

FROM THE SCHUYLKILL CENTER FOR ENVIRONMENTAL EDUCATION | SPRING 2021



ABOVE: SARAH KAVAGE HARVESTING PHRAGMITES

braiding phragmites

ONE OF THE FIRST IRAQI GUESTHOUSES IN THE U.S.

By Tina Plokarz, Director of Environmental Art

THIS SUMMER WE WILL BUILD A TRADITIONAL IRAQI GUESTHOUSE, a mudhif, on our property, just beyond our meadows. Constructed entirely of the invasive reed phragmites, the sculpture Al-Mudhif, will be one of the first of such structures in the United States offering a welcoming space for inter-cultural encounter and hospitality. Environmental artist Sarah Kavage and social designer Yaroub Al-Obaidi will spearhead this project.

Mudhifs date back 5000 years ago to the Sumerian civilization of southern Mesopotamia. They are one of the oldest known monumental building types designed with nature at its heart and used for town gatherings and ceremonies like weddings. Simple in its material yet complex in its traditions and designs, the environmental art project Al-Mudhif - A Confluence offers a critical perspective on water ecology, restoration, and global migration.

At our 10th annual Richard L. James Lecture, Sarah and Yaroub discussed this cutting-edge environmental art project. Established in memory of our founding executive director as a forum for today's environmental issues, the artists shared stories about displacement, migration, and healing and the experience constructing one of the first Iraqi mudhifs in the United States. Al-Mudhif will become a

space for intercultural encounters for veterans from Native American, American and Iraqi immigrant communities to share experiences and discover a sense of belonging. As a recent immigrant from Iraq himself, Yaroub is optimistic that Al-Mudhif can "positively change communities for a better future" while reshaping our socio-cultural biases towards invasive species.

A perennial wetland grass, phragmites is part of a biological invasion that threatens ecosystems and species worldwide. Over the past 150 years, phragmites have been rapidly expanding and changing the landscape in the greater Delaware River watershed. Cultivated around the world for its resistant and medicinal qualities, phragmites reeds are used in traditional practices from thatched roofs in the Netherlands to woven boats in Bolivia, from medicinal tinctures in China to musical instruments in the Middle East. In North America, however, the wetland grass was first planted in ornamental displays for its signature fluffiness CONTINUED ON PAGE 6

and on distressed lands for its soil-filtering capacity.



ABOVE: MOCK-UP OF AL-MUDHIF ON THE GROUNDS OF THE SCHUYLKILL CENTER



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INSPIRING MEANINGFUL CONNECTIONS BETWEEN PEOPLE AND NATURE

director's cut

AFTER A DECADE OF CHANGE, WHAT'S NEXT?

IN MAY 2011, A FULL 10 YEARS AGO ALREADY my family and I were formally introduced to the Schuylkill Center at a Meigs Award ceremony. A week later, I joined the staff.

All of a sudden, it is a decade—and a world of difference—later. At the time, Green Woods Charter School had already planned to move off our campus, leaving two-thirds of our building empty. The school's large footprint gave us no large indoor spaces for events. Our cavernous bookstore sadly had become a musty museum of nature books no one was buying, as even Borders was collapsing at that moment.

We rolled up our sleeves, and doggedly dove into the task of reinventing the Center, trying to answer a question I ask all the time: "What's a 21st-century nature center supposed to do?"



Fast forward 10 years. We've opened up our 100-seat auditorium to host large events and filled it many times. Downsized the bookstore into a gift shop, and carved out an art gallery. Launched Nature Preschool—an idea I brought to my job interview that winter. Presented Naturepalooza, our Earth Day festival, now our largest single-day event. Completely remodeled the Visitor Center front entrance and radically remade our entrance on the Schuylkill River Trail. Doubled the budget while almost tripling the staff.

This is all the tip of our iceberg, and there is much more to do: reinvent and expand our nature museum, refurbish other indoor spaces, decide the future of several 19th-century structures, diversify staff and board, continue progress at the Wildlife Clinic, and more.

Thank you very much for your remarkable support of our work; I invite you to stay along for the ride. Look at how far we have come in 10 years: imagine what we'll look like a decade from now? I can't wait!

All the best,

Mike Weilbacher, Executive Director mike@schuylkillcenter.org
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clinic spotlight

CAPITAL IMPROVEMENTS LEAD TO BETTER OUTCOMES

By Chris Strub, Director of Wildlife Rehabilitation

THROUGH THE GENEROSITY OF SEVERAL WILDLIFE CLINIC SUPPORTERS, we will achieve a long-time goal in purchasing an X-ray machine. Having this in-house will be a tremendous help and timesaver in performing diagnostics for hundreds of patients each year.

Currently, our workaround has been to transport our patients to nearby wildlife and veterinary clinics when we need X-rays or radiographs. This is complicated by finding a time when a vet is available, identifying a staff person or volunteer to take the patient to the vet, then staying for the procedure, and bringing the patient back to the clinic. While we have a great partnership with our local vets/rehabbers, we will now be able to perform this procedure on-site, leading to better outcomes for our patients.

During a physical examination, we can feel many fractures, but it is incredibly challenging to pinpoint the exact location and nature of the break by touch alone. For example, birds have a complex architecture of bone, tendon, and muscle in the shoulder and pectoral region that enables them to fly. A hairline fracture or minor dislocation in this area can cause serious long-term damage. With small birds, these injuries can be impossible to palpate without causing further harm. Radiographs allow us to see the exact location of the injuries and provide more targeted treatment. Of course, treatment of the initial injury is just the beginning of our journey at the Wildlife Clinic.

Our indoor/outdoor enclosures are another step in getting animals back out into the wild. Indoor enclosures provide a safe place to rest, while our larger, outdoor enclosures give animals the ability to exercise and get into shape for their eventual release. We are very excited to have the support and funding to continue to improve our outdoor enclosures.

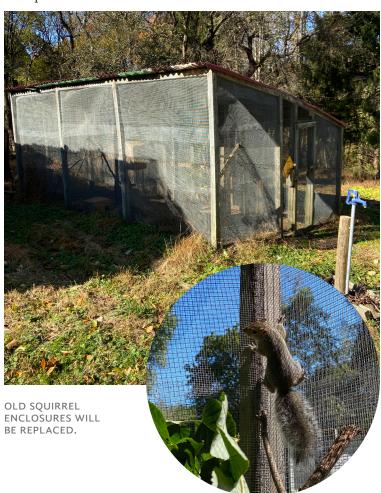
This spring, we plan on building a brand-new squirrel enclosure for the hundreds of orphaned squirrels—our most frequent patients—we expect to see this year. Our current enclosures have served us well, but time and weather have taken their toll, leading to structural problems that mean they are no longer secure enough for our patients.

Our new enclosures will be built on a concrete pad with a double wall of hardware cloth to keep them predator-proof. By looking at where our previous enclosures have broken down, we can build these new enclosures to stand the test of time, and to weather rain, snow, heat, and humidity. We are also looking at adding quality-of-life improvements for the squirrels such as brackets to hang fresh branches for enrichment and small "feed doors" to make changing food and water a bit quicker.

While we're building these enclosures with squirrels in mind, they will also do double-duty for opossums and other small mammals.

Additional improvements include an aviary, outdoor water lines, and a new shed.

The Wildlife Clinic is thrilled to have received donations to purchase the X-ray machine and enclosures and other major improvements through the generosity of Clinic supporters Gail Seygal, Bob and Nancy Elfant, and a board member and spouse.



preschool spotlight

100% OUTDOOR CLASSROOMS KEEP OUR CHILDREN SAFE

By Amy Krauss, Director of Communications

ASK A NATURE PRESCHOOL TEACHER HOW THEY'RE ADAPTING
TO BEING FULLY OUTDOORS AS A RESULT OF THE PANDEMIC

and you'll hear a uniformity of answers like "I love it," "I wouldn't have it any other way," or "We've been teaching outdoors all along." This is the consistent theme from our veteran teachers as well as our newest educators who are embracing the opportunities of the outdoor classroom. Our extraordinarily flexible teachers have kicked it up a notch, as nature and the outdoors have become our secret weapons in keeping our children safe from COVID-19.

Not many adults typically spend 6 hours outside, but that is not the case with our 3-6-year-olds who are outside the entire day they're with us. Each weekday morning, parents receive a friendly 'reminder' text from their child's teacher recommending the appropriate clothing for the day's activities. On a brisk winter's day, it's not unusual for our preschoolers to show up with long johns under their regular clothes, layered with snow pants and topped off with hats, boots, and gloves.

Knox Rodriguez, a kindergartener in the Mighty Oaks classroom, has embraced this "new normal" with aplomb. His parents, Kelly and Emilio, knowing that virtual learning was not a good fit for their son, make the almost one-hour drive from South Philly because "it's totally worth it. Knox is a kid that likes to be outside and the Schuylkill Center is such a beautiful setting for him to play and learn." They could have found something closer to home but specifically chose our program because it was childresponsive and fully outdoors.



KNOX RODRIGUEZ, ONE OF OUR CURIOUS MIGHTY OAKS, EXPLORES ICE.

With so much of our world moving to online platforms, Nature Preschool has remained true to its core values and embraced our outdoor "classroom" model. During the pandemic, we have had a constant waiting list as the data show that being outdoors is safer. Immersed in our 340-acres of forest, streams, trails and ponds, our children are continuing to thrive while gaining a deeper appreciation and respect for nature.

In the Sweet Gums classroom (ages 3 and 4), children arrive ready for their day outside. One of the first things Teacher Leigh noticed when we went to fully outdoor classrooms is that the transition from parent to preschool has become seamless. The children are already dressed for the day. With their gear on, they don't need to adjust their temperature or clothing; after doing their COVID check-in protocols, they are off to explore.



A RESCUED MOUSE BECOMES SWEET GUM'S CLASSROOM PET FOR THE DAY.

There have been a handful of occasions where a forecast of torrential rain, snow, or high winds has forced us to cancel school. On these occasions, the outdoor classroom presents a safety issue and Interim Director of Early Childhood Marilyn Tinari is ready to inform parents of any preemptive closures. She wants the children to quickly return so that they can discover the changes that occur as a result of new weather patterns. The February snowstorm, while typically an inconvenience to adults, presented some great opportunities for our preschoolers to observe deer and squirrel tracks, touch icicles, and enjoy the simple pleasure of





preschool spotlight

(CONTINUED)

sledding. Our outdoor base camps where children gather to stay warm and dry (with the added convenience of a port-a-potty) allow us to embrace the elements regardless of the weather. Whether it's Sassafras' lean-to, Mighty Oaks' fort, Sweet Gums' spot in the greenhouse, or Sycamores in the pavilion, there's a designated dry space for everyone.

Initially, having a dry home base presented some initial challenges—but true to our adaptability, and our versatile land and facilities team, we persevered. We enclosed the pavilion with tarps, patched leaking roofs, and carved separate outdoor spaces for each classroom. On colder days, you might see the Mighty Oaks sipping hot tea around a fire ring in which they collected the firewood to fuel their warmth. Sassafras' Teacher Katie is quick to point out, "Our kids aren't usually cold because we are rarely idle. We take a lot of hikes and we do a lot of running around."



DYNAMIC AND IMAGINARY PLAY ARE A STAPLE IN THE SASSAFRAS CLASSROOM.

The Mighty Oaks created their own shelter where kids dragged small saplings and grasses to create a cozy little spot into which they could crawl. Marilyn points to research about how kids thrive and adapt to these organic spaces versus a traditional classroom that is made up of rectangular spaces and angular planes. "Natural structures are organic with a variety of fluid shapes. These kids are living in a different world that connects them to natural ways of being with their surroundings and embracing it."



SYCAMORES SET OUT ON A SNOWY HIKE.

Another unexpected benefit of being fully outdoors is that children are getting used to doing things themselves. Putting on gloves for a little 4-year-old hand can take a lot of effort, but they're learning how to be more independent out of necessity. Teacher Leigh agrees. She notices when the kids arrive, they know exactly where to put their lunches and don't need any help from a grown-up. This was not the case a year ago.

Asked how teaching outdoors has impacted her this year, Teacher Katie was very matter-of-fact. "I don't think it's affected me at all. We were teaching outdoors before the pandemic so our daily routines are almost the same." After Thanksgiving, when COVID cases were surging, the preschool went to a week of virtual teaching. Sassafras teachers were still able to engage kids and the parents with a child-led scavenger hunt. Each family received a package with a compass and a letter and details from an invented character, Old Man Weil, on finding buried treasure. The kids led their parents on a hike of familiar places at the Schuylkill Center. The "prizes" were recognizable objects like feathers and rocks, items that were significant to each student's experience.

When Kelly Rodriguez picks up her son Knox at the end of the day, she acknowledges that it's really hard to get him to leave. "I think it's just so cool how the pandemic has forced us to think outside the box. Now we accept that it's okay that the kids are outside and we need to adapt to how we can prepare them to do that instead of defaulting to 'it's too cold.' What we see as inclement weather is now just weather to them."

And as a nature-based preschool, we wouldn't have it any other way.



1965 legacy society

ENSURING OUR FUTURE

By Casey Darnley, Director of Development

THE 1965 LEGACY SOCIETY offers donors an affordable way to make sure that the issues you care about and the values you cherish will be long remembered. To ensure our critical work continues in perpetuity,

learn how 1965 Legacy Society member Kathy Wagner decided to make a lasting legacy to the Schuylkill Center.

"Pledging a planned gift to the Schuylkill Center wasn't an easy decision for my husband and me. We have a modest estate, an extended family we'd like to help, and a wide range of interests we'd love to support. But when it came

ABOVE: KATHY WAGNER

time to make some decisions, we realized that the Center's mission, programs, and long-range plans checked off a number of boxes for us: environmental stewardship, community engagement, beautiful and accessible natural lands, a commitment to diversity and equity, and a history of leadership and excellence in environmental education. My introduction to the organization as an educator many years ago, my board service, and our continued participation in programs have reinforced our decision, and we encourage others to join us in ensuring the future of this great organization."

To learn about ways to leave a legacy to the Schuylkill Center, or to let us know you already have, please contact the Development Department at 215.853.6248 or support@schuylkillcenter.org.

Help us make sure the work we began in 1965 continues in perpetuity. *

BRAIDING PHRAGMITES

CONTINUED FROM PAGE 1

Research suggests that the main factor for its exponential growth and negative impact on native species and habitats is the pollution and soil salinization caused by human activities.

So we came up with an eco-friendly way to harvest phragmites in an effort to eradicate it from our region. Sharing the creative vision for the construction of Al-Mudhif, the artists started to reshape the perspective from an invasive species into a thatched sculpture that has the possibility to restore connections, overcome cultural biases and heal communities.

Sarah and Yaroub will braid together these simple reeds into 20-foot-long posts, crafted lattices and interwoven mats. The sculptural installation Al-Mudhif - A Confluence is part of a larger art initiative Lenapehoking~Watershed with Sarah Kavage by the Alliance for Watershed Education (AWE). Funded by the William Penn Foundation, AWE is a regional grouping of 23 environmental education centers throughout the Delaware River Watershed in Delaware, New Jersey, and Pennsylvania.

This summer Sarah will create multiple site-specific, temporary installations along the Circuit Trail network, exclusively using natural materials such as meadow grasses and invasive phragmites.

Each installation will be "a momentary response to the specific environmental conditions of each site," she underlined. "I want to understand how we shape and are shaped by our surroundings and learn how to heal our eroded relationship with the land and each other." Each installation will function both as sculptures and as public spaces for locals to build relationships with the land and the water, as well as with each other.

Phrag Fest

On February 27, the Schuylkill Center joined forces with the John Heinz Wildlife Refuge to harvest numerous bundles of phragmites for the upcoming art project Al-Mudhif – A Confluence. Grateful for a dedicated team of members, volunteers and community members, Phrag Fest successfully kicked off Sarah Kavage's communal art project at multiple sites in the Delaware River watershed. The project will create awareness for the ecological and cultural diversity of the watershed at large.







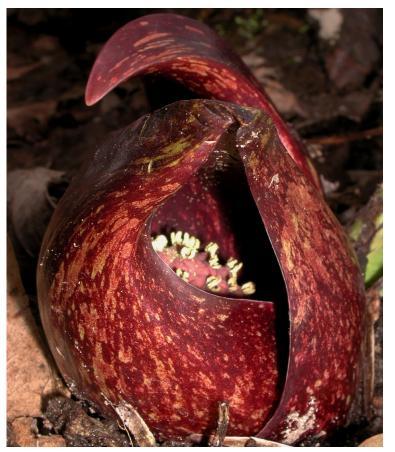
naturalist notebook

THE FIRST WILDFLOWER OF SPRING IS...SKUNK CABBAGE?!

By Mike Weilbacher

SPRING IS AN EXTRAORDINARY PARADE OF WILDFLOWERS, each species timed to bloom at a key moment in the calendar. And the leader of the parade, the first flower to bloom, one of my favorite and first signs of spring, is a very unlikely flower, a purple mottled hood poking through wet spots in the forest.

Skunk cabbage, named for its large stinky leaves, blooms surprisingly early, as early as late February. That mottled hood is



thermogenic, able to generate heat, allowing it to melt the snow and ice around it. Temperatures around the hood are as much as 60° higher than the air around it. Crazy, no?

But that purple hood isn't the flower. No, tucked inside the hood is a Sputnik-like knobby orb, rather Klingon-ish. Those knobs, unsexy as they are, are its flowers. And the flowers reek, giving off a smell akin to rotting flesh, which serves a huge purpose; attracting its pollinators, the flies and bees that scavenge on rotting flesh. They crawl into the hood looking for dead meat, and accidentally pollinate the flower—a highly effective strategy. The smell explains the purple mottling of its hood, common among plants imitating dead flesh.

And one of its pollinators is a blowfly with the wonderful species name of vomitoria. Need we say more?

The heat accomplishes multiple functions; it not only melts the ice, but also helps disseminate the smell. And pollinators are likely to come into the hood seeking the warmth that it generates.

After blooming, its bright green leaves come up as well, some almost two feet long, their cabbage-like appearance lending the plant its name. The leaves are pungent too, this odor likely discouraging herbivores from nibbling on it.

As if all this were not cool enough, the plant's stems remain buried below the surface, contracting as they grow, effectively pulling the stem deeper into the mud. In effect, it is an upside-down plant, the stem growing downward. As the plant grows, the stem burrows deeper, making older plants practically impossible to dig up.

As you walk the Schuylkill Center, come down the Ravine Loop, and when you make the left turn at Smith Run, look around—there is skunk cabbage everywhere down there. Enjoy!

A heartfelt thank you to the following staff who have recently moved on from the Schuylkill Center:

Ben Cohen
Nature Preschool Teacher
Drew Rinaldi Subits
Land Stewardship Coordinate

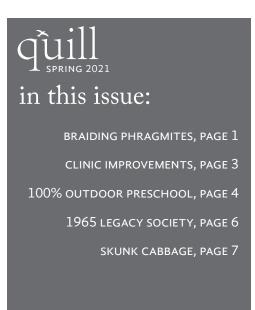
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Assistant Director for Individual Giving





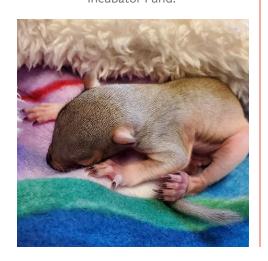
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Help the Wildlife Clinic give more second chances by supporting the Incubator Fund.



native plants, order online coming in march

