

Nantucket Land Bank

SPRING 2023

NEWSLETTER



Conservation,
recreation, and
agriculture for the
benefit of the public
in perpetuity

CLIMATE CORNER:
NATURE-BASED SOLUTIONS

FARMER IN FOCUS:
EAT FIRE FARM

PROPERTY SPOTLIGHT:
MIACOMET WOODS

STAFF SPOTLIGHT:
SUSAN CAMPESE,
ADMINISTRATOR / FINANCE
MANAGER

5/03/2023

An Introduction to Nature-Based Solutions: Letting Nature Do the Work

Climate change poses many threats to communities around the world in the form of flooding, rising temperatures, and more intense storms and droughts (to name a few). As these conditions become more evident, we must ask ourselves how we plan to adapt to rapidly changing environmental conditions.

If you’ve been involved in conversations surrounding climate resilience lately, you may have heard the term “nature-based solutions” (also known as green infrastructure, low-impact development, or bioengineering). According to the Federal Emergency Management Agency (FEMA), nature-based solutions are “Planning, design, management, and engineering practices that weave natural features or processes into the built environment to promote adaptation and resilience.”

Natural systems already provide numerous benefits, also known as “ecosystem services”, for both people and our environment, and examples are all around us! Salt marshes absorb storm surge and wave action to reduce flooding impacts, forests purify our air, and wetlands serve as catch basins for stormwater runoff. Nature-based solutions harness these beneficial natural processes and apply them to societal, environmental, and economic problems. We can implement green infrastructure on both small and large scales to achieve various goals, such as reducing flood risk, improving water quality, providing recreational opportunities, or shoreline stabilization.

Nature-based solutions are more flexible than their gray infrastructure counterparts in that they can adapt to changing conditions more easily. Gray infrastructure is manmade and designed for a very specific purpose – examples include bulkheads, stormwater pipes, seawalls, or water treatment plants. Then there are hybrid designs which include elements of both. What the best strategy may be for a given location will depend on the circumstances and priorities of the community in that area.

A wide variety of natural systems or projects qualify as nature-based solutions. See the examples from FEMA below, which illustrate the diversity in scale and habitat type of these projects: green infrastructure can range from a simple tree canopy to a complex stormwater park!



TREE CANOPY

Tree canopy can reduce stormwater runoff by catching rainfall on branches and leaves and increasing evapotranspiration. By keeping neighborhoods cooler in the summer, tree canopy can also reduce the “urban heat island effect.”

Because of trees’ many benefits, many cities have set urban tree canopy goals.



PERMEABLE PAVEMENT

Permeable pavements allow more rainfall to soak into the ground. Common types include pervious concrete, porous asphalt, and interlocking pavers.

Permeable pavements are most commonly used for parking lots and roadway shoulders.



RAIN GARDENS

A rain garden is a shallow, vegetated basin that collects and absorbs runoff from rooftops, sidewalks, and streets.

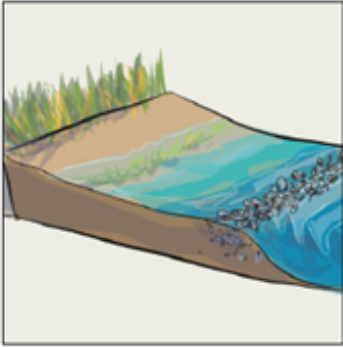
Rain gardens can be added around homes and businesses to reduce and treat stormwater runoff.



DUNES

Dunes are coastal features made of blown sand. Healthy dunes often have dune grasses or other vegetation to keep their shape.

Dunes can serve as a barrier between the water’s edge and inland areas, buffering waves as a first line of defense.



OYSTER REEFS

Oysters are often referred to as “ecosystem engineers” because of their tendency to attach to hard surfaces and create large reefs made of thousands of individuals.

In addition to offering shelter and food to coastal species, oyster reefs buffer coasts from waves and filter surrounding waters.



STORMWATER PARKS

Stormwater parks are recreational spaces that are designed to flood during extreme events and to withstand flooding.

By storing and treating floodwaters, stormwater parks can reduce flooding elsewhere and improve water quality.

FEMA

The Land Bank often utilizes nature-based solutions in managing our properties and in the planning of new projects. For instance, our Washington Street Framework Plan includes a dune restoration on the beach to stabilize the shoreline, slow wave energy in storm events, and enhance wildlife habitat. On the inland side of the street, a stormwater park has been designed to withstand regular flooding and help drain stormwater off Washington Street while also providing more open space for recreation and wildlife habitat. Gray infrastructure elements are also proposed (e.g., bike path, boardwalk, tide gates), thereby making this plan an example of a hybrid design.

On the other side of town, the Land Bank plans to create a demonstration rain garden on our Easton Street property. Rain gardens are a great example of a nature-based solution that can be implemented by residential homeowners on small plots of land. These gardens are made from depressions in the ground that are designed to collect, absorb, and filter stormwater runoff from roads, parking lots, or roof tops. As a result, these gardens have a positive impact on downstream water quality and can reduce unwanted flooding in other areas. Also, when planted with native vegetation, these gardens can provide excellent pollinator habitat!

In all of these examples, nature-based solutions are performing a resiliency function (e.g., floodwater management) while also providing benefits like new or improved public recreational space. By recreating symbiotic processes that already exist in the natural world, we can improve quality of life while also mitigating the impacts of climate change.

Farmer in Focus: Eat Fire Farm

Eat Fire Farm is located at Sustainable Nantucket at Mt. Vernon Farm. A 7+ acre portion of this Land Bank property was licensed to Sustainable Nantucket in 2015 to support the growth of agriculture on Nantucket.

Dylan Wallace and Caroline Borrelli have run Eat Fire Farm since 2019, but both have a rich history with farming and Nantucket. Dylan grew up on the island picking berries around Lily Pond for his father to use in desserts at the restaurant he ran. Dylan attended the Museum School of Fine Arts in Boston, and despite initially pursuing a career as an art teacher, he was drawn to agriculture. When he returned to Nantucket, he soon found himself on the board of Sustainable Nantucket and the Agricultural Commission, in addition to sponsoring the Right to Farm Bylaw. Caroline summered on Nantucket before moving to the island year-round in 2012, and she warmly remembers playing outside, picking up worms, and cherishing her time outdoors. She, too, is an artist turned farmer, as she attended Salve Regina studying ceramics. After graduation, Caroline worked in landscaping creating small-scale vegetable gardens, then tended to the ducks and microgreens at Dan Southey’s Washashore Farm where she and Dylan first met.



Today, the pair grows perennial herbs, including basil, rosemary, parsley, cilantro, oregano, thyme, sage, fennel, lovage, lavender, and peppermint. They also grow rhubarb, blackberries, artichokes, chillis, and garlic, in addition to creating solar evaporated sea salt blends, smoked chili flakes, hot honey, and a soon to be released garlic salt. Their herb salt is a fan favorite and is perfect for roasted veggies, fish, and chicken. Islanders can purchase Eat Fire Farm goods in a variety of locations. Dylan and Caroline hope to launch their online store this year and their products can also be found at the Farmer’s Market downtown, Pip & Anchor, and 167 Fish Market. When in season, they stock herbs, garlic, honey, and specialty foods at the farm stand on Hummock Pond Road, which is open 24/7 to the public.

When speaking about why farming on Nantucket is so important to them, they explain that it’s the community that draws them to stay here. There are places more conducive to buying land and farming, but Dylan and Caroline are passionate about being part of the resurgence of farming on Nantucket. In Dylan’s words, “Getting Nantucket families that are not connected to agriculture involved is so important. That’s a big reason why I want to be a farmer on Nantucket.”

In addition to Eat Fire Farm, Dylan owns and operates a wood fired pizza company named Eat Fire Pizza, which you can find at Cisco Brewery, or call upon for catering services! The farm and pizza businesses are in a symbiotic relationship – the veggies they grow are used on the pizza, and the add-ons (including hot honey and chili flakes) are all made by them as well. Dylan also runs his own commercial bay scallop boat in the off season. Caroline not only believes we can, as an island community, grow more of our own food, but also create more of our own energy. She works as a Senior Project Manager for ACK Smart solar energy, in addition to running operations and managing bookkeeping for Eat Fire Pizza.

In the future, the couple hopes to focus on farming full-time, along with raising a family. They would like to create a “pick your own blackberry” farm, keep farm animals, expand the farm stand, and much more. Dylan and Caroline have great vision and ideas for the various ways agriculture can grow on Nantucket.

The Land Bank appreciates having partners like Eat Fire Farm as a resource as we define our role in supporting local agriculture going forward!

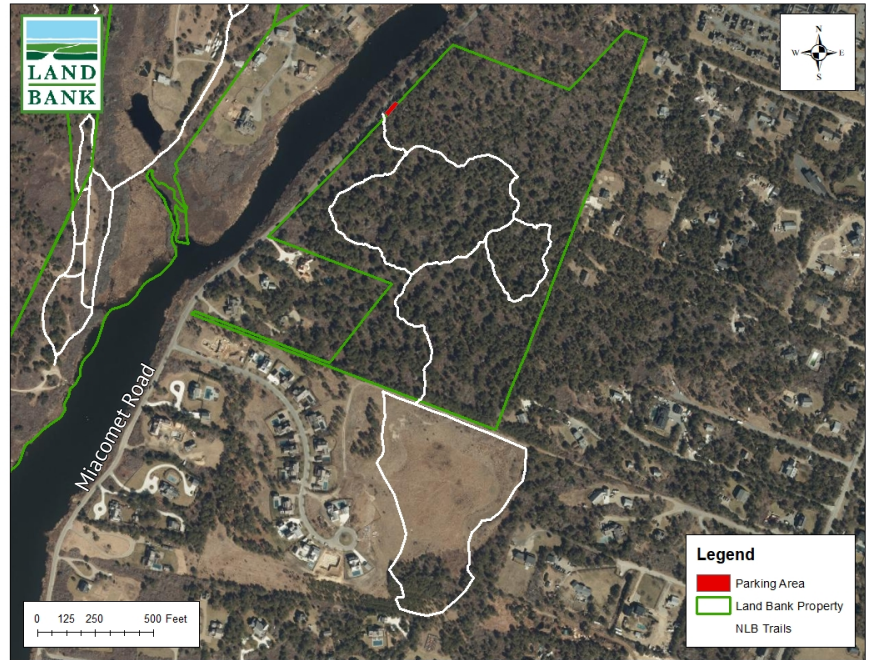


Property Spotlight: Miacomet Woods

The Land Bank staff is always eager to create new public access to conserved spaces on island, and this winter we were able to create a new trail system on our Miacomet Woods property!

Situated across from Miacomet Pond, this parcel is a 32-acre forest dominated by pitch pines. These trees provide essential habitat for the northern long-eared bat (*Myotis septentrionalis*), which was recently reclassified from threatened to endangered under the federal Endangered Species Act. The shrub understory is full of colorful shrubs such as huckleberry, viburnum, and blueberry. This woodland property now features a 0.8-mile trail, which makes for a pleasant summer walk beneath the shade of the forest canopy.

After you enjoy a peaceful walk on the trail, cross the street to take in the view of Miacomet Pond! To access this trail from the intersection of Surfside and Miacomet Roads, drive south on Miacomet Road for 0.7 miles, and there is a pull-off parking area on the left.



If you visit Miacomet Woods and take a photo, post it on Instagram and tag @nantucketlandbank! We love to see people exploring Land Bank properties, and hearing what they love most about them.

Staff Spotlight: Susan Campese

We sat down with our very own Susan Campese, the Land Bank's Administrator / Finance Manager, to learn more about her life and work at the Land Bank. Susan has worked at the Land Bank for 13 years and has a hand in everything: she oversees Land Bank transfers, plans the Cross Island Hike, answers the public's questions, and supplies the staff with her delicious homemade muffins... the list goes on!

Tell us about your background prior to the Land Bank!

I was born in Newton, MA, but a good portion of my childhood was spent on the Cape in Falmouth. I moved to Nantucket on Memorial Day weekend of 1989, and said I was going to give it 6 months because I was a city girl... I've been here ever since. Prior to the Land Bank, I was a floral designer, then I worked in accounting services. Once I had my children, I started my own accounting service specialized in nonprofits. I have two adult children, two rescue dogs, and two rescue cats.



How would you describe your role & responsibilities at the Land Bank?

My responsibilities are running the day-to-day operations and keeping track of our finances, but I've always taken the responsibility of being support for everybody. I try to connect people across departments and make our projects work seamlessly. Problem solving has always been one of my best skills. I don't always get the answer, but I always try.

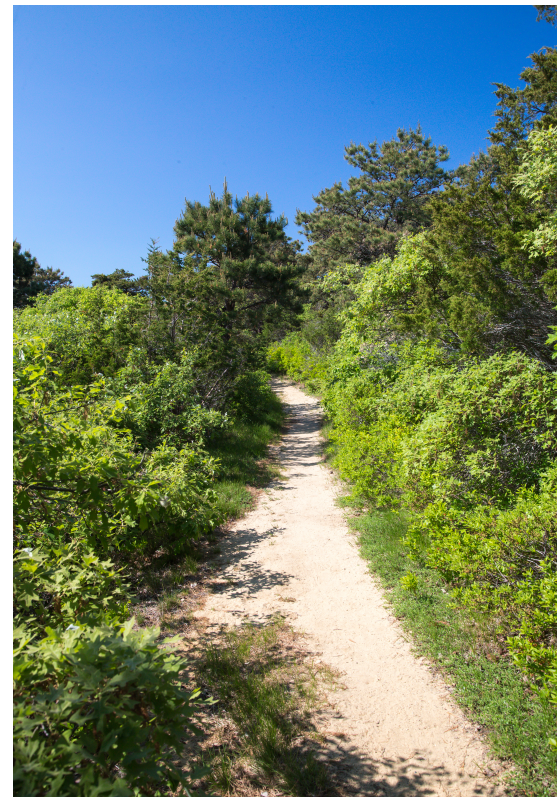
What projects are you most proud of completing?

You think the answer I'm going to say is the Cross Island Hike, and I am very proud of it. I was really excited to spearhead that event, and I think it's an amazing thing for the island. I think some of my coworkers were nervous about the first Cross Island Hike, because the Land Bank didn't have events. But I had many years of experience chairing galas and fundraising, and I knew this would be a good event to let the community see what we do. That first year was amazing and the staff was thrilled. It's very gratifying.

However, the thing I'm *actually* proudest of is redoing the filing system (*laughs*). We had filing cabinets with 30 years' worth of files, and some were sorted by the person we bought the property from, some by the address, some by what we named the property. You had to look in 6 different places to find something. I spent an entire week creating our current filing system. You have no idea what a change it was!

What is your favorite Land Bank property and why?

Shawkemo Highlands. I like walking up the hill, through the woods, and suddenly you're into big sky. It's quiet, and you rarely run into anybody else out there.



Tell us something people may not know about you!

I've always been a maker, ever since I was a kid. I started working with glass in 1996 and have a glass studio in my basement. My grandfather was a stained-glass artist, so I thought "I'll try that to see what Papa Max did", and I loved it. Eventually, I moved to glass mosaics. Then I saw a piece in kiln formed glass that I loved and decided to try that. I have been studying with Paula Kochanek and taking Narcissus Quagliata's Painting with Glass masterclasses which has completely changed my way of thinking about glass as a medium. Whether I'm working with glass, baking, or knitting, my hands always have to be busy making something.