BAY - SPRING 2018

## Open Hours:

**Sanctuary Wetlands Center:** Wednesdays, Fridays, Saturdays, and (Mar-Nov) Sundays  
9:00 am - 5:00 pm

**Glendening Nature Preserve:** Wrighton Road entrance daily, gate open 9:00 am - 5:00 pm; Plummer House entrance Monday to Saturday, gate open 9:00 am - 5:00 pm (trails, Butterfly Garden, dogs on leash)

**Patuxent Wetland Park:** daily, dawn to dusk (fishing, hand-carried boat launch)

**Wootons Landing Wetland Park:** daily, dawn to dusk (fishing, loop trail, hand-carried boat launch)

**Sanctuary Wetlands Center admission fee:** \$6/vehicle

Free for current Friends of Jug Bay members, active volunteers, and active military and their immediate families.

There are no fees to visit our other sites.

Visit [www.jugbay.org](http://www.jugbay.org) for directions, information and updates to our schedule.

Registration is required for all programs. Please call 410-741-9330 or e-mail [programs@jugbay.org](mailto:programs@jugbay.org) to register, or, in the case of ActiveNet programs, register online at <https://apm.activecommunities.com/aarecparks>. All programs meet at the Wetlands Center at 1361 Wrighton Road unless otherwise noted. An adult must accompany children under 13.

## Guided Bird Walks

*First Saturday of every month, 8:00 am - 11:00 am*

**Ages: 12 and older**

**Fee: \$6/vehicle entrance fee**

Learn the skills of identifying birds by sight and sound. Binoculars and field guides are available to borrow. Wear comfortable walking shoes and dress for the weather. **Registration required: Call 410-741-9330 or e-mail [programs@jugbay.org](mailto:programs@jugbay.org). If e-mailing, please include program name, participant name(s) and whether adults or children, and contact phone number.**

## Praying Mantis Prowl (Glendening Nature Preserve)

*Saturday, March 3, 1:00 pm - 3:00 pm*

**Ages: 10 and older**

**Fee: \$6/individual (ActiveNet Activity #12817)**

Learn about the wonderful world of Maryland mantids. Hike with Naturalist Liana Vitali to experience hands-on conservation. Participants will learn about the Carolina Mantis (*Stagmomantis carolina*) native to Maryland and hike the meadows to locate and safely remove praying mantis egg cases before the meadow mowing season in late spring. Dress for the weather. **Registration required through ActiveNet.**

## Volunteer Training Day (Glendening Nature Preserve)

*Saturday, March 3, 9:00 am - 12:00 pm training, followed by 1:00 pm - 4:00 pm vernal pool hike*

**Ages: 15 and older, but many opportunities are family friendly**

**Fee: Free**

Come be part of the amazing volunteer team at Jug Bay Wetlands Sanctuary! Participants will learn about the volunteer, stewardship and citizen science opportunities here at Jug Bay. This training will focus on vernal pools, butterfly phenology, and bumble bee monitoring. Training will be followed by vernal pool monitoring.

**Registration required: Call 410-741-9330 or e-mail [programs@jugbay.org](mailto:programs@jugbay.org).**



## Woodcock Watch

*Saturday, March 3, 5:30 pm - 6:30 pm*

**Ages: 10 and older**

**Fee: \$6/vehicle entrance fee**

Join volunteer Master Naturalist Mike Quinlan on a late winter evening to observe the "sky dance," as Aldo Leopold put it, of the male American woodcock. This annual mating ritual takes place right in the meadow. Dress for the weather. **Registration required: 410-741-9330 or e-mail [programs@jugbay.org](mailto:programs@jugbay.org).**



## Patuxent Wetland Park Clean Up (Patuxent Wetland Park)

*Saturday, March 10, and Saturday, April 7, 9:00 am - 1:00 pm*

**Ages: 8 and older**

**Fee: Free**

Meet up at Patuxent Wetland Park, located under the highway Rt. 4 bridge at 1426 Mt. Zion Marlboro Rd, Lothian, MD 20711. Join us to keep this great "fishing hole" clean. We will collect trash on the mile-long stretch and parking area to ensure safe fishing and paddling and a clean habitat. We will provide gloves and bags, but please bring water, snacks, a hat, old clothes, and shoes. **Registration required: 410-741-9330 or e-mail [programs@jugbay.org](mailto:programs@jugbay.org).**

## Volunteer Naturalist Open House

*Saturday, March 10, 10:00 am - 12:00 pm (coffee and refreshments provided)*

**Ages: 18 and older**

**Fee: Free**

Share your wonder for the Maryland natural world with learners of all ages! We are currently recruiting Volunteer Naturalists to lead our 2- to 4-hour Classrooms in the Field outdoor field trip programs for students K-12 in the spring, summer, and fall. Choose the programs and age groups that most interest you and receive in-depth content and safety training by Sanctuary Staff Naturalists and shadow a field trip before leading a group on your own. Additional benefits include free admission to Jug Bay as an active volunteer, access to research opportunities not available to the general public, and professional development support from the Friends of Jug Bay. Volunteer Naturalists receive two in-house trainings/professional development courses each year with themes centered around current research efforts at the Sanctuary.

**Registration required: Call 410-741-9330 or e-mail Liana Vitali at [rpvita23@aaccounty.org](mailto:rpvita23@aaccounty.org) with your name, e-mail address, and cell phone number.**

## Beaver/Otter Hike

Saturday, March 10, and Saturday, April 7,  
5:00 pm - 7:00 pm

Ages: All

Fee: \$6 per vehicle entrance fee

Early evening is a good time to look for beavers and otters! Chuck Hatcher, one of our experienced Friends of Jug Bay Volunteer Naturalists, will walk you through the woods to the Beaver Pond to look and listen for activity of these amazing creatures while sharing some interesting facts! Bring a flashlight. **Registration is required, and participation is limited to 12 people:** Call 410-741-9330 or e-mail [programs@jugbay.org](mailto:programs@jugbay.org) to reserve your spot.

## Soup and Science Lecture Series

Sunday, March 11, 12:00 pm - 3:00 pm

Ages: 16 and older

Fee: \$6/vehicle entrance fee

Enjoy hearty homemade soup and fresh bread and catch up with friends and colleagues. Then sit back with dessert and enjoy listening to our guest speaker.

Register online at [www.friendsofjugbay.org](http://www.friendsofjugbay.org).



## Amazing Ospreys

Saturday, March 24, 10:00 am - 11:30 am

Ages: 6 and older

Fee: Free for Friends of Jug Bay members, \$6 per person for non-members, park admission included

Join experienced Volunteer Naturalist Diane Goebes to learn about the amazing osprey who arrive at Jug Bay each spring. We'll have a short presentation, followed by a walk to observe ospreys in the wetlands. Dress for the weather, and be prepared to walk about 2 miles.

## Equinox Hike

Saturday, March 24, 5:00 pm - 7:30 pm

Ages: 8 and older

Fee: \$5 per person/maximum \$15 per family, park admission included

Join Master Naturalist Mike Quinlan for a leisurely hike through the Sanctuary to see and hear the signs of spring. Wear shoes that can get wet and muddy, just in case. Binoculars and cameras are always a good idea. We'll end by watching the sunset from the Observation Deck.

**Registration required:** Call 410-741-9330 or e-mail [programs@jugbay.org](mailto:programs@jugbay.org).



## Spring Break in the Park

Thursday, March 29, 9:30 am - 3:30 pm

Ages: 8-12

Fee: \$30/child (ActiveNet Activity #12830)

Spend a day of Spring Break exploring Jug Bay Wetlands Sanctuary! Participants will hike the woods, dip net in a vernal pool, search for wildlife, complete a nature service project, and make a nature craft. Bring a bag lunch and a pair of waterproof boots or footwear that can get wet. Dress for outdoor exploration! **Registration required through ActiveNet.**

## Big Bad Fishing Fun Day (Patuxent Wetland Park)

Saturday, April 7, 8:00 am - 5:00 pm

Ages: 4 and older

Fee: \$10 entry fee

Meet up at Patuxent Wetland Park, located under the highway Rt. 4 bridge at 1426 Mt. Zion Marlboro Rd, Lothian, MD 20711. Help manage invasive fish populations on the Patuxent River. Winner collects the most weight of all invasive fish collected out of the water on this day. We want the big and the bad, size does not matter. \$50 goes to the winner. **Registration will begin at 7:30 am**, and the winner will be announced at 5:30 pm. Fish must be chilled and will be collected when weighed for our Taste of the Wild event.



## Volunteer Training Day

(Glendening Nature Preserve)

Saturday, April 14, 9:00 am - 12:00 pm training

Ages: 12 and older, but many opportunities are family friendly

Fee: Free

Come be part of the amazing volunteer team at Jug Bay Wetlands Sanctuary! Participants will learn about the volunteer, stewardship and citizen science opportunities here at Jug Bay. This training will focus on goat husbandry, butterfly phenology, and bumble bee monitoring. After the presentation we will visit our prescribed grazing goats and hike on our beautiful trails to test your skills. **Registration required:** Call 410-741-9330 or e-mail [programs@jugbay.org](mailto:programs@jugbay.org).

## Survival Skills Series Part I:

### Orienteering

Saturday, April 14, 1:00 pm - 3:00 pm

Ages: 14 and older

Fee: \$8/individual (ActiveNet Activity #12818)

Join experienced orienteer and Jug Bay volunteer Dave Linthicum in a fun, hands-on field experience to learn "old fashioned" orienteering skills for finding your way in the forest. In this era of "Hey Siri, Open Maps" and GPS-smart phone navigation and compass apps, park rangers are reporting more lost hikers than ever and serious atrophy in the "old time" skills. Easy-to-use color maps will be provided, as will compasses if you don't bring one. Dress for the weather as you will be outside for the entire program. Maximum number of participants: 20. **Registration required through ActiveNet.**

## Survival Skills Series Part II:

### What's On Your Pack?

Saturday, April 21, 10:00 am - 12:00 pm

Ages: 14 and older

Fee: \$8/individual (ActiveNet Activity #12819)

Join our Recreation and Parks Chief of Natural and Cultural Resources and experienced member of the Anne Arundel County Search and Rescue Team Chris Carroll for a fun hands-on program at Jug Bay to learn some basic survival skills. Have you ever wonder what you really need to put in your backpack before going out for a hike in the woods? Well, this is the program for you!! With Chris, you will learn the answer to this question and practice how to use each of the items you have packed. Maximum number of participants: 15. **Registration required through ActiveNet.**

## Jug Bay Film Premiere:

### *Jug Bay Farm: An Enduring Legacy on the Patuxent*

Sunday, April 22, 1:00 pm - 4:00 pm

Ages: All

Fee: Free

Join us for the showing of the first Jug Bay film produced to document and preserve the history and evolution of one of the Sanctuary properties, the Jug Bay Farm, also known as the Riggleman Nature Preserve. Produced and directed by Peter M. Perry with historical research from Pat Melville and other Jug Bay volunteers, the film will take us through time to tell the story of the Jug Bay Farm and its vineyard, a legacy from the Riggleman family. Coffee/tea and pastries will be provided to enjoy while watching the film! Ken Riggleman, Peter Perry, and Pat Melville will be our guests and will introduce the film and answer questions after the showing. Optional: participants are welcome to drive to Jug Bay Farm for a short visit of the property.

Registration required: Call 410-741-9330 or e-mail [programs@jugbay.org](mailto:programs@jugbay.org).

## Canoe Guide Training

Saturday, April 28, 10:00 am - 4:00 pm

Ages: 18 and older

Fee: Free

Do you love to get out on the water? Here is your chance to share your love with others by helping to lead canoe and kayak trips on the Patuxent River. New and returning canoe and kayak volunteers are required to attend our canoe training session before leading trips. Dress accordingly to enter the water for wet exits and rescue demonstrations. Please arrive 15 minutes before the start time. Bring plenty of water, lunch/snack, sunscreen, sun hat, sunglasses, a set of dry clothes, and closed-toe shoes that can get wet. Paddling experience required. Rain date May 5. Registration required: Call Debra at 410-741-9330 or e-mail [rpgage00@aacounty.org](mailto:rpgage00@aacounty.org). Required registration form can be downloaded at [www.jugbay.org](http://www.jugbay.org).



## Forest Preschool

Monday, May 21 through Friday,

May 25, 9:00 am - 12:00 pm

Ages: 4-6;

children must be potty trained

Fee: \$125/week

(ActiveNet Activity #13437)

Let your child's natural-born curiosity bloom alongside our meadow wildflowers this spring during our week long Forest Preschool program. Rain or shine, we'll spend every morning outdoors engaged in hands-on, nature-themed play and activities designed to encourage independent thinking, observation, and discoveries in the natural world.

Registration required through ActiveNet.

Photo by Phillippe Put.



## The Archaeology of Glendening Nature Preserve: A Hike through History (Glendening Nature Preserve)

Saturday, May 5, 9:30 am - 11:30 am

Ages: 12 and older

Fee: \$8/person (ActiveNet Activity #12820)

Join two expert archaeologists from the Anne Arundel County Cultural Resources Division, M.A.A. Stephanie Sperling and Dr. Zachary Singer, to hike through the Glendening Preserve and learn about the archaeological and cultural history of this property ranging from early occupations over 10,000 years ago to historic times. Stephanie and Zac will talk about how these archaeological sites inform us about past ways of life for people occupying the landscape of the Glendening Nature Preserve. We will meet at Glendening Preserve, Wrighton Rd. Entrance: 1290 Wrighton Rd, Lothian, MD 20711. Participation is limited to 12 people.

Registration required through ActiveNet.

## Survival Skills Series: Part III:

### Basic Foraging

Saturday, May 12, 10:00 am - 12:00 pm

Ages: 14 and older

Fee: \$8/individual (ActiveNet Activity #12821)

Join Anne Arundel County Superintendent of Trails and active Search and Rescue team member Adam Smith for a fun hands-on adventure to learn some basic foraging skills. Adam will take you for a hike in the forest to search and identify edible plants and fruits and any other sources of food while learning some fun facts about the different species. Participation is limited to 15 people.

Registration required through ActiveNet.

## Exploring Jug Bay Riggleman Nature Preserve

Saturday, May 26, 9:30 am - 12:30 pm

Ages: 12 and older

Fee: \$6/vehicle entrance fee

Get acquainted with a future part of the Sanctuary: the Jug Bay Riggleman Nature Preserve. Our guide Ken Riggleman will take us through the forest and along the stony shore known as "Axhead Beach" and tell us all about this wonderful property, including its history! Wear shoes that can get muddy. We'll meet at the Sanctuary Wetlands Visitor Center and drive to the site in a caravan.

Registration required: call 410-741-9330 or e-mail [programs@jugbay.org](mailto:programs@jugbay.org).

## Marsh Ecology by Canoe

Saturday, May 26, 10:00 am - 2:00 pm

Ages: 7 and older

Fee: \$20 (ActiveNet Activity #12837)

Discover the abundant wildlife in the Patuxent River wetlands. We'll paddle up some of the smaller branches of the river to look for beavers, birds, and flowering wetland plants. Please arrive 15 minutes before the start time. Bring plenty of water, sunscreen, sun hat, sunglasses, a lunch, and shoes that can get wet.

Registration required through ActiveNet.

## Winter donations:

Mike Quinlan, waders





programs and has facilitated field trips with Spanish immersion schools not just from Maryland but from Washington, DC, as well. In addition, Diane is a founding member of the Jug Bay Education Advisory Committee that convenes semi-annually. Her background in child psychology has been invaluable, in particular as we seek to better integrate students with special needs into our programs.

Empowering women to be comfortable in the outdoors has also been a passion of Diane's. She has helped to develop and lead two women-centered programs: Women on the Water and Women of the Woods. Both programs celebrate camaraderie among women against the beautiful Jug Bay backdrop.

A champion for osprey conservation and education, Diane has also developed and led an Awesome Osprey program for children and their families for the past several years. She shares her knowledge on the species' incredible migratory journey, unique fishing abilities, and tender care of their chicks. But she won't be stopped at osprey! Her Amazing Amphibians has been a hit for years as well. Watching her take off down the trail towards our vernal pools with children, families, and multiple dipnets and specimen tanks in hand is truly a sign each year that spring is around the corner.

Her dedication to environmental education doesn't end on land. Diane has been a Canoe Guide at Jug Bay for several years. She recently completed American Canoe Association Trip Leader Certification, where she was trained in several paddling techniques and in-water rescues. She is entrusted by Jug Bay staff as well as the entire Recreation & Parks Department of Anne Arundel County to lead water-based programs at Jug Bay and across the county. She's quick to follow up with post-trip briefings and suggestions for future improvements and share a good laugh or highlight of the day.

### Pati's Reflections

Those who know **Lloyd Lewis** agree that he is an exemplary and dedicated Jug Bay volunteer, not only because of the many hours he gives every year, but because of the passion and commitment reflected in his work. Lloyd started volunteering at Jug Bay around 1994, adding to 24 years of service!! As an avid birder, he helped with the establishment of the now long-term monitoring avian productivity and survivorship (MAPS) songbird netting study. Soon after, however, he began cultivating and soon became the lead and "heart" of the South County Community Garden, found at Jug



**Lloyd in the potato patch at the South County Community Garden, Jug Bay Wetlands Sanctuary. Photo by Matthew Cole, Capital Gazette.**

Bay's River Farm. In the initial years of the garden, Lloyd was instrumental in setting up the electric fence that protects the garden from herbivory, installing the greenhouse, and getting the equipment and materials needed to operate the garden. Since then, Lloyd has worn many hats: gardener, manager, teacher, mechanic...

For many years Lloyd has engaged garden members of all ages and taught them the art of growing a vegetable garden. He particularly enjoys working with the little gardeners! In this "green playground" there is always much to learn and much to do! Since its inception, the idea was to use this field to grow vegetables in an environmentally sensible way, and Lloyd has honored that principle by following good environmental practices, making it even more valuable as a teaching tool for those who want to learn.

The South County Community Garden is not just any garden, thanks to Lloyd and all of its members; it is probably the only one within the county that donates most of its produce to various community organizations, including the South County Senior Center. The list of vegetables and fruits produced in this 4-acre plot is long: tomatoes, potatoes, cucumbers, melons, peas, asparagus, peppers, eggplants, garlic, all sorts of greens, strawberries, blackberries, sunflowers, etc. Some of these we have enjoyed in the Friends of Jug Bay's signature fundraiser "Taste of the Wild"!

It is impossible to think about the garden and not think about Lloyd. If you find yourself there, you will most probably find Lloyd tending to the plants, the water lines, the tractors, or what not, just enjoying himself in the small green patch he and his dedicated members have cultivated through the years. His hard work has made a great contribution to the Jug Bay community.

### Winter Volunteers at JBWS:

Dick Blass	Nathan Hepp	Leigh Sellari
Jessie Bradley	Darcy Herman	Mary Kay Sistik
Pete Bradley	Rose Jacobius	Bob Smith
Cynthia Bravo	Dave Larrabee	Chris Taylor
Alan Christian	Joe Mankowski	Pete Uimonen
Regan Christian	Madeleine Mankowski	David Watts
Sylas Cox	Chuck McClain	Robert Williams
Patricia Crandell	Rob McEachern	Sea Williams
Dave Davis	Pat Melville	
Michelle DeTolla	Anne Muecke	During the winter,
Victoria DeTolla	Manfred Muecke	737 volunteers
Kim Elliot	John Norris	logged 153 hours,
Erin Engstrom	James Oland	a contribution
Lee Fisher	Matthew Payne	worth over
Elaine Friebele	Siobhan Percey	\$19,478!
Joyce Gillespie	Michael Quinlan	
JudithAnn Hartman	Gordon Reynolds	
Chuck Hatcher	Doris Schmidt	

*Thank You!*

Explore our volunteer opportunities online at <http://www.jugbay.org/volunteer>. For more information, call 410-741-9330 or e-mail Volunteer & Stewardship Coordinator Melinda Fegler at [rfegL00@acounty.org](mailto:rfegL00@acounty.org).

Jug Bay is one of the three components in the Chesapeake Bay National Estuarine Research Reserve, Maryland. The purpose of CB-NERR is to manage protected estuarine areas as natural field laboratories and to develop a coordinated program of research and education as part of a national program administered by National Oceanic and Atmospheric Administration (NOAA).

**STAFF**

**Jennifer Raulin, Reserve Manager**  
410-260-8745  
jennifer.raulin@maryland.gov

**Sasha Land, Coastal Training Program Coordinator**  
410-260-8718  
sasha.land@maryland.gov

**Kyle Derby, Research Coordinator**  
410-260-8724  
kyle.derby@maryland.gov

**Chris Snow, Stewardship Coordinator**  
410-260-8731  
chris.snow@maryland.gov

**Coreen Weilminster, Education Coordinator**  
410-260-8744  
coreen.weilminster@maryland.gov

**Trystan Sill, Education Assistant**  
410-260-8827  
trystan.sill@maryland.gov

**Becky Swerida, Research and Stewardship Assistant**  
410-260-8762  
rebecca.swerida@maryland.gov

**Website:** <http://dnr2.maryland.gov/waters/cbnerr>



Check out the  
CBNERR-MD web page at  
[www.dnr.state.md.us/bay/cbnerr](http://www.dnr.state.md.us/bay/cbnerr)

## Ch-ch-changes: Research Reserve Updates

By Jenn Raulin, *CBNERR-MD Reserve Manager*

The theme of this spring's Reserve article is inspired by my David Bowie Pandora station—oh, and the season too! I just love this time of year, still energized by the blank slate the New Year brings, inspired to make changes for the better...and anxiously awaiting the change to spring: warmer weather, spring peepers, and bud bursts. Change is afoot at the Research Reserve as well, and I'm thrilled to be sharing some exciting updates.

**Staffing.** The New Year brought us a new Research Coordinator (see bio below). In September 2017, we said farewell to Jenny Allen, our Research Coordinator for 3 years. Jenny and her family had a “can't miss” opportunity to return home to New England, and we wish her the best. Jenny now lives close to our sister Reserve in Waquoit Bay, so I suspect this isn't a goodbye, but a see you later. Jenny was integral in securing our role in a NERRS Science Collaborative grant studying the application rates of sediment in a marsh

restoration technique called thin layering.

**Site Improvements.** Did you know that the Research Reserve is made up of three components? Jug Bay and Otter Point Creek make up our Western Shore sites, but we have another site on the Lower Eastern Shore. Monie Bay is located between Princess Anne and Deal Island in Somerset County. Monie Bay has long suffered from lack of access and infrastructure, but that is about to change. In October 2017, we received a grant from NOAA to implement site improvements at our Drawbridge Farm property to improve water, road, and safety conditions at the site. In addition, we will begin work designing a field station at the site to drive research and open up opportunities for educational programming in Somerset County.

**Communications.** The Research Reserve is making moves to improve the visibility of our programs and our data. We'll be launching a new and improved Coastal Training Program website, [www.dnr.state.md.us/bay/cbnerr](http://www.dnr.state.md.us/bay/cbnerr).



**Aerial photo of Drawbridge Farm, part of the Monie Bay component of the Chesapeake Bay National Estuarine Research Reserve. Photo by Coreen Weilminster.**



*Photo of Focus*

**Featured Photographer:  
Wayne Bierbaum**

“I come to Jug Bay because frequently and with seasons, there is always something to see. In mid September of 2016, I was witness to the emergence of young Green Tree Frogs. Hundreds and hundreds were climbing up the shoreline plants. When I found a well-positioned frog, I very slowly extended my arm and camera toward it and had the viewfinder focus indicator flash on one of its eyes and as the camera got closer and closer I would take several shots. From that one hour I spent with the frogs, I have several hundred photos. More shots from Jug Bay are in flickr albums: <https://www.flickr.com/photos/rivadock4/> and I have a presence on facebook: Wayne Bierbaum Photography.”

**Green Tree Frog (*Hyla cinerea*) by Wayne Bierbaum.**

*Wayne Bierbaum*

*continued from page 10*

coastaltraining-md.org, which will allow for a more pleasant user experience when registering for our programs and will help us better communicate with you! In addition, over the course of the year, we will be rolling out our System Wide Monitoring Program Status Reports, which will help us tell the data story of our water quality and the health of our marshes. The System Wide Monitoring Program is a long-term continuous monitoring effort to track environmental change over time.

We will continue to keep you all abreast of these initiatives and more throughout the year. And while the faces of the Reserve may change, and the political landscape may change, and yes, even the physical landscape will change, the Reserve will continue to drive forward its mission to empower and inspire stewards of Maryland’s natural places by studying, teaching, and connecting people to estuaries.

**CBNERR Welcomes  
New Research  
Coordinator Kyle Derby**

Originally from Ellicott City, Kyle began his lifelong interest in the Chesapeake Bay watershed during fishing trips with his family. His love of the Bay, and especially its wetland fringes, grew as he learned about how important they are for the overall health of the ecosystem. Kyle received a B.S. in Environmental Restoration and Management from the University of Maryland, College Park, and afterwards worked as an environmental scientist in the private sector before spending over 4 years working for the U.S. Geological Survey studying the impacts of sea level rise on marsh elevation and health. He then returned to UMD and received his M.S. in Wetland Science in 2016. Before joining the Department of Natural Resources, Kyle worked with the Smithsonian Environmental Research Center and Maryland Sea Grant as a biolog-



**CBNERR-MD Research Coordinator Kyle Derby. Photo by Andy Baldwin.**

ical technician and wetland research assistant, respectively. Kyle’s lifelong love of getting dirty in the marsh during research brought him to his current position as Research Coordinator for Maryland’s Chesapeake Bay National Estuarine Research Reserve. Kyle lives in Silver Spring with his wife Lisa.



DEPARTMENT OF RECREATION AND PARKS

**Jug Bay Wetlands Sanctuary**  
**1361 Wrighton Road**  
**Lothian, MD 20711**  
**410-741-9330**



SPRING  
2018

SAVE THE DATE

## *Native Plant Sale*

**Glendening Nature Preserve**

*Saturday, June 2, 9:00 am - 3:00 pm*

Come to the Friends of Jug Bay's annual spring fundraiser and purchase native perennials, trees, shrubs, grasses, and other plants that support native wildlife.

