



# Cattails



7130 Marshy Point Road, Middle River, MD 21220  
www.marshypoint.org | 410-887-2817

## The Marshy Point Nature Center Council's Newsletter March-April-May 2023

### Special Event Highlights: Spring Festival & Trail Guide Training

**Spring Festival (April 15th, 10am-4pm):** Celebrate spring's arrival with crafts, games, egg hunts, food, animal chats, live music, boat trips, and more! Admission and parking are free; activity costs vary.

**Trail Guide Training (March 22-24, 10am-1pm):** Baltimore County parks are looking for volunteers. This training will familiarize you with our programs, history, and ecosystems. 3/22 at Marshy Point, 3/23 at Cromwell Valley Park, 3/24 at Loch Raven Fishing Center. \$5/new volunteer; free for returning. Refreshments provided; please bring water.

### Healing from the Earth

Daniel Dean

Hopkins' Chalybeate Water doesn't seem like the best name for a drink's marketing campaign, but it does define two major aspects; one aspect is who produces the product while the other aspect is what you can expect in the product.

In the mid 19th century, William Hopkins owned a mineral well, located near Baltimore County park property on the northwest side of the nature center'. During this time, mineral springs dotted Maryland while many searched for a "cure all" to everyday ailments.



Chalybeate is a natural mineral spring that contains iron salts. According to the Surgeon General's Office Library copy of the analysis and certificates, we derive a good description of the well from a 1858 pamphlet completed by John W. Woods—the same printer and publisher of Woods' Baltimore City Directory. The pamphlet states:

The well was dug in 1855, and is 80 feet deep; the Water standing within 8 feet of the surface of the earth. Numerous experiments made in order to test the supply of Water, only confirm the opinion that it

is inexhaustible. The soil in which the well is dug, is a tenacious Red Clay variegated with frequent strata of Magnesian Earth, and the Water rises through the original Sand Stone Rock. Its temperature when drawn from the well is 52° Far."

Its claims include being a "curative in Dyspepsia, loss of Appetites, Indigestion, Extreme Debility, and in various Atonic and Anemic conditions...". Of the ingredients, the prominent component is Carbonate of Protoxyd of Iron, and Free Carbonic Acid Gas; they note that it is "very remarkable" that there is no Sulphur in the mix.

Our display case in the nature center's auditorium has a recent donation of one of the bottles produced after the 1860s. You can partially date a bottle by the presence or absence of a pontil mark, a scar where the bottle was broken away during free hand glass blowing at the base. We would like to thank the Reiner Family for this fantastic example, found prior to Baltimore County Recreation and Park's Marshy Point Park acquisition, and for keeping it with care. If you find any historic artifacts along your park travels, please leave the item in place, contact staff, and alert them to its location.



Feeling feisty? Looking for an awesome adventure? I have just the thing for you. Take your kayak to Northpoint State Park or anywhere in Edgemere where you can access the water, and head out to Hart-Miller Island. It's about a four-mile paddle to the ranger station from Northpoint. If you prefer a shorter paddle, launch out from Rocky Point Park—it's only about a mile. The ranger station is on the south cell of the island. The park offers free bike rentals for adults and kids. You can circumnavigate the island on a dirt and gravel trail that is mostly flat and easy to ride (the rental bikes are one speed with pedal brakes; they are all you will need for this terrain). You may want to bring a simple bike tool—think a set of allen wrenches—to adjust seat height. There are additional trails that crisscross the island, creating a total of eight miles of trails. On an early fall trip, I saw a magnificent gray fox, a half dozen eagles, at least as many ospreys, several great blue herons, and more cormorants than I can count. Horned grebes, common loons, and diving ducks are frequently spotted, as well as migratory songbirds such as tanagers, warblers, and vireos. There is an observation tower that provides a 360-degree view; the island's camp store is open during the season from May 1st to September 30th, but is closed on Tuesdays and Wednesdays.

Hart-Miller Island is a marvel of both man-made and natural engineering. It is a 1100-acre island in Baltimore County, Maryland, just off the mouth of Back River in the northern part of the Chesapeake Bay. It was physically connected to the Edgemere neighborhood as a peninsula, but storms and wave erosion separated the island from the mainland and split it into two pieces. In the early 1950s, another portion of Hart Island was separated and is now known as Pleasure Island. You will pass Pleasure Island on your way to Hart-Miller. In the early 1800s, Joseph Hart, an Englishman who established himself as a wealthy landlord and tavern owner in Baltimore, purchased the now eponymously named tract. Legend has it that he buried gold on the land due to his distrust of banks.

The islands were acquired by the Bethlehem Steel Corporation and C.J. Langenfelder & Son Inc. In an example of corporate generosity, they conveyed both islands to the Maryland Department of Natural Resources (DNR) in 1977 and 1978. In 1981, the

state began an ambitious project to reconnect the islands by constructing a massive earthen dike around both and filling the impoundment with dredged material from the Baltimore Harbor; this was a controversial issue. Environmentalists and neighbors were concerned about dumping possible toxic residue in this unspoiled area. They feared the consequence of a breach in the impoundment. They argued that if the state dumped dredged material in an affluent area, armies of well-heeled lawyers would move to stop the dumping. However, since Back River residents were not wealthy, they argued no one cared. Lengthy, and ultimately unsuccessful, litigation ensued. The project was completed in 1984 when the southern part of the island was filled; the once two separate islands became one. The perimeter was completed in 1984 and the southern part of the island was considered to be filled to capacity with nearly 16 million cubic yards of dredged material by 1990. The island's northern part is still being used to accept dredged material.

Every year, an additional 4 million yards of soil is removed from the Baltimore Harbor to maintain a 50-foot-deep channel. This material is now added to the north cell, which is closed to the public. When the dredged material was initially examined, more than 1000 pieces of ordinance were discovered. Some of them still contained gunpowder and had to be detonated. They ranged in size from grapeshot to a 15-inch-diameter cannonball weighing over 300 pounds.

Perhaps ironically, the impoundment established a wetland, mudflat, and open water paradise. It hosts an extensive bird population and provides a stop for migrating birds. Over 300 species of birds have been observed since the Island became a park. If kayaking there and back in one day is too much for you, there are twenty-two campsites available on Hart-Miller and five others available on nearby Pleasure Island. Camping is available from May 1st to September 30th. Of course, the island is also reachable by boat and is a popular stop for sailors and boaters.

Carl Gold is a Maryland Master Naturalist and can be reached at [cgold@carlgoldlaw.com](mailto:cgold@carlgoldlaw.com).

Typically, this time of year I become a bit peaky with a touch of the cabin fever. However, with the amount of mild days we have had, I cannot say that I feel the least bit restless. I tell you, the wildlife have been capitalizing on these 40-50 degree days as well. I write this immediately after a Hermit Thrush gobbled up an American Holly berry outside my office window. Staff have also observed Beaver, Coyote, Tundra Swans, Gadwall and the splendid Ruby-crowned Kinglet to name a few.

The sun's arc is slowly but surely rising higher each day above the creeks as the staff have been doing great work in the park and nature center. Winter allows us to catch up on projects inside the nature center and maintenance on the trails and prepare for the explosion of life, field trips and events in the springtime. One new item that I am excited about is the updated school and group program form. This form now has a list of the programs that we offer to schools and other groups. Some programs you will recognize from our catalog from years prior like the "Gateway to the Bay" program where we cover estuaries and the Chesapeake Bay watershed. Yet, we also have several new topics and themes that staff are excited to engage the public with such as "Beginners Botany," or "The Energy Flow," where we will be discussing how energy moves through an ecosystem. Our school and group programs have an indoor component but all of them will primarily be outdoors with a focus on first-hand encounters and observations for the participants.

Well, it turns out eels love hiding in PVC. I would imagine it is very similar to a natural hide in the wild, being able to fully cover their cylindrical bodies from would be predators. This eel fort, if you will, was assembled and placed into our

Chesapeake Bay tank. As you can see, the eel fort receives one fin—continuously stretching around the tail—up.

Along with the pleasure of creating new and enriching opportunities for the public and animal ambassadors, we have been able to perform some wonderful programs through the winter months. The Holiday Open House was a grand old time filled with wreaths, ornament, and chocolate making. I had a hoot seeing all of the happy faces as they came in to partake in the festivities. Another weekend program I would like to mention is the Winter Scavenger Hunt that had a whopping 240 people register. These participants guided themselves to nature observation and exploration of their local park. That is a wonderful way to spend ones weekend afternoon if you ask me.

I am still holding out for a heavy snow to blanket the Dundee and Saltpeter Creeks before March time, but I am glad to have been able to reap these warm days as they come to us. As always, I'll be seeing you all out on the trails.



After this winter, there's no doubt that climate change is starting to affect our area. As comfortable as it was to hike in January of this year, I missed having some snow and being able to get out on the ski slopes a few times. Let's continue to do our part by thinking globally and acting locally. If you haven't made any changes to act locally, consider reducing the amount of meat your family eats. When you need a new car, make sure it is electric

or, at least, gets better gas mileage than the vehicle it's replacing. Use less plastic—studies are showing that very little plastic is actually recycled. Buy clothes from a second-hand store. Instead of buying a gift for a family member "who has everything," make a donation to your favorite nature center. I hope to see lots of you at the Spring Festival and out on the trails soon.

Who hasn't watched a butterfly either in flight or at rest and marveled at its beauty? Who doesn't want more butterflies in their yard? There is one simple thing anyone can do to attract more butterflies: plant native trees and plants.

Many butterfly caterpillars will only eat a very limited menu of plants. The Baltimore Checkerspot, the state butterfly, eats only white turtlehead, plantain, and viburnum. The stunning monarch feeds only on milkweed. No milkweed, no monarchs. Most butterflies have not adapted to feed on nonnative invasives that are so prevalent in our fields, woods, and our homes.

Understanding the life cycle of butterflies demonstrates the importance of natives. Over thousands of years, insects, animal and plant life evolved in a codependency based in part on geography and in part on climate. Certain plants and trees bloom, flower and leaf out at certain specific times that match, for example the emergence of caterpillars. At the same time, migrating birds are passing through and birds that stay all year are hatching their eggs. The caterpillars eat the leaves of the native trees and plants, and the birds eat the caterpillars. If this cycle is interrupted, or if the host plants and trees have been replaced by non-natives, there is no food and species become endangered or fail entirely, region by region.

A single butterfly will lay between one hundred to three hundred eggs (some will lay as many as a thousand). They will only lay them on a host plant that looks and feels right—right color, right leaf shape. If you see a butterfly touching her abdomen to a leaf, she is likely laying eggs. Skippers, a small frenetic group of butterflies, drop their eggs as they fly over the right type of native grass. Only a small percentage of these eggs will survive as they, just like the caterpillars they will become, are a favorite food of many other insects.

Have you seen a miniature dragon with antenna in your garden? How about a tiny snake with huge eyes? A hairy looking creature that looks like a moving piece of poison ivy vine? These are all butterfly caterpillars with a myriad of disguises to try and ward off predators. Birds, frogs, and even spiders (and some people) like to feast on them.

The surviving caterpillars are voracious consumers of plant material, but don't fret—they will not kill your plant and that is why you planted it in the first place. They double in weight every two days! They molt, like snakes, about five times on average. They do not have noses; they breathe through tiny openings on the sides of their bodies called spiracles. They smell, and taste, with feet, antennae, and hair. Each caterpillar has four thousand muscles—humans have just over six hundred.

When the caterpillar has stuffed herself with your plantings, she begins to transform into a chrysalis. She finds what she hopes is a safe spot, sheds the last of her skins, and makes an upside-down question mark. Some of what happens next is still a mystery to biologists. The caterpillar digests itself; if you cut open a chrysalis too soon, a goopy mess of metamorphosing caterpillar will leak out. Some of its cells, however, do not cannibalize and form "imaginal discs." A disc is formed for each body part. The discs feed off the protein rich goop of the rest of the caterpillar fueling the rapid cell division of the soon to be fully formed butterfly. Still in the cocoon-like chrysalis, she fills herself with air, thus cracking the chrysalis and allowing her to emerge. As she is emerging, she pumps fluid through her wings and hangs upside down to let them dry.

This miracle does not occur without native plants and trees. You can start small by converting a piece of your yard from lawn to garden. Ideally, at least part of it will get about six hours of sun daily. Native butterfly nectar plants in our region include asters, bee balm, liatris, cardinal flower, coneflower, goldenrod, ironweed, joe-pye weed, milkweed, mountain mint, phlox, and hyssop. For more information about how to grow these yourself inexpensively, see my article about winter sowing in the winter issue of Cattails. A chemical free environment is crucial. The same chemicals that kill so-called garden pests or weeds kill butterflies. Many areas are slowly undergoing a culture change from big green lawns of grass to lawns of pollinators. Catch the wave!

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## Top 10 Reasons to Start Your Own Garden This Year Dave Oshman

1. Save money.
2. Homegrown produce tastes better.
3. Get better nutrition by eating more vegetables.
4. Reduce carbon emissions (by not relying on industrial farming and shipping of vegetables).
5. Save pollinators (by lowering pesticide use).
6. Enjoy family time together.
7. Learn new things about nature.
8. Reduce stress by getting more sun and fresh air.
9. Get more exercise (those weeds won't pull themselves).
10. Have pride in bringing food you grew to your family table.

Marshy Point Nature Center has begun renting out plots in our Community Garden for the 2023 growing season. We offer 100 square foot plots in either ground level (\$25 per season) or raised beds (\$40 per season).

Our garden area is enclosed by a high fence and includes a sizable shed with ample tools for gardening needs as well as a pavilion with picnic tables. Our watering system is from an underground well which has been verified as potable and we have multiple rain barrels to be as environmentally friendly as possible. Our gardens

are organic-only, and we provide rich compost for soil enrichment. One of our gardeners keeps bees in our compound providing guaranteed pollinators. For the first time this year, we are providing a hoop house starting March 1st for an additional \$10 to get plants started early. For those that like to start their own plants from seeds, our Garden Community members have started a seed library.

If you are interested in a plot, or would like to tour the garden area, call the Nature Center office between 9-4 on weekdays. If you are curious where it is in the park, the address is **7131 Brinkmans Rd, Middle River, 21220**.



## Academic Scholarship Program Is Back

Dave Oshman

The Marshy Point Nature Center Council is proud to announce the academic scholarship program's return! The Council will award a total of **\$6,000** in academic scholarships for the 2023-2024 School Year.

Applicants must meet the following minimum eligibility:

1. 3.0 (B average) GPA
2. Freshman, sophomore, OR student with high school credits entering their junior year as a first-time student
3. Environmental science or related major
4. Nature or conservation-based work and/or volunteer experience

Applications and supporting materials for the 2023-2024 school year will be due on **May 29, 2023** and are available on our website ([marshypoint.org](http://marshypoint.org)).

Included in the application are a series of short-response questions (lists are acceptable) and a short essay. Please be sure to include a copy of your high school or college transcripts; they do not need to be official transcripts. Applicants can email their applications and all supporting materials to [contact@marshypoint.org](mailto:contact@marshypoint.org) or mail them to the nature center. A letter of recommendation is not required but may help support your application.

Call the nature center at **410-887-2817** with any questions!

We've all heard the idiom, "an elephant never forgets." As the largest land animal in the world, elephants have very large brains and can recall important places, such as sources of food and water, even if they haven't been there for many years or decades; they also have the ability to recognize group members they haven't seen in quite some time. While small in comparison to elephants, an ant's brain allows them to have great memories, too.

Ants, like elephants, can retain information for a long time. Ants use their small but mighty brains to find food sources, routes, and colony members just like an elephant does. Ants can even remember times of the day when food sources are the most available. They memorize visual "snapshots" of landmarks as they travel about and use visual cues while considering negative experiences and dangerous routes, such as previously encountered predators and traps.

Ants use these memories and their keen senses to communicate with colony members. They produce chemicals called pheromones to help them find their way back to their nests. By using their antennae, other ants can pick up on the scent. They also use their antennae or other body parts to send messages through touch. Touch messages are transmitted through stridulations, which are sounds and vibrations generated by one ant rubbing its body parts together. A recent study shows that even if all the ants of one generation die, the next generation follows the same trails because the older generation has trained the new generation what to do to survive. Now we know why ants seem to enter our homes in the same spots every year.

While their memories might be sharp, ants are best known for their work habits and incredible strength. They are one of the strongest living creatures on earth in relation to their size—with the ability to lift 20 times their own body weight—thanks to their physical design. Ants are most closely related to bees and wasps, which all have a narrow waist that segments their body. Ant bodies consist of three separate parts: the head, thorax, and gaster (abdomen). At the top of the head, you'll find antenna. The gaster and thorax, are connected by two very small segments which are called nodes

or pedicels and are unique to ants. Their size varies from very small (1/16 inch) to large (more than 3/8 inches). Most ants are either black, brown, or red. When carrying food to the nest, they often run very fast, especially when disturbed.

Speaking of food, ant diets vary among species, but most eat leaves, seeds, small insects, nectar, and honeydew. While they like sugar water—as evidenced on your hummingbird feeder—ants have a diverse diet, and their prey selection is not dependent on pest status. Many of the creatures ants consume are ones that we'd like not to see in significant numbers, like ticks and termites. Fire ants are very effective at pest management in agriculture areas. If given a chance, ant colonies will swarm on larger arthropods like scorpions or stink bugs.

When ants aren't swarming, they are separated into groups of individuals with different jobs: workers, soldiers, and queens. Ant colonies usually consist of mainly all-female workers. They take care of the much larger queen and her young, forage for food, and rarely travel alone. Winged males mate with queens and die soon after. Queens also have wings, but they break off after mating. Longevity can't be generalized to all ants, but queens usually live for several years and workers for only a few weeks or months. If you find an ant trail in your house, take a look to see if they are all the same size. If the workers are equal in size, they are a monomorphic colony, if not, they are a polymorphic colony.

Like their bodies, ant nests can take different sizes, shapes, and forms. Typically their nests are well hidden. Some species settle into the crevices of trees or make their nests in soil, leaf litter, or under rocks. They make several entrances, called egresses, in case the nest becomes compromised in some way.

All of these factors considered, it comes as no surprise that ants are one of the world's most diverse types of insects and are found in almost every environment on earth except Antarctica, Greenland, Iceland, and some island nations. There are 12,000 types of ants in the world, 700 of which are found in the U.S. alone, adding up to a staggering ten quintillion ants world-wide.

## Amazing Ants Cont'd.

Bev Wall

Ant populations are stable and fill many important ecosystems roles and are frequently referred to as “ecosystem engineers” because they provide a variety of critical ecological functions. Like earthworms, ants move the soil so it can aerate, allowing water and oxygen to reach plant roots. As a result, seeds germinate and produce new plants—this is called seed dispersal. Ants are also important prey for many species

Well, now you know a lot about ants and how they live in the world—maybe more than you ever wanted or needed to know. These little creatures are not only interesting but are useful and necessary. They may be small, but they are mighty like an elephant and have a good memory, too!

## Sea Turtles: Amazing and Endangered

Valerie Greenhalgh

Sea turtles are gentle giants of the oceans, graceful swimmers and Disney-like in appearance. They are among the largest reptiles in the world, with the leatherback sea turtle following just behind the saltwater crocodile, Komodo dragon and green anaconda.

The leatherback can reach up to 1,500 pounds and six feet in length. The other six species of sea turtles are the Australian flatback, hawksbill, olive ridley, loggerhead, Kemp’s ridley, and green. The latter three, along with the leatherback, can be found here in my home state of South Carolina near shore waters from April through November or nesting on the beaches from May through October.

Evidence shows that sea turtles once shared our earth with the dinosaurs some 210 million years ago, with the now-extinct Archelon sea turtle measuring in at a whopping 21 feet in length! Unlike freshwater turtles that have feet and retractable heads, sea turtles have flippers and cannot retract their heads. They spend their entire lives in salt water except when females come ashore to lay their eggs. While the seven species of sea turtles share many similarities, loggerheads are the most commonly found sea turtle in South Carolina, so let’s focus on them for a moment.

Female loggerheads crawl onto the beach at night during the nesting season, dig a cavity about 18 inches deep and deposit approximately 120 leathery, white eggs, each about the size of a ping pong ball. The temperature of the nest determines which of the hatchlings will be males and which will be females. Approximately 60 days later at night, the hatchlings that survived predation in the nest

(typically by raccoons, coyotes, ghost crabs and humans) emerge. Guided by the light of the moon and stars, the tiny turtles hurriedly crawl toward the ocean. Most of the hatchlings will unfortunately be eaten by shorebirds, sea birds and fish. It is estimated that less than 1 in 1,000 sea turtle hatchlings will make it to adulthood.

After swimming for 36 hours nonstop, the surviving hatchlings will reach the relatively safe sanctuary of seaweed in a pelagic zone. Several years later, they will return to coastal waters to feed on bottom prey such as crabs and mollusks. It can take decades for sea turtles to reach maturity and begin the cycle of reproduction.

Nearly all seven species of sea turtles are considered endangered, and three of those seven are identified by the World Wildlife Fund as critically endangered. One common way in which conservationists are trying to bolster the survival rate of these wonderful reptiles is to identify a nesting site, cover the nest with hardware cloth or chicken wire, and install a fence-like barrier (usually orange in color) around the entire site. If you are lucky enough to see one of these protective structures, please steer clear and let others know to do the same.





Marshy Point Nature Center  
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## Support Marshy Point Nature Center

Help support Marshy Point by becoming a member! Our annual memberships are valid January 1 – December 31. Membership fees vary by type, which includes individual, single senior, senior couple, and family options. Members receive special program discounts, have access to priority summer camp registration—including a \$25 discount for family membership holders—and are invited to members

-only events. Membership fees support the nature center and park by funding programs, scholarships, animal care, exhibit development, trail maintenance, and more. You can begin or renew your membership on our website or by completing and returning the membership registration form; fees may be paid by check made out to MPNCC, with cash, or on our website.

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