When art is rooted in place, it gives voice to the place. To create art from the earth and to advocate for the natural places we know and love is our work as Strawtown artists and educators. We develop place-based arts programs that connect people with their natural surroundings and show them new ways of seeing and being. Wherever we live on earth, there is a need for humans to become aware of the life of the natural world. In our classes participants adventure to different outdoor sites and learn to create art that is based on their exploration of the land and the natural materials found there. The art we make is rooted in place.
“Our place” is the lower Hudson River Valley of New York, 30 miles north of New York City. This is where suburbia meets wild and natural places. The landscape of our area is defined by the wide bays of the Hudson River, which are surrounded by wooded hills, freshwater streams, and buildings, roads, and parking lots.

In our classes, students see both the natural wonders of a place, and also the environmental impacts of development, especially upon our local streams and rivers. As their teachers we have realized it is not enough to take care of the children, we also need to take care of the world in which they live. We have stepped up to become stewards and voices for the land and waterways of our surroundings. For the past 15 years we have been developing the roles of art and the artist as instruments of environmental change. Our roles have expanded beyond that of creator and teacher. We have become protectors, connectors, place-makers, and community builders. This environmental engagement is now a formal aspect of our mission as an arts-based environmental education (AEE) not-for-profit. We find that there is wholeness to Strawtown’s AEE, combined with advocacy work. Each one informs and inspires the other.

Our programming is designed primarily for young people, ages 7-12. We see this as a time of life in which children often are in wonder and open-hearted to the world. We sometimes refer to them as young mystics. We recognize this stage of life as an impressionable time for children to form a relationship with nature, and to realize they are not separate from the natural world. These early experiences can inform them for the rest of their lives. Strawtown educators allow children to explore and make their own discoveries while being led in learning pursuits.

One way we like to begin attuning students to the place is to ask these three guiding questions: Where are we? Who are we here with? How are we all doing together? In listening to the answers, both interesting and entertaining, we – i.e. children and educators – notice our surroundings and open up to our place in the natural world. Questioning as a pathway to learning is fundamental to our philosophy. The class journey continues with skill-building practices in awareness, relating and responding with nature and art. Some practices are as simple as harvesting natural materials mindfully and then sitting quietly with handwork. Others are group-oriented and playful. As teachers we creatively challenge ourselves in how we stage a space for the lesson so that it is welcoming, invites interaction, and opens perception for the artistic and other-than-ordinary experiences.

A favorite group activity of the students is the imaginative “Council of All Beings,” based on the deep ecology work of Joanna Macy and John Seed. The Council is a time “in which participants step aside from their human identity and speak on behalf of another life-form. A simple structure for spontaneous expression, it aims to heighten awareness
of our interdependence in the living body of Earth, and to strengthen our commitment to defend it.”\textsuperscript{1} At Strawtown, the Council takes form with costumes, poetry, movement, and shared discussion. To become Willow Tree, Fox, Goose or Moss, we have noticed, deepens the participant’s personal connection with that life form, and raises his or her awareness of the relations associated with that being.

While facilitating participants to become acquainted with their surroundings we also turn to the realm of science. In our view, the myriad ways in which science explains the interactions and relationships of a place add to the ability of the artistic mind to imagine more fully the life of the place. When students contemplate the leaves of different trees through the lens of an artist, they may at the same time wonder about the purpose of the different shapes. With science at their fingertips through the Internet, students can take their questioning further. Science informs the art, and art opens a gateway for scientific inquiry. At Strawtown we pass this art/sci way of seeing and creating on to our students.

As facilitators we identify which emergent discoveries from the place-based experiences will be carried into future programs. In this way we are explorers and authors of new material. Our students make discoveries as often as we do as educators and we pay close attention. When students see that their work is documented and becomes part of field notes or a new curriculum, they seem to gain a sense that their work matters.

Strawtown has a number of outdoor classroom sites, many of them by waterways. Through stream and river exploration, citizen science has entered our lives and teachings. A global movement on the rise, citizen science is the gathering and examination of data related to the environment that is performed by members of the public, usually in partnership with professional scientists. Citizen science is rooted in place, and opportunities to learn water-monitoring skills came to our teaching team right at a time when we were looking for more information on what to do to help our waterways. From training with regional science institutes we learned about aquatic habitats, their characteristics and challenges, and supporting actions we can take. As educators who know our area, we became community project leaders for aquatic migration study and water quality sampling programs. Through this we realized that citizens who are familiar with the waterways can become valued stakeholders in environmental decision-making. By bringing our regional water knowledge forth into local government, we have become involved in county water planning. Environmental agencies and municipalities are recognizing the importance of citizen, science and government partnerships, especially in the face of drastic budget and staff cuts. The key word here is \textit{partnerships}. With citizen involvement there is a new continuum for setting goals and staying the course.

\textsuperscript{1} Macy, 2002.
As artist-citizens we are experiencing how artful thinking is a contributing force for connecting people and moving projects forward. Artists often bring an entertaining element of surprise, making it attractive to work together. Artists imagine what can be possible and can provide creative visuals and approaches to the work at hand. They offer new perspectives and are often sensitive to the environment. When our students learn that their teachers are advocating for the environment, they can see we are looking out for their future. It matters to their parents too. Liz Co, who is a parent, wrote, “It gives me such a good feeling and comfort in the world knowing that you guys are out there doing what you do” (personal communication, Sept. 2014).

We now present three illustrated narratives from the field of education and water advocacy.

**Stream Art with Science at Woodland Stream**

When we approach a woodland stream site with our students, as facilitators we ask the children, “Who lives here? How can we play and learn, and at the same time respect the homes of all the living creatures?” The upper reach of the Sparkill Creek is where the stream originates, where the water is clean, and the children can play safely. They search for fish and frogs, look under rocks for critters, and observe water currents as they race stick and leaf rafts downstream. In the stream we show children how to take a closer look for tiny benthic macro-invertebrates (aquatic insects). The children learn that different insect communities in the creek are indicators of water quality. Sometimes we demonstrate the skills it takes to perform citizen science stream monitoring (where we take physical, chemical and biological measurements of the creek and submit them to a local database). The children get to know the creek as a home for many beings, and the friendships with nature grow.
To shift the attention of children away from play and discovery to a guided learning experience, we commonly start with meeting the materials. Through exploring and creating with natural materials, the children can learn in a hands-on way about a place. When learning to grind wet creek stones into color pigments for painting, for example, the geology of the place is experienced through the characteristics of the rocks. As they seek to expand their palette, they learn igneous, metamorphic and sedimentary stone all yield colors differently. Students appreciate the fun, hands-on learning, and they know it’s more than playtime. As one student commented, “If all my friends came to Strawtown they would be intelligent about the world” (Ray, age 12).
Figure 2: Pigments ground from creek rocks in the Sparkill Creek

Figure 3: Painting with creek rock pigments and Japanese ink
One day we were with a class at a stretch of the Sparkill Creek, only a mile downstream from the headwaters area. This lower area of the creek meanders through a neighborhood where human development begins to have a harmful impact upon the health of the creek. There was a striking moment when a 9 year-old student suddenly declared, “The creek smells nasty! You need to tell the adults about this!” (Pause) "Tell them the children know what they’re not doing." And then she added, "And tell them that if they’re looking for something to do, well here it is!” Taking these words to heart, Strawtown Lead Artist, Laurie Seeman, called the Hudson Riverkeeper organization’s boat captain and water sampling program director, John Lipscomb. He came out the next day and collected a water sample with the children. The finding revealed that a concerning level of enterococci (wastewater bacteria) was present.
A search began to find other community members concerned with the health of the Sparkill Creek. The Sparkill Creek Watershed Alliance was formed, with Laurie Seeman as chair, and now seven years later, it is a growing not-for-profit organization with 25+ members that include: teachers, writers, scientists, artists, actors, historians, landscape architects, engineers, and college professors. The Alliance is committed to developing partnerships and practices that restore and preserve the health of the Sparkill Creek and its watershed. The group’s activities include monthly water sampling, stream bank tree plantings, green infrastructure projects, trash cleanups, and community outreach and education. Key partnerships include: municipal leaders, elected officials, the State Department of Environmental Conservation, leading river organizations, and a number of community groups. Through working with local colleges, the whole watershed is becoming a classroom for learning. In reconnecting children and community members with their waterways, we found a way to work for improving the health of the water.
Marsh Grass Painting at Hudson River Marsh

As artists and educators, we seek to keep our teachings fresh and relevant by looking into the living mysteries around us for new possibilities and insights. We often ask ourselves how artistic perception, the ability to imagine beyond the obvious, can lead to greater knowing and relating.

When the idea arose among Strawtown staff to explore ink painting with marsh grasses, the art making led us to surprising insights into the qualities of these plants. Through trimming the grass stalks into ink painting tools, we discovered striking differences between two species. Common Reed (*Phragmites australis*) is stiff and hollow like a straw, and when dipped into ink, acts like a quill. Common Cattail (*Typha latifolia*) however, is flexible, soft and dense, with an interior that is rather sponge-like. It soaks up and holds onto the ink, and feels similar to painting with a loaded brush. We wondered, what does this finding tell us about each plant and the way it functions in the water where it grows? What more is there to learn about them? Looking through a microscope we compared the two grasses, adding to our understanding of what we experienced while painting. The phragmites stalk is hollow, with linear, vascular chambers in the walls. The cattail is dense with fibrous material that absorbs and retains water. As we researched further, we found that these structural differences provide an
interesting point of entry into an environmental debate about the invasive phragmites in cattail marshes. On basis of these reflections we developed an inter-disciplinary lesson for our students. This lesson takes the same path of art followed by scientific inquiry. In the class, students are first invited to develop a tactile relationship with each plant through marsh-grass painting. After painting we ask them, “Which plant do you think would fare better standing in polluted water?” The answer is obvious to them – not the one that absorbs and retains water. When then ask, “Which plant would make a nicer bed for the muskrat?” students can imagine that the soft cattail would make the nicer bedding. The answer is felt. We call this felt perception.

Figure 7 & 8: Microscopic views of marsh grasses.
Above: Cattail, bottom: Phragmites
As artists working in our local waterways, we took part in an environmental debate concerning a local Hudson River estuary marsh, called Piermont Marsh. The phragmites grasses have almost completely taken over the marsh, which at one time was an expanse of cattail grasses that provided habitat to a greater variety of creatures. When the State fisheries scientists proposed a marsh restoration plan, the intention was to spray glyphosate (a herbicide) on the phragmites to eradicate them and allow the native grasses (cattails) to grow back. Local community members fiercely opposed the spraying for reasons of feared health impacts on the adjacent community and wildlife. They also wanted to protect the phragmites, which provide aesthetic beauty on the waterfront. The residents raised the issue of the benefit of the phragmites as an important shoreline protection from storm surge (as was experienced during Hurricane Sandy, which hit the Piermont coastline in 2012).
The level of citizen concern led the State fisheries scientists to halt the plan and consult for a year with a wider range of experts. A series of expert panels followed, to inform the community on state-of-the-art marsh management practices. As the Sparkill Creek flows into the Piermont Marsh, Laurie Seeman, leader of the Sparkill Creek Watershed Alliance, was invited to present. It was the discoveries made through the marsh grass painting experience that triggered key questions she raised during the session: Perhaps the phragmites were thriving because they are more pollution tolerant than cattails? Is the eco-system responding to the human-made impacts? Laurie advocated for implementation of a more robust water quality study to take place to obtain a better understanding of the factors impacting the ecological system before any further restoration actions are taken.

As a result of all efforts by citizens, the Piermont Marsh restoration plan is being modified. It is proceeding in a more considered way with continuous scientific discussion. Another positive outcome is that the community members are developing and deepening their relationship with the marsh as a place of living systems.
Root Art and Shoreline Stabilization at Hudson River Beach

Nyack Beach, one of our outdoor classrooms, is sited along the edge of the Hudson River, on Tappan Zee Bay. In 2012, Hurricane Sandy took down many of the trees that, as a result of years of erosion, had exposed roots. These were the very same trees that we taught under and that the children climbed in. The few remaining trees are in need of protection. In 2014, we as Strawtown Studio’s directors took interest as community stakeholders in the design review of a “Sustainable Shoreline Restoration Project” for Nyack Beach State Park. The project plan overlooked the beach site and focused only on park infrastructure. By submitting comments and attending meetings, we successfully advocated for restoration of the natural shoreline at the beach. There is now a design underway for an engineered landscape with a soft, vegetated shoreline that will protect the remaining trees and will include boulders placed in the river as wave breakers.

Figure 11: Art with poetry from the “Thinking like a Root” class

In the “Thinking Like a Root” class, students created art works based on observation of the exposed tree roots along the river’s edge, while they simultaneously learned about the importance of trees in shoreline stabilization. In the root art class the students learned to see tree root exposure as a problem resulting from storm water erosion. They
heard how their teachers advocated successfully for the trees and the shoreline, and were shown the renderings of the site design. It sent an empowering message to our students to know that just one or two people can make a difference through taking action.

Figure 12: Nyack beach at present day

Figure 13: Design rendering of proposed natural vegetated shoreline at Nyack Beach

(Credit: Princeton Hydro)
Preparing teaching spaces and art materials in a ceremonious manner is a way of introducing a class to our intentions for the lesson. One of our intentions is to invoke an atmosphere of reverence and respect. Staging the learning event with beauty and thoughtfulness shows our students that we honor them and the class experience. Staging has become one of our central art forms, and allows time for staff to be creative together and contemplate the arrival of the children.

In this root art class, the young artists, ages 7-12, were introduced to tree roots laid out artfully on a cloth. Everyone gathered around the roots to observe their forms, and then circled around the cloth twice. The children first looked the roots over before choosing one for making their art. The staging gave the roots more presence (beyond merely piling them in a bucket), and offered a new way of perceiving the roots. What was once overlooked became chosen and special.
The roots had been harvested from a fallen tree and were lightly covered in dirt. When a student exclaimed it would be a good idea to wash the roots before making art, the children became excited and everyone headed to the river to wash the roots. Side by side kneeling and washing roots, the shared experience, to us, felt like a ritual. This all happened in an unplanned, spontaneous way. It was a novel experience, in which the students themselves became part of the artistic “happening.” Strawtown’s AEE activities often invite the children to co-create the class experience. The students learn quickly that Strawtown is a place for them to open up and follow their sense of wonder. As one parent put it, “Thank you for creating a place for my boys to explore the sacred worlds around them and within” (Carrie Steindorf, personal communication, Aug. 2010).

Being out in nature with art materials and friends, and responding to the needs of our places, grows strong roots in the community. The multi-dimensional approach of Strawtown’s AEE provides a new construct for living in relationship with the world.

In our times of great uncertainty and rapid change on earth, many people are searching for guidance on how to live. Even in difficult situations, the Strawtown experiences can
help to generate “active hope,” to borrow a phrase from Joanna Macy. Macy teaches that in times of despair, hope is found when we come together to share our grief and offer support for one another. She says that when we act together we can face anything. Through Strawtown’s work, we are not only together, we are rooted in place together, giving us more common ground from which to live, support one another, and take action.

To learn more, visit www.strawtownstudio.org and follow us on Facebook.

References


\[2\] Macy, 2012.