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# Through Tivoli Bays: My Time in the Woods

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# Through Tivoli Bays: My Time in the Woods

Senior Project Submitted to
The Division of Social Studies
of Bard College

by

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**Acknowledgements**

This project is a lifetime of accumulation of natural history knowledge. But over the last four years at Bard, I have had the privilege to get to know the amazing natural areas in the Hudson Valley well. Thank you to anyone who has gone for a walk with me

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A big thank you to Rachel Shamsie, for inspiring me way back in quarantine to start writing about the Bays after going to The Butt together every day for sunset.

And thank you to my family, for teaching me about the natural world. Thank you for making me feel comfortable in the forest, in the water, and in the garden. I can never spend enough time outdoors with you.

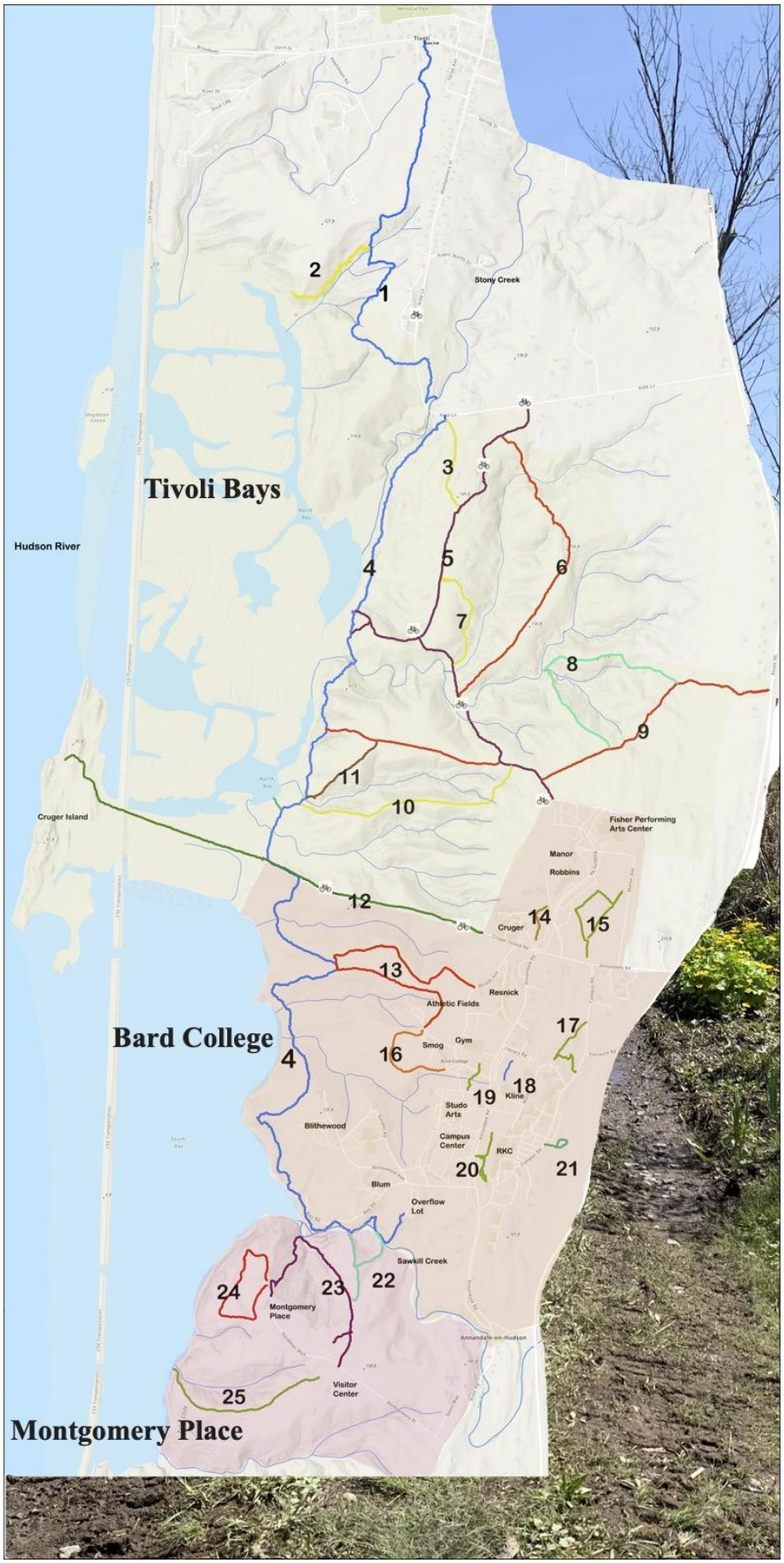
Table of Contents

**Introduction**

It is funny how fast you can pass through a place and speed by the details of a square inch. On a bike, and down a hill, there is no stopping to see it all. I flew through the woods to finish my Senior Project, passing through the forests of Tivoli Bay, over the streams with frogs on their banks, through fields of sprouting ferns, past paths that meander the acreage, and by blooming flowers of spring and the singing birds of migration. The air was sweet, the clouds were ready to precipitate, and in the marsh, the tide was beginning to rollout.

This is the Tivoli Bays Wildlife Management Area and National Estuarine Research Reserve. The place where I spent the last four years exploring and admiring. It is the place where the Stockbridge Munsee peoples once called home before forced removal by the Dutch and British. The place where an electric company once wanted to deforest to build a nuclear power plant in the 1970's. It's where low income residents of New York City used to come for a summer in the woods at the turn of the last century. It's where recreational hunters come for ducks and deer. And is where I have come to write, record, and observe.

This project works to slowly unravel the details of the Tivoli Bays and its moving pieces. It is a landscape that is constantly undergoing physical and ecological change, full of so much detail that these series of essays cannot even begin to fully capture. I started this project during the pandemic when I needed this tract of land to escape people and the cloud of issues we drag around with us. With my notebook, I could start telling the story of the landscape, my interactions with it, and draw the details of the land. It is my hope that you can come with me, into the wild, through the trees and water, to experience the Tivoli Bays.


Tivoli Bays
Hudson River
Stony Creek
Cruger Island
Fisher Performing Arts Center
Manor
Robbins
Cruger
Bard College
Resnick
Athletic Fields
Smog
Gym
Kline
Studo Arts
Blithewood
Campus Center
RKC
Blum
Overflow Lot
Sawkill Creek
Montgomery Place
Annandale-on-Hudson
Visitor Center
Montgomery Place
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| Tivoli Bays Trails: | Distance (Miles): | Guidance: |
|---|---|---|
| 1. Tivoli Trail | 1.2 | Start behind Tivoli Village Hall and continue to Kidd Lane. Meadows, forest, mud |
| 2. North Bay Overlook Trail | .3 | Continues along stream, uphill, to a wood overlook over the north Tivoli Bay |
| 3. Historic Roadbed Trail | .25 | Stony trail with ruins from the Manor summer camps |
| 4. North and South Bay Trail | 3.1 | From north to south, this trail runs along the waters of the north and south Tivoli bays. Forested |
| 5. Tivoli Bays Access Road | 1.5 | Newly paved bike path, linking Bard Camus to Kidd Lane in Tivoli |
| 6. Tivoli Meadow Trail | .8 | Moves through forest and meadows |
| 7. Barn Trail | .3 | |
| 8. Stream Loop | .6 | Hilly and forested, crosses many joining streams |
| 9. Overlook Trail | .9 | Starts on route 9G, moves through forests, part of the bike path, and meadows reaching an overlook |
| 10. Hogsback Trail | .6 | Behind Manor, the trail steeply descends through forest to the north bay |
| 11. Connector Trail | .2 | |
| 12. Cruger Island Road | 1.2 | Only passable at low tide! Down the hill behind Cruger dorm, the trail cuts north and south tivoli bay in half. Very muddy. |
| **Bard College Campus Trails** | | |
| 13. Solar Field | 1.0 | Open field walk starting behind Smog and the recycling center o by the solar array |
| 14. Cruger-Robbins Connector | .1 | Cuts between the trees between the Cruger and Robbins dorms |
| 15. Robbins Meadow Trail | .4 | Meandering pathways in the meadow adjacent to the parking area |
| 16. Woods Trail | .3 | Loops through the woods adjacent to the baseball field towards Smog |
| 17. Bard Cemetery | .2 | Pathways through the gravestones |
| 18. Kline Trail | .1 | Forested trail sandwiched between the Kline field and parking lot |
| 19. Studio Art-Stevenson Gym Trail | .2 | Forest cut through along a stream |
| 20. RKC Trail | .2 | Pathway through the center of the forest between Annandale road and the RKC building |
| 21. Constructed Wetland Trail | .1 | Built for cleaning storm water runoff by slowing down water and allowing plant absorption |
| **Montgomery Place Campus Trails** | | |
| 22. Sawkill Waterfall Trail | .3 | Extends off of the Saw Kill Trail and overlooks the waterfall and rapids |
| 23. Sawkill Trail | .6 | ff of the lawn, the trail moves through forest before emerging again in the meadows in front of the estate |
| 24. Montgomery Meadow Trail | .5 | Meandering pathway in the meadows in front of the estate |
| 25. South Woods Trail | .4 | Old growth forest tra |

Map designed with help from the Bard office of Sustainability

**“You Are the One Who Walked Yesterday”**

You are one who walked yesterday

Pulled from your place in time,

And now I see

That your feet once stood here

Imprinting the earth where I stand,

In moccasins I will never see

Dancing

Bending in this same sun,

To a song I will never hear

The stories you would have told

Were silenced by other tongues,

Yet your blood is in mine

A link over time

I imagine your life from these feelings,

Though I see

You belonged undisturbed

Covered with this dust we share,

Now walk with those who are gone

Aapaachiiw

June 10, 1997
Stockbridge, Massachusetts
Theresa (Miller) Beaulieu,
A member of the Stockbrdge-Munsee Community, the tribal nation forcibly removed to Wisconsin from the land where Tivoli, Tivoli Bays, and Bard College now stand.

**Magdalen Island**

Rushing inside, post first week of school, I pull out a tote bag and backpack from the hall closet and go upstairs. The flashlight from my bedside table, my book and journal, some pens to draw with, and the binoculars resting against the window all go into the bag. I go down to the kitchen piling together an assortment of food; rice, beans, banana, coffee, and water. Back upstairs again, to change into my bathing suit, get the tent and sleeping bag. Running through the back door, I go outside to the shed and throw a lifejacket over my shoulder and pull out some wooden paddles. Throwing this all in the car, my pile of stuff, I grab the keys and my crocs to head off down to the river. Still wallowing in the freedom of summer, a time when only work and the sun dictate my schedule, I grasp onto the fleeting season by escaping the empty house and new school assignments. The sun is still about three hours from setting, and it is time to disappear.

Into the sunlight, straight down the hill, me, the car, and my stuff rolled towards the Tivoli Waterfront. I rounded the bend into the expanse of the river and Catskill Mountains beyond and pulled up next to the double set of train tracks that lie next to the river. Reflective beams of orange light mirrored off of the Hudson. The mountains across the way were rounded and smooth like a green wave, and the brown water that had been headed upstream for the past six hours had now reversed direction, following the tidal pull southwards. I unloaded the food, paddles, clothing, all of which were along for the adventure, onto the rail road gravel. Unearthing the aluminum canoe from under the bushes, I lifted it over the train tracks, and placed it halfway into the water that gently laped the stony shore. I carried my stuff over, put it in the boat, scooped

up a rock from the shore and put that in the bow to serve as a counterweight. Taking no time to pause as the sun sank lower into the horizon, I cast off southbound with the water towards the glowing Magdalen Island.

From just offshore in Tivoli, the island looked like a lump of green trees, mounded out just a short ways into the river, parallel to the train tracks that ran along the shore of the Hudson. Radiant sun, golden like the water, made the island warm, like an old photo or distant memory. Standing proud, Magdalen Island, the spine of old rock thick with tall trees and perfect symmetry enticed me downstream. Steep on either side, long stretches of rock protruded from either point off the tight oval. Sticking out just far enough from the shore, the wider Cruger island to the south could be seen behind Magdalen. Made from the same arch of bedrock, geological evidence from core samples taken in the river and the bays show that the carved out and set back positioning of the north and south bay relative to the islands and main Hudson channel is the result from lingering ice from the last glacial period.  The islands were pieces of the bluff left behind which pressed down and carved out a depression into the usually steep bluffs along the Hudson (Funk, 1992). The ‘sore thumbs’ of rock were like pieces of crust left out in the river. They are little blips of space, isolated and wild.

Paddling downstream towards the rising bedrock, the boat and I slid through the water parallel to the train tracks that lie flat on the eastern shore. In the river, the sky widens, hills above the river and marshes edge can be seen, the mountains loom larger in the blue sky, and the river stretches far and long to the north and south. The open expanse shrinks the shoreline, and the canoe

becomes small too; on this ancient river the canoe and I are only tiny moving pieces in its active and restless flow. Tangled and stringy matts of water chestnuts interspersed with spiky seed pods floated down as well, having been broken off from the thick rafts that grow in the muddy shallows of the river.

At Sycamore point the main current pushes off the edge of the train track and cuts rightward towards the western edge of Magdalen Island. There is no majestic sycamore tree standing here, it's just a spit of rocks exposed at low tide. A decrepit stone pump house stands above the water marking the edge of the main bluff that lines the edge of the Hudson. The land slides back and the expanse of cattail marsh opens up. The train tracks continue straight, cutting off marsh from the river. It was easy riding the current that grew as the channel turned and I headed towards the white pines that clung onto the rocks of the island's northern point.

Soon enough, the island was adjacent to me. The waves lapped the rocky shore bouncing off and reflecting them back towards the open river. Half way down, a small rock outcropping disrupted the thick stone face of the island. I stuck the paddle in and rounded the jutted rock that offered a small cove and pulled up the canoe onto the scrappy shore. Chestnut seeds, sticks, beach glass, wooden boards, and plastic bits clung to the high tide line. I lifted my things and the boat away from the water for the night.

A small path runs along the western side of the island. It passes over the rocky edge from point to point crossing through the trees and over moss covered ground. Twenty feet or so above the

water, this path stands adjacent to the lapping waves and is exposed to the sun and width of the river. An overhanging rock shelter is carved into the spine of the island which has long been recognized as a campsite during seasonal travel on the river. And above that rock lays a flat section of ground, directly on the spine of the island which offered a larger setup space for a campsite.

During spring, summer, and fall, when the river is ripe for fish and freshwater clam harvests, many sites like this on the river were used as camping grounds through ancient history. Archaeological dig sites at such locations reveal shells and evidence of fishing and hunting materials. (Funk, 10). With my things, I took the path past former camping sights to my own little nook in the rocks. The spot was full of moss and tall oaks, back from the river and below the steep rock. The sun, now cradled into the side of Overlook Mountain beyond, released its final glow. A cheetering entered over the pine above, and a rushing fly by of a Bald Eagle crossed over the setting sun. The orange afterglow of sunset and the hum of evening crickets settled the day, I pitched the little tent, and settled in.

Two sounds woke me up in the middle of the night. The first one started as a vibration, a horn sounded, and then the thunderous clacking of steel wheels. Squeaking and echoing across the river and off of the mountains, this train filled the whole landscape. Clattering over the trestle bridges along the North Tivoli Bay, the freight train lingered for a while slowly plowing through, leaving an echo footprint. Later on, a grumbly hum vibrated the air and water right next to my tent. It was a big object, echoing in its chambers, being pushed by a huge motor. Then right after

it drifted by, crashing waves rolled up the side of the island slamming on the rocky slope. Fearing a tidal wave, I unzipped the tent and saw the back red and white lights of the natural gas tanker headed up towards Albany. Here I was, on a patch of wild land, all alone with the force of the tidal river surrounding me, under the moon and stars, but sandwiched between two major highways. Utilitarian wilderness seemed to be the right term here. The trains and boats took advantage of the flat space, the access to an easy route, but this section is kept wild, the fringe of the bedrock, the bays, and the river. How lucky is it to have such an attitude in this strip of industrial river.

Settling back into my tent, I wondered how many people had slept here, witnessing the river dig into the edge of the rock, or taken shelter in the stone overhang, and had a fire inside that half cave along the path. Who were these people taking shelter from storms, high waves, ice, impassable waters, and darkness. Dotting the island are numerous, in fact 220 pits dug over the years, done by looters, looking for artifacts from former temporary settlements. For 10,000 years this place has hosted people, all of whom arrived by the water, carrying with them items for survival or importance. Biological remains show that people would fish in the river and marsh, catching shellfish and the herring that swim upstream in spring. Yes, I am alone here, but the ghosts and spirits of others who escaped to this chunk of wilderness on the Hudson lay within Magdalen Island. The Island knows how to host guests too, as Magdalen has experience with almost any type of person, the hunter, the partier, the warrior, the nomad, the looter, or the archaeologist, all have been here.

Loud moos of cows filtered through my tent in the morning. It sounded as if a cow was outside of it actually. But after I opened up, in the shadow of the island peak, there was only mist rising from the river. The cows are far on the other side. With water and an apple, I headed further down the path to the rocky point on the north. As the island narrowed, mist from either side rose and gently flowed south, pushed by the lightest wind. Bright rays of dawn illuminated the rising water vapor, and it felt as if I was on a great boat, slightly bobbing forward over a bed of golden clouds. The cattail marshland of the north bay to my right glowed too and the morning activity of the Tree Swallows and Northern Rough winged swallows filled that air with cheer. Under the train trestle, the birds shared quick bursts of tweets as they filled their bellies up with insects, flipping, gliding, and zooming around. Struck by their action I decided it was time to move, so while the tide was still rising, I got my things, and marched back over the path towards the boat, and drifted back upstream from the island dreamscape.

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On a spring day, six months after my Magdalen Island night, I met Mary Burns. With long hair and skinny legs branching out from her shorts, she came to tell me her story of Magdalen Island. The snow was melting around the picnic table, and the sun was brightly shining off of it as we imagined and discussed the island out on the icy cold Hudson River. That place was a gem for her as well, and before discussing the matter further, we decided that the island would need to be shared between us and our birding friend, Susan Rogers.

Time on that place feels different, it feels ancient, and the scale of personal existence shrinks a bit as the wild becomes bigger. Her first trip out there was in a canoe with Bard College's Archeologist, Chris Lindner in 1994. She fell in love. In my interview with Mary said,

> "It was cool to be on this gem of an island, right here, so close to Bard, and you were out there learning what he knew about the prehistory. On the west side you look at the Catskills and imagine yourself back a thousand years ago. It was a wonderful feeling of a little microcosm of pre-history. The chance to be out there was so special where the only sounds you hear are birds and water lapping, until a barge or train comes along."

But beyond the spectacle and imagination, the physical remains broke her heart. Looter pits, of which there are hundreds of had been, and continue to be, dug all over the island. The camp site above the rock shelter had been heavily torn into. Seeing history being ripped out of the ground is what set Mary off on a quest to do anything she could to respectfully unearth, record, and catalogue the remaining artifacts on the island. This is hard work, though, as the looters use a different set of eyes than the archeologist. In Mary's words, the looters dug for treasure. They even went so far as to trim the edges of the tree bark and cut the roots around the tree to kill so that the trees would topple and, hopefully for them, the fallen tree would then pull up the earth where their 'treasure' could then be plucked. Archaeology is about what you find, but also where you find it, and it's relation to other things around it. If there are decades of people digging for personal treasure, then that erases all the context an archaeologist is looking for to piece together in order to develop a higher resolution image of what occurred in ancient history on this land. Looter activity is like "ripping a page out of a story book" Mary told me.

Determined, she worked effortlessly to preserve the remaining information still left in the ground before looters destroyed it all. Her work involved the main camp site above the rocky shelter, stabilizing looter pits, doing soil flotation to look for biological remains that revealed the aquatic organisms that were being harvested from the river and eaten on the island, but many of the plots were so destroyed that information couldn't be gathered from them. She spent a good decade going back and forth to Magdalen to rescue its history and preserve it. By applying for a grant she received money to shore up the sides of the pits so that erosion could be limited and she got the island recognized by the state as a historic preservation area. Although this isn't her native ancestral land, she felt as though she was the only one out there who cared about its history and the story that the island still had to tell.

I asked Mary if she had spent any nights out on the island. Picturing her out on the island for long days, it only seemed natural that she would want to try out the rock shelter to see how well it protected sleepers in the rain, or witness the sunset and sunrise over the marsh and river. But she replied ‘no’ to that question, she said she isn't one to break rules. I felt embarrassed, having just told her my tales of being out there, in the pocket of wilderness, enjoying the adventures of swimming, canoeing, and camping out there. But she assured me that as long as I wasn't digging she wouldn't tell the NYS Department of Environmental Conservation, the owners of Magdalen island and Tivoli Bay who require permission to camp.

Before parting, we made plans to canoe out there in the summer, so that she could tell me more stories as the island has revealed much more to her than me in their long term relationship. Pulling out her bag of Magdalen island things, she showed me a recording log of each trip out, who was with her, and what they did on the island. Every trip was an adventure, a memory, a written record. This ordered history of Mary and the Island juxtaposes the scramble of recorded history of the island.  Her care for Magdalen, to not have pages ripped out of its history book and preserve the patch of wilderness, is an antidote to the disrespect that has invaded the island since colonizers sailed up the Hudson.

Her love for this little place, a mere dot on the map, has trains and fuel tankers flying by, looters digging for personal collections, and campers resting on its shore, yet her care for this place has her returning again and again to do whatever she can to honor this magical island allowing it to be the monument that it is.

Sources:

Funk, Robert. “The Tivoli Bays As a Middle-Scale Setting for Cultural-Ecological Research.” *The Hudson Valley Regional Review*, vol. 9, 1992, pp. 1–24.

Mary, Burns. *Interview with Mary Burns*. 27 Feb. 2021.

**Eyes**

The Spicebush off the side of the trail is dense. Endless stands of the bush stretch in a thicket on the tilted land. Holding great volumes, the thick humid air is still able to contain some of the sweet and spicy aroma of the bushes. A crunched leaf in my hand emits the sweet and flavorful smell. Everything is even toned, in gray sky and distant horizon. Heavy drops of water falling from the ever-so-slightly windblown tree tips are the only source of motion. Because there are young and old Spice bushes, and young and old trees mixed in, the transition of leaves from understory to forest canopy doesn't exist resulting in a column of green. Cascading down, the drops bounce leaf to leaf from the canopy to the forest floor. With such little distance and depth variation outwards and upwards, my eyes are free to wander in this tight bubble of green. Walking in, my eyes were fixed five feet ahead, looking for hints of trail on the forest floor. Dodging branches as I walked deeper into the thicket, my eyes would quickly bump inwards and latch on each branch crossing the path, so that I could navigate out of its way. But when I stop moving, my eyes are sent adrift. Thoughts and space cover my eyes. There's too much detail and too many objects for them to pick up and register everything. Each leaf shines and moves. The angles are infinite.

It's fun to play with your eyes in these circumstances, letting them go into space and then land upon something. You can feel the muscle contraction and expansion as it focuses on each dot in the leafy world. How come, though, can this only happen comfortably when you are all alone? I am not alone, there are more things under my feet than I could count, but none of these things

have eyes that I can click into. The finger looking mushroom next to my right foot doesn't stare back and the Oak tree amongst the Spice Bushes doesn't either. I hear a Nuthatch, and a Chickadee, hopping around some tree down the hill, but I'm not really something worth staring at for them. Scanning, my eyes come in and out of the field of depth and touch all the things that move ever so slightly around me. You could call this movement unruly, but people have so many rules with eyes and this freedom is welcome. There is the

Begging for attention stare

Help me stare

Single eye contact stare

Friend stare down in excitement

Biking stare

Death stare

From car stare

Facemask stare to figure out who the person is

Gay eye stare

I love you stare

Is it okay to stare at animals? I don't know, I guess it depends on the type. Leaving my house from the front is always tricky, because I could have a potential stare at my neighbor. He’s not my neighbor, but rather my crush. And often there will be an eye meeting, but the fear of two or more clicks of the eye is very important because too much eye contact shows too much interest, but how can you look at your crush and avoid eye contact?

**Sunset on the North Side**

The trail quickly lost control of its order and dissolved into the forest. Blue dots marking the trees faded away and stepping over fallen trees and shrubs, I found myself bushwhacking through the trees. Strong northeastern winds from powerful Atlantic storms had ripped through here as overturned trees fell up the hillside, westward, exposing their upper reaching branches to the forest floor. The barely worn path was hard to follow because the forest floor was littered with colorful leaves. Fallen yellow birch leaves, one with a heart ripped into it, red Virginia creeper vine, and the orange veiny leafs of the sugar maple blended into the ground. Newly fallen leaves merged with last year's dark and decomposing leaves. The most brilliance of color came from the poison ivy. Their orange and red leaves, full of color saturation crawl up the tall trees creating stripes of hot color though the forest. Poison ivy vines this time of year also seem to be scurrying with activity. Birds love the berries that dangle from their branches. It's a perfect snack during fall migration. Do the bright leaves call the birds in? The berries must taste great, strictly for birds.

After dodging trees of all diameters and type, the loose deer path I was following turned and opened up into a grassy very steep open forest. Straight ahead of me stood the north end of the North Tivoli Bay. Making the marsh out through the tree canopy below me, it was clear that all the cattails were brown now. Fall really was here and the plants knew it too. From my slope, the trees were all still green not yet reacting to the cold and diminishing sunlight. They stand on the south face of the hill, where the  sun keeps them a little warmer and sheltered.

I arrive here in this forest at sunset. Bumming my way through a friends backyard, I headed in this direction, walking a path I hadn't seen since spring. The air blew steadily across the marsh gliding up through the trees on the hillside. Even though the winds were from the southwest, where the sun was falling between the mountains, it was cold and reminded me of winter as the air was clean smelling, no longer heavy and rich. Yellow from the sun shone all around as the light streamed in through the trees, but it wasn't the same yellow tone of the summer sun, it had less strength in it now.

Earlier in the week a friend of mine had told me that there was a bear spotted on the Montgomery place property, just south of Bard and Tivoli Bays. A notice went out about the bear to all the students. Largely missing in the notice was what to do if you see a bear. Words like, keep calm, make your presence known, do not run, and stay away from cubs. Did they expect everyone to know what to do? Later a photo from the college shuttle bus circulated showing a mamma bear and two cubs running away from the bus next to some white pine trees. Moving north from Montgomery place then to campus made Tivoli Bays the only logistical place for the bears to head to next.

As the sunset over the North Tivoli bay, my short pause ended. Thinking more of the bear and impending darkness, I turned around. Pressed between the Hudson River on the west, farms and broken forest to the east, the Tivoli Bays, Bard, and the estates to the North and South along the

river create an intact long and full forest. And a perfect wildlife corridor. A great walking path for the mamma bear.

What would I do if this bear crossed my path tagging along her three kids? Putting myself in a not so good location, I had to get out of here and headed to the edge of the forest. The trail petered out long ago, but the land here is easy to navigate as valleys follow streams, and the sun sets in the mountainous west. Once I made my way out of the sun and onto the main hill I could head north to town again. Sloping downwards to my right was a stream, laden with mud and thorns, and to the left was the top ridge of the hill, the blue sky, and setting sun. Along the ridge was a horse fence and a meadow on the other side. Pointing myself between the stream and the meadow I meandered over the sloping terrain through the trees. The fence line gradually moved in towards my direction and intersected my path right where I started.

The trailhead, and friend's backyard, has lots of weird objects in it on the way to the path. One stone chimney, an odd pine tree, long grass, a dead garden, big barn, and a wisteria vine that is shaped like a bush which we thought was dead for a long time. But amongst this sculpture garden is the view of the sunset out of the way of bears, I watched the dusk enter. The sun goes down over the meadows and trees beyond landing straight into the mountains. Slowly emerging is the red light. Atop Overlook mountain the faint red light blinks slowly high above the earth. Clouds reflect the orange afterglow. Each blink of the tower glows brighter while the stars begin to peek out. Along the wildlife corridors edge, crickets warm the cool air of September.

**Blue Jay's Head**

October 4, 2020

A stream of geese flew overhead through the day. Their sound was the first thing I noticed stepping outside in the morning. Flocks honked above in commotion of thirty or so birds. Each group formed mostly well organized groups of v formation. The bundle of wings and long necks call out high above; each goose looked like an ant crawling across the clouds. There, up high in the sky, the north wind is stronger and pushes the birds south so they can fly with ease riding the current of wind. One flock today dipped below their original flying height and went under the strong upper winds. Amongst the puffy clouds of white and brilliant blue patches in the sky above, this flock stumbled around in the air losing sight of their formation as they struck slower moving humid air. Whirling in a circle of rapidly flapping wings, around and around, the geese flew independently, out of form, into an unruly ball. Slowly, gaining rhythm and height, they climbed back up to their previous elevation with the wind current and continued on south.

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The night before I dreamed that I was on a runaway boat that carried seeds of plants from all over the world. It was the boat's mission to mix and grow all the seeds on an island. As the boat headed for land, I jumped off the ship into the ocean. I swam towards shore and away from the incoming boat. A long border of rock and dust cut across the mountain island like a dividing line drawn down to the water. One side was where the plant experiment was taking place to create a worldwide plant forest, the other side was a deciduous forest like what is here, along the Hudson. My parents were on the experiment side and I had to get them out. The island was about to

become a disaster. A cloud of dust reached the beach from down the hillside towards the border. As soon as I was out of the water I went towards the rock rubble and dust, workers were chipping at the stone, building a pathway over their carved out line. Grudgingly, they let me through and I could get my parents away and back to the side of the island where the environment was healthy and the natural cycles of growth, decay, and water, were all in balance. The dream ended as we reached the safe side, but the whole island felt like it was going to change, the border of rocks wouldn't be enough to stop the experiment from spilling over to our side leaving it vulnerable to an invasion of plants trying to conquer the stable forests.

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In the morning, after staring at the geese endlessly flying north, I needed to go out onto Hudson River and paddle. I sat the canoe in the water and didn't know what direction to go. The tide was rising north and the clouds were sending mixed messages of darkness and blue sky. I could fight the current out and ride it back, and so I chose to go south.

I paddled slowly south against the light current of the rising tide. The water was being wedged upstream, pushed into the narrow stem of the Hudson from the ocean. Rocks along the edge of the train tracks dragged the water around themselves and swirled the floating residue of decaying plant matter. High above, the moon was a crescent, pulling the water, like a glob, close to its mass forming the high tide. Pretty soon, the moon would sink, setting on the horizon of the Catskill Mountains, and the tide would  ebb towards the sea.

Floating on the incoming water, the mohawk of a Blue Jay's head stuck out. Amongst a sinking tangle of green duckweed and spiky chestnut seeds, the blue feathered point bobbed with the northbound tide. The feathers were dry and the water hid whatever was below the blue crown. On shore, a Blue Jay murmured. It made a light whistle and muted the tone between its beak. The sound was soft and sad as the Jay hopped around the branches of the Box Elder trees that grow in the rocks. Ripples formed into small waves around the canoe. The bow of the boat turned, joining the ripples as a gust of wind swept the surface of the water blurring its surface. The gusts pushed the boat against the tide. The water's movement north slowed at this point, almost reacting to the change in wind, and it seemed as if, for a moment, the wind became stronger than the moon forcing the tide to shift. Resisting the wind, I put my paddle in and took a stroke forwards. Inching closer to the swirling head, the wind moved the two of us around. Tiny strokes soon scooted us closer until the head was at arms length away. My hand reached out and I plucked the crown of the bird. Its bottom beak drew open as the head was lifted out of the water. The bird's eye was half open on the right side. Determination was still present in the black eye. Before it died the bird was doing something great. Poking its curious beak and eyes into everything it saw. Perceiving the world brilliantly.

Lying upright on the extended paddle, the bird's head was placed down on its clean severed neck. There was no blood, the feathers had been untouched and were precise. It was a clean slice. We looked at each other before I dipped my paddle back into the new south flowing tide setting the head free.

The Hudson River facing east towards the train tracks

**Ash Trees**

I remember when I first realized that people live in homes different than mine. My mom read Olivia to me, a book about a pig who wanted to join the circus. Sitting in bed with me, my mom turned the page of the book to a paragraph and a picture of Olivia, the pig, with her dad sitting on her bedside reading her a book. On Olivia's wall was a big photograph of Eleanor Roosovelt. As she read, I stared at my walls, imagining that photograph over the rolling green hillsides that were painted on my wall. She had two doors in her room and I only had one. Olivia's room was different from mine and seeing that this cartoon pig had many differences in bedroom style allowed me to consciously realize that other kids rooms look different than mine. And because Olivia was a pig, I then began to realize that the differences in what rooms we have isn't just a human thing. Other beings, not just humans, have different places that they call home and something equivalent to a room of sorts.

And a little later, that thought moved beyond thinking about the animal. I soon realized that plants and trees have homes too, but they just have to stay put in the same ground during their lives. The trees lack the ability to move their mass far distances, to different climates, or join in and hang out with other new trees far away.

The repeated image of a tree with a hole in its trunk paired with an Owl sticking out of it was multiplied many times in kid nature book imagery. It entered my subconscious. The tree could be a home. A bird that can fly and live there, or an insect could have hatched out of an egg in the

canopy, and even the bark grows lichen and moss. In these images and connotations, there is always some sort of balance. The tree is happy and the owl is happy. The tree gives seeds for offspring, the seeds nourish the food web in the forest, and animals plant the seeds for future generations of trees; I make and build my room, and it provides a space for me. These neat and orderly concepts engrained themselves in thoughts about the forest, it is easy to believe that there is a presetine balance there and that the cycles will continue.

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Down the hill where the North and South Tivoli bay meet at Cruger Island Road, there is a stand of tall ivory colored bare trunked trees. They stretch high twisting upwards. Most of the branches have fallen off, and the canopy is bare pointing up. A few curvy limbs stem off from the slightly less than vertical trunks, where robins, hawks, eagles, kingfishers, and vultures land. On the forest floor, the land is flat, and wet, and crowded with Spicebush and rich green Skunk Cabbage. Now bright and full of sunlight, the tall trees used to shade this marshy forest. Slowly crumbling, the massive stand White Ash Trees are dying and falling to the ground.

The home of the Ash Tree is more complicated than the home of a cartoon pig. New to the environment where Ash Trees grow is the Emerald Ash Borer, a small and shiny green beetle. The Borrer calls the Ash Tree home. These guys are newcomers and quite destructive tenants. All over the swamps near Cruger Island, along the fields in the back north east corner of the Tivoli Bays area, and near the community garden at Bard, the ash trees are almost all dead. In the fall their leaves are purple, deep and dark, but this year there are only small specs of the purple leaves. It seems as if the emerald ash borer has eaten its way through these mighty trees. Straight

trunked and striped bark, Ash Trees who once towered out of the forest and through the canopy are going to collapse like rubble, as many now are only dead statues of wood collecting insects and fungus.

At their best, the Ash Trees are pioneer trees in this area, as they will happily grow first in a meadow. The tall towering trees of the forest, of 60 to 80 feet, shed their helicopter blade seeds outwards into the wind carrying the winged seeds pods into a spot under a warm leaf on some empty soil in the sun. This is the game of the Ash Tree in the meadow and the trees are good at getting here first. Popping up forest inward, the trees can quickly blend the height of a forest edge and the tall grass. Sloping in, the Ashes wedge the forest into the grass, as they grow tall to short. Clean and upright, they can inch forward each year with the tallest trees near the forest and the youngest heading outwards into new territory.

The Ash Tree is now leaving its home. The forests and meadows, marshes, almost all habitats, are going to have an empty shadow, a place for roots to fill. Any number of trees would be ready to fill their spots, hearing through the roots and fungal networks that a tree is absent.

The beetle starts its invasion once an egg is laid into the tree. Larva hatch as grubs under the bark and consume the live layer of the outer ring of the tree. Inside the tree, the grubs chew a network of squiggly paths in the tasty wood cutting off the flow of nutrients and water that travels through the trunk supplying branches above and roots below. A third of the foliage and branches may die in a year and it takes about three years for the tree to fully die. Certainly a long and

arduous death. Moving tree to tree by flight as a mature beetle, or via logs transported by humans place to place, the beetles breed and lay more eggs.

The tree is not totally helpless, because all parts of the tree are in communication with each other. Peter Wohlleben in *The Hidden Life of Trees* discusses tree communication as a whole body process. “If the roots find themselves in trouble, this information is broadcast throughout the tree, which can trigger the leaves to release sent compounds”(Wohlleben, 8). The sent compounds are picked up by other leaves telling insect’s are attacking. “When a caterpillar takes a hearty bite out of a leaf, the tissue around the site of the damage changes. In addition, the leaf tissue sends out electrical signals, just as human tissue does when it is hurt...However it takes an hour or so before defensive compounds reach the leaves to spoil the pest’s meal” (Wohlleben, 8). In the Ash, it recognizes that there is an insect consuming the soft and delicious outer trunk and the trees are mounting their best compound defence. The trees are also using “Chemical signals sent through the fungal networks around their root tips...Surprisingly, news bulletins are sent via the roots not only by the means of chemical compounds but also by means of electrical impulses that travel at the speed of a third of an inch a second”(Wohlleben, 10).

There is one problem, the Ash Borer tipped the balance of the forest equilibrium. It doesn't have many predators like other beetles have, so the sent and fungal signals calling for help does not have any predators picking up the other end of the line. The woodpeckers seem to be the only ones eating the Borers, and are quite happy about it.

Attacked on all sides, the remaining Ash Trees are now refugees. The seed bank is dwindling too. Some seeds will survive after their species is driven to the edge and maybe it will grow when the beetle is gone. It can't imagine another home, a place without pests and a place full of other Ash Trees. The language of its homeland has now changed, translation and adaptation is too difficult with such a rapid shift. And it has no ability to move it's present body.

43 species of caterpillar rely solely on the ash trees, and 282 species feed off of the tree in total. The plague that is affecting the tree also tarnishes the balance of insects that once was. The delicate biodiversity that was built up around the ash trees is gradually unfolding. Moths and butterflies, who have adapted special mechanisms to digest the trees leaves and compounds. The 43 that rely solely on the tree do not stand a chance at survival if the tree dies out or diminishes greatly, which could lead to local or even regional extinction. That means that caterpillars which rely on the trees, which occupy 8% of the forest here, will quite rapidly become absent. This caterpillar mass is food for birds. The roughly 200 species which consume caterpillars in New York forests, which also face many other existential threats to survival, are going to be short on protein rich food. Forming the base of the food chain, caterpillars feed the birds, chipmunks, squirrels, and their predators as a protein packed grub. All of this system will be lost when the trees are gone or almost absent. Rot moves fast.

Yes, new trees will replace their shadow in the forest. Maybe it will be an Oak who will produce lots of acorns, or a Sugar Maple tree which also supports around 200 species of caterpillars. But many of these, just like the Ash, only consume maple leaves and do not offer food for the

caterpillars that eat Ash leaves. The tress replacement could also be a non native invasive species whose leaves and flesh support very little of the forest food chain and its biodiversity. Take a Norway Maple for example. First planted in the United States in 1756, it has been here for 265 years. How is a caterpillar supposed to figure out how to detoxify the white poison juice that leaches out of its leaves in such a short time? This takes time via many accidental caterpillars being able to miraculously recognize the trees chemicals and digest them. It's not going to happen fast.

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**Stony Creek**

November 7, 2020

Broken off by a road from the larger land area of Tivoli Bays is a small tract of land that extends between Kidd Lane and the White Clay Kill. This begins the final stretch of the creek before its tremendous double down over bedrock and into the north bay tidal wetland marsh. Upstream, and before all this, the creek makes its way through the village of Tivoli. The creek is shy, you could visit or even live in Tivoli without giving the creek much through. The main road entrance into town has a bridge that moves high above the creek and shelters its view with tall stone walls. On Kidd Lane, the road that cuts off a section of the bays from the rest, another bridge crosses the creek.

In the stretch between the stone bridge and tight turn bridge followed by waterfalls, is where I walked after the results emerged that the country elected a new president, rejecting a facist from ruling another four years. The water flowed in and out above the waterfall downstream, just like the lazy president would soon be, swiftly taken away. After days of anxiously waiting, hoping, making phone calls, and wishing for the best, I could now walk freely and feel relieved that maybe some of this mess we were all in was finally at ease. So, I traveled down the riverbank to walk this stretch of creek for the first time.

The one thing about walking in the woods in fall is that each step is so ridiculously loud. You could hear a human walking from half a mile away with the sounds of the cracking leaves. Why

is stealth walking in the fall reserved only for rainy days when the leaves are damp and mute? I was trespassing if I walked on the high flanks of the creek edge, and I was making a loud sound at it, so whenever I could, my feet would place themselves on rocks, stones, downed trees above the flowing water as I moved downstream.

Making my way through the woods past the gentle flow of water over stones, the pace of its movement began to slow down and widen out as it approached the Tivoli sewage outflow. Behind a small fence was a squared off level piece of land. White barrels holding sewage eating bacteria spun in the outflow water. A pipe extended underground to the side of the creek, bubbling out the treated water. It was clear and clean, a little methane blew out of the penned in filtration systems. Now the creek was wide and slow and deep. The two flanking hills once pulled in closer to the creek forming a fast stony channel widened out away, leaving space for the creek to wave and weave in meandering curves. This flat land was covered in old and dying or dead Ash trees, many collapsed bohemiths lie on the forest floor. Emerald Ash borer invaded the trees and consumed their living inner layers of the trunk by forming multitudes of squiggling pathways just behind the bark.

On the ground, the Japanese Barberry bushes were orange and golden yellow. The small and tight round prickly bushes are a favorite home for mice. Protected by thorny branches, the mice live in the roots. It's a good place to hide from the hooting Great Horned owl in the White Pines up the western hill behind me. Bending down in reaction to the crawling sensation on my legs, I found three ticks climbing up my socks at a quick pace. They scaled vertically through hair and

slippery skin, racing for my warm crevices. It is because of the barberry bushes that there are mice, and because of the mice there are lots of ticks. The mice stockpile them, and the deer that move through distribute them around.

Just before tumbling over the rocks and waterfall beyond the road and the Kidd land bridge, the creek really got wide and deep. Sunset was beginning and the sky turned from a creamy orange to dark lavender. The woods were purple and the river black with reflection. A hole in the ground along the creek appeared as I went around a tree. Bending down, it looked like a tunnel as I extended my flashlight into it looking up and down the slope inside. A clay bank extended under the water. I sat down, still and quiet from the shouting leaves. Wiggling over, bouncing ripples off the side of the bank, a sleek brown little Muskrat with wyling tail scurried downstream. A Muskrat is the perfect boat and a perfect submarine. Complete with exquisite paddling feet, oily coat, and rudderlike tail, this rodent is designed for the water. It circled and slowly turned to smell the air above the water. Maybe it caught a whiff of me, but it didn't seem too worried. The Muskrat made only ripples behind its skinny tail. Then it dove into the underwater tunnel and away from sight.

**Streams**

November 25, 2020

Resting low on the southern horizon, the sun slowly scraped through the sky, traveling with resistance. Too weak to burn off the daytime clouds, the sun is becoming a rare and sacred part of the day. Reduced to a grey glow during the day, the clouds often are too thick for the sun to poke through, yet strong enough to produce the slightest afterglows of sunset. At sunset, the grey is gone, people go outside, bow to the golden light, smile in its grace, and remember when it ruled the world here.

Hope for warmth shifted into memory. Magdalen Island, that glorious chip of rock in the Hudson, with cliffs to jump off of, sunsets to gaze at, slabs of rock to lie on, and thick mats of moss to sleep on, is now a far off nostalgic memory. On the dock overlooking the North Bay marsh, shot guns firing at ducks, the island is just a stand of skeletal trees on the horizon. And from the beach in Tivoli looking south, the island is miles and miles away behind the fog, it is unreachable through the choppy and cold opaque waters of the Hudson.

With such heavy and frequent cloud cover, the natural conditions of pre-winter, stillness has increased in the woods. Wings of the teetering turkey vulture and stunted looking wings of the black vulture, soar in multituded overhead. Outstretched wings, no flapping, quiet, forever looking downwards, the vultures just glide across the backdrop of grey and twiggy naked trees. They swirl together in great flocks over the White Pines at Bard where they rest at night. On the

forest floor, leaves no longer make a loud ruckus and dance across the forest floor, for rain has glued them down into the mud and decomposition has begun. Crunching has given way to mushing. On the trees, a few rattling leaves on the Beech tree are all that are left of this year's bloom. Curved inwards like shells, the leaves shake like ghosts in the wind. White Pines remain forever blowing on the hillsides and meadow edges. Small flocks of Chickadees in the trees, cheerful and bouncy, dabble around on the tree branches swinging around, scratching the ground, and tucking into the thicket while the landscape enters dormancy. Tufted Titmice, silvery gray, join in filling the air with momentary and passing chatter before the breeze shuffles them along to the next tree. Higher above, flocks of geese fly overhead towards the water which is still open for landing and free of ice. Though smaller in numbers compared to the large migrating flocks earlier this fall, these birds fly in mighty little groups and stick to a routine. Making their way over the woods from the east, the birds splash their bodys down into the South Tivoli bay by sundown. Like an airplane on its final approach, the geese lower their elevation as they approach the water. After flying over the forest, the trees break and the bay extends beneath the geese. Over the water, the geese stop flapping and glide, their bodys quickly sink. Stretching their wings wide, the birds tilt them upwards to gain the most air resistance and their downward rush begins to slow. Feet first, applying the breaks, they break the surface of the water splashing down churning the glasswater as they erupt into a chorus of honking. And after sunset, a few geese honk from the water, their voices emerge from dark silhouettes slowly paddling around in the swirling water. All in now for a night out on the water, their tones begin to fade along with the grey glow of the sky quietly returning.

Despite the geese, the clouds, and the treetops, the attention of our eyes migrates downward as winter sets in. The sky is less acrobatic than it once was. Walking through the woods becomes more of a task than a space to observe. It is colder now, jackets, hats, and scarves weigh down our bodies. Hillsides, now exposed by the loss of green leaves, reveal their earthly mass. The brutes, composed of clay and rock layers, are sheltered by an even-toned brown carpet of decomposition. This place, the earth's surface, Tivoli Bays, where we walk, run, bike, bird, hunt, sleep, and jump on is just a carved surface scoured with high and low points that all gradually flow like melting wax hands towards the water. The back of the hand represents the contours of the land here. The more level and largest portion of our hand is the east, the fingertips dissolving into the marshy bay is the west. Between each finger and around each finger wort is a stream. At the cusp of the finger joints, a crack of new earth exposes itself to the air and water.

Accumulating on the clay dominant soil, water slowly moves through the mud and grass, around trees and bushes forever seeking the lowest point. Making its way through the flat joints behind the fingers, the water gains some momentum and force. Joining forces with other collections of water now, the rush can slip through the leaves and channel through cutting out the clay surface. Miniature canyons develop and quickly slide between slopes towards the tidal waters of the bays. Eroding earth material beneath trees that have unwillingly grown adjacent to the small streams, the water often topples the pillars of wood causing them to lie across the little canyon. Like massive bridges over momentous rivers, the dead trees give even more soil to the streams.

Working their way west, towards the low tide line, the lowest level this surface water can go, bits and pieces of sediment composed of clay and silt flow along with the water. So much carving is done that the water is consistently murky and light brown with the dust of the fine particles of earth. Each rainfall brings more water and more downward erosion. Eventually when the dark water reaches the tidal flow of the bay, the movement of the heaviest particles subsides and settles itself on the bottom of the water basin. Rounded disks of land bow out into the bay as the stream, now on flat land, slows and branches off and meanders before dissolving away to the water. Willows and dogwoods sprout out of the mushy dirt, and closer to the waters edge cattails and wild rice poke through the new territory.

Small streams, of which there are about six that flow into the north bay, only contribute a small portion to the sediment deposition in the marsh. Stony Creek, from Tivoli,  collects its contributions of earth materials and flushes them downstream into the tidal wetland. An influx of sediment from elsewhere in the Hudson Valley also wash into the north bay during storms and the routine high tide. An ongoing study conducted by The University of Massachusetts, Amherst has been collecting data on the accumulation of sediment in the north bay, and many other Hudson River tidal marshes. Since the creation of the railroad trestle in 1850, the marsh has grown and accumulated more and more sediment. The railroad acts as a barrier from larger scale erosion caused by waves, and the two bridges on the north bay allow the river sediment to enter each high tide. Rates of deposition are around 1.5 - 2 cm per year, while water levels are only increasing around 1 cm per year, due to climate change. This is good news for the marsh, as this vital ecosystem wont rapidly be destroyed by sea level rise.

Winter storms are coming soon, and then the spring rain, followed by heavy rains of summer. Following the cycle of the sun's strength and heating abilities, the precipitation contribute to erosion and sediment deposition at different rates. The patterns that the trees, birds, and marsh is used to will grow ever more scrambled with the onset of climate change. Every moving piece in the Tivoli Bays is being altered by the pattern changes.

Source:

Yellen, B, Woodruff, J, Ladlow, C, Ralston, DK, Fernald, S, Lau, W. Rapid tidal marsh development in anthropogenic backwaters. *Earth Surf. Process. Landforms*. 2021; 46: 554– 572. https://doi.org/10.1002/esp.5045

A clay filled stream cutting through the hillside after a rainstorm

**Stock Barn**

Mid October I heard that the old stock barn in Tivoli Bays was being demolished. We called it the slaughterhouse at school because it was a creepy sort of barn; tall brick walls on either side, holes in the roof left by fire, a wide open rectangular doorway extended upwards, tracks of steel lay on the cement floor, and vultures and ravens would often sit and bask on the crest of the decrepit roof. Numerous spray painted tags, images and words, coated the walls inside the slaughterhouse. It wasn't a slaughterhouse at all, but a stock barn used when Tivoli Bays was a summer camp for people looking to escape the city and spend the time farming. A tiny strip of barbed wire fence blocked the barn visually from the main path, but you could walk behind it to get inside. The whole barn stood open, no door, lock or barrier. Inside, every sound echoed off of the cement floor and brick walls. A nest underneath a chimney dropped many sticks onto the floor below. Cracks in the roof let water in when it rained and sunlight in when it was out. Naturally, small trees and plants began to emerge out of the cold concrete splitting large cracks through and into the basement below. Like a series of caverns, arches of concrete formed the basement. Sound echoed in strange ways off of the soft soil and the openings in the walls. Each created their own pattern of sound resonance.

After hearing word of its demolition, I approached the barn for a final visit. Three walls still stood. The roof was gone, ripped off, and the front wall had been removed and turned into rubble. A large “TACO" was written on the wall. Spray painted mushrooms, vines, and scribbled sentences scoured the remaining sides of the barn. On the right hand wall, a large inscription of

the word “rise” was spray painted thirty feet up. Below it was a pile of scrap wood. Half of it was previously burned. A warning sign of asbestos stood next to the pile. A dove cooed from the pile and fluttered away through the open roof. Noticing another movement above, I spied a Cooper's Hawk on top of the burnt wood. This small hawk, with long rectangular striped tail and speckled breast, loves to eat other birds like the dove, and after it saw me, it leapt up and flapped its wings, rising over the word “taco” and into the sunrise behind it.

“Rise” and “taco” were going to crumble like the front wall and roof. What was most striking was the amount of blue in the sky above me. On each side stretched the cloudless and cool open sky. What was going to rise out of this spot once the cement, bricks, wood, metal pieces, toxic soil, asbestos, were all removed? Sun now reached the ground of what once was a dark cavernous space. Ten vultures, a mixed group of Turkey and Black, circled overhead riding the rising warm air above this open space in the forest.

A week later, the remaining three walls and basement chambers had been knocked over and crushed into chunks. Under the densely overcast sky drizzle made a shallow layer of mud on the road. The trees stood like skeletons and the vines of the still green Wisteria wrapped over the squiggling mess of bramble over the former roadbed to the barn. The cut in the trees on the left side of the main road once revealed the ghostly barn presented a burial ground. An orange fence surrounded the circle of barren trees like a running track. Inside the ellipse was once shape and structure, weathervanes, wooden beams, brick, spray paint, sculptures, and drawings. The barn was a home for animals, fire, people's parties, and secrets. Now it was a tomb. Forming a

rectangle in the center, evenly broken bits of cement cubes lay flattened smoothed to the earth around it. Chunks of light colored brick tiles filled in the holes. It was like the barn had been squashed and formed into a rectangle cube and sunk down into the earth, leaving a hole of air in its place. Open sky overhead and empty, raw, cold wet rock below.

Some pieces of brick had color remains of the spray painted walls. I picked up a piece. Fitting into my palm, the chunk of wall was half cement and half brick. Painted on the cement side was worn light blue on top of navy. The paint was full of scars revealing the underlayer. Shaped like a cloud, the chunk once formed some words, a tag, or monster drawing on the inside wall. Maybe it was high up requiring the artist to use the old rusty ladders that went up toward the burnt roof. Or perhaps this piece was on the wall of the stockades and storage rooms in the basement. It's collaborators, the other pieces with light and dark blue pieces, lay broken apart and scattered among the rubble in the grave of the barn.

A pile of crappy soil, full of clay and stones, was placed ominously outside the orange ring of fence. Perhaps it will be the final erasure mark to this place; the soil that covers the grave. A bright orange eight foot hackhamer called a "Rammer" and a chomping machine called "Fortress, Sheer Core", the size of a T-Rex skull, sat next to the pile of dirt cover. Battered and scraped, the Fortress tool looked like a metallic dinosaur. It had a narrow head and a bottom and top steel jaw with sharp teeth. A chunk of aluminum pipe lay wedged between the opposite row of teeth on the bottom jaw. It said "keep away 75 feet during operation". This was a monster. Predator of cement and history, champion of serialization.

The North Tivoli Bay, facing east

**Remnants**

January 12, 2021

Right before the sky turned orange and the setting sun beamed up through the mountains, my mom pointed out a cement stump on the precipice of a hill tilting towards the water. ‘What's that, what is it?’ The cube stood three feet high and wide and a white, something, was placed on top of it. The grey cement blended in easily with the maturing trees, maples, and large red oak. The dogs were with us and stopped along the trail adjacent to us, slightly forward, leading the pack. We all stepped off and into the trees to investigate this manmade object placed here in the wilderness. It wasn't a match to the surroundings. It looked as if it were placed specifically, like a monolith on the curving hill.

Stepping over the thorny low growing scraggly Japanese Barberry, over un crushed fallen leaves from fall, and between saplings, the dogs, my mom, and sister approached the mystery object. As we got closer, the expansive landscape of the Tivoli North Bay, the Hudson, and Catskills emerged more into view than before. The screen of trees was reduced towards the precipice. I believe what pulled us in here was the white sculpture placed on the tip. It was pure white, organized in its form, purposefully. It was also small too, undefinable from afar.

Lying bare to the elements, the cement cube was aged. Large pebbles in the mortar exposed themselves, and the color had taken on the same grey of the clouds and tree bark. The white object now up close had a rounded side and sharp chipped points, and still confused by its awkwardness of angles and bows, we picked it up. Inside the back end of a curved section rested

a wolf spider. About the size of my thumb, the sleeping arthropod was clinging in the curved cavern of white, in its white objects resting position, the spider is completely insulated from water, snow, and wind. It found a resting bubble. By this point it was clear that the white was porcelain and that the curve the spider laid in was the rounded base of a toilet. The spider didn't flinch, and assuming that it was comfortable in its hide out, I showed the spider to everyone and placed the toilet chunk back down on its cement pedestal.

On the ground my mom pointed out the little green leaves hiding amongst the fallen tree leaves. Connected through a vine network the Myrtle, or Vinca Minor, groundcover had established itself here on the forest floor. A common and long used nursery plant from southwestern Asia, these had been planted here. But ages ago since the site did not look like a neat manicured garden. Along with the cement, the myrtle was also a human introduction here. But the forest had grown up, leaves were not raked, and the cement only healed up a broken toilet, placed on top by who knows who and from god knows where. Looking up now, the magical Hudson valley sunset was revealing itself again, making the world turn orange.

A small building was drawn over this space on the old map of Tivoli Bays from back when this place was a camp, a farm, and retirement home. There is no label on the map, other than it is south of the Bungalow Camps and lies south of the stream cutting between the two areas. The drawing depicts a square structure, with vaulted squares of the roof, and it stands on four little supports. The cement here may be one of these corners left behind from the summer fun up here

in the woods, left behind after demolition, left with plants, and a chunk of toilet with a wolf spider hibernating.

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I met with Helene Tieger, a former resident of Tivoli, the historian at Bard College, and inhabitant of this woods during the summers of the sixties and seventies. She recalled a time when she and her friends would come to the woods when the cabins still stood here. Screened porches on wooden boards, broken doorways, and leaky roofs were all that remained of the summer camp cabins. One of her friends, Stephanie was 'obsessed with Gone with the Wind." she told me, "And would go to the porches to read." Slowly, the cabins were demolished. Her family, along with others from Tivoli, would come here to collect house parts to renovate, add, and build new homes, a form of recycling what was no longer being used. The Oja family with eight kids built almost their entire home out of pieces of the Ward Manor cabins.

Eventually erased from the landscape, these cabins once hosted families and kids from New York City with the help from the Association for the Improving the Conditions of the Poor who ran the Ward Manor Camps. Out on Cruger Island, there was a boys camp, in the Ward Manor mansion retired residents lived out their final days tending to vegetable garden plots in the present day meadows, and a working farm where the families from The City could help participate in its activities centered around the large beautiful barn which too had recently been demolished.
As Richard A. Anderson, a camper of Ward Manor, puts it in a 1990 interview

> "no other single thing in my life was more important to me than the time I spent at camp. Maybe it was the fact that only 30 boys had the whole island with great food, great

games, and great people caring for us. It was like stepping into a strange perfect world. I'm certain that had the wealthy people known of the existence of the Ward Camp, they would have fought to have their own children attend there"

Through his youth coming here, from New York City to the Ward camps, now Tivoli Bays, Richard stayed in the cabins and on Cruger Island. They played baseball where the Parliament of Reality sculpture stands now at Bard College, swam in the pool near the stock barn and Hudson River, and ran through the trees and streams playing games all summer long. This wild place was an introduction to nature for a lot of these kids, and it seems like the proper place for it to happen. I couldn't think of a better place, then and now, for kids to learn about the woods, the way streams work, and how the natural world functions.

One of the blueprints of the cabins that overlooked the North Bay shows that the camp wasn't too shabby either. With screened-in porches facing the water and setting sun, the cabins had bathrooms, multiple bedrooms, and a central chimney too.

Looking at the ground now, illuminated orange by the sunset and purple reflection of the mountains, the plants and most miniscule chunks of cement are the only physical evidence left of these places. A few trails mark the landscape as trees continue to grow out of meadows and clearings. The cottages have been transformed into other homes, and the stock barn has been leveled and fully buried into the ground. No stories of the summers remain here, only letters, images, and testimonials hide out in the depths of the Bard archives. But there is a spirit to the landscape that still lingers. It entices us to explore it. And the 'perfect world' where we can

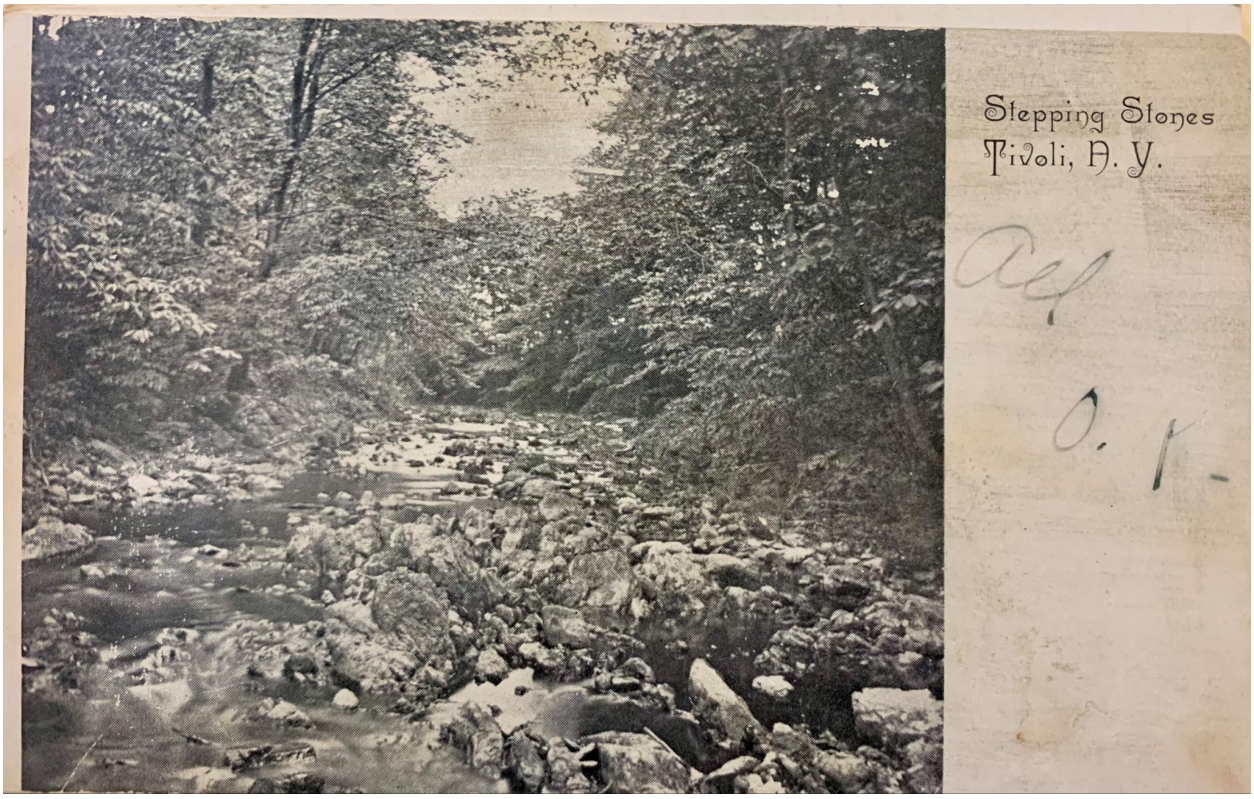
imagine ourselves, smaller than the natural forces at play inside this natural system, are still at work. People have different reasons for coming here now whether that be birdwatching, frog catching, exercise, or admiration for its beauty, but this place still can be whatever we want it to be. It is a space that gives small clues to its past and the ability to imagine the future.

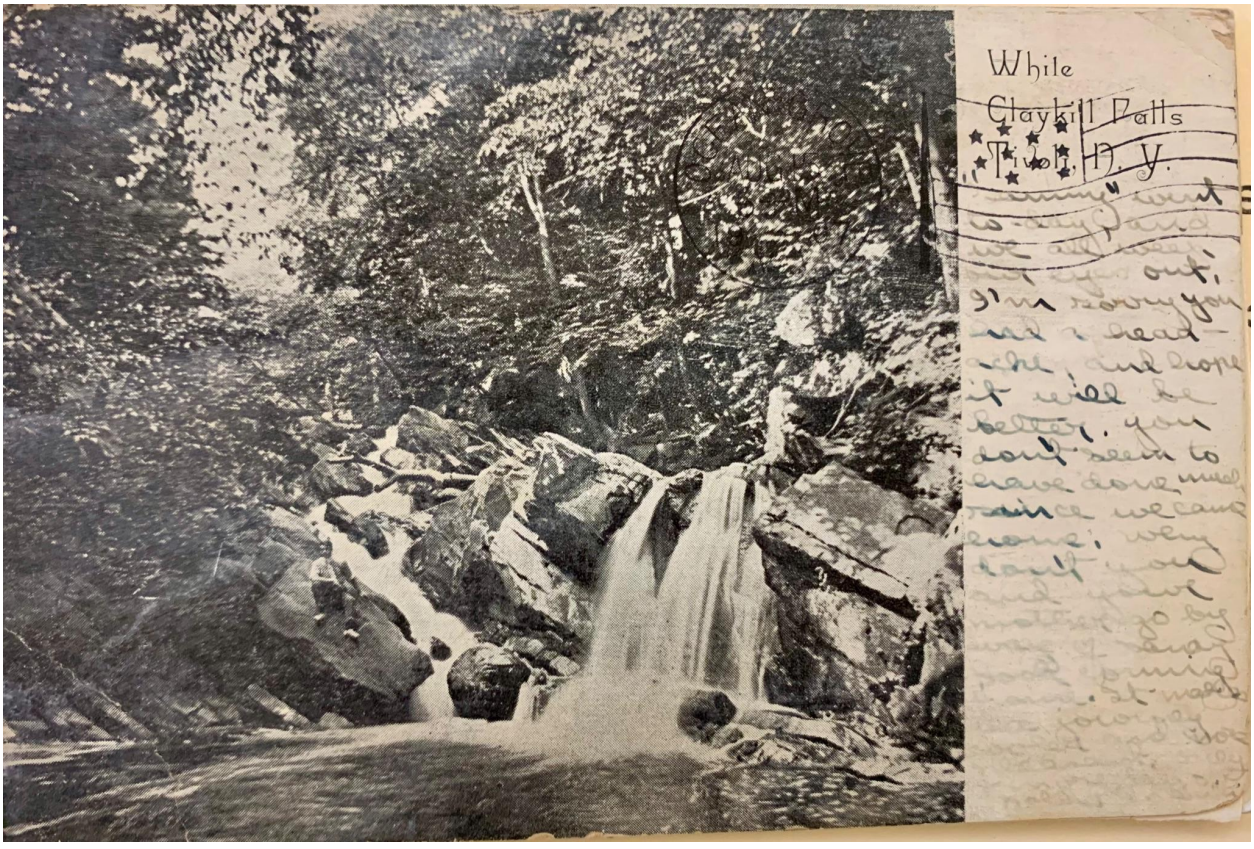
Images, Letters, and Map sourced from the collection of:

Richard A. Anderson. 16 Nov. 1990. Dick Wiles Collection, Box 2, Bard College Archive. Accession number 2018_0041.


Ward Manor Estate house (1920's, Richard A. Anderson)


Closest station to Tivoli, Rhinecliff, NY (1908, Richard A. Anderson)




Tivoli postcards of the White Clay Kill, or Stony Creek. (1907, Richard A. Anderson)


49 Map of Ward Manor property and camps (Richard A. Anderson)

**The Frozen Marsh**

February 13, 2021

I found myself staring at the rounded points of cattail flower heads, each collecting small globs of snow on their top. The falling flakes fell in large bunches; sticky and heavy they fell like paperclip helicopters. Catching small clumps of snow, the cattails accumulated little white cones on their heads and stood still keeping their hats balanced. Locked in by deep snowpack, and iced over meandering canals underneath, the statues remained grounded, unable to grow or fall. The big flakes blended into the horizon, erasing and dulling shapes in the distance. Trees on the train tracks across the North Bay marsh were blurred and the hill beyond the river was a silhouette of a ghost, placing me in a plain of infinity.

As a child, like most, I had a fever every winter. Under the covers and on my back in bed, I would spend the day going in and out of sleep, followed by a bath and some warm food before entering the dreamscape again. Reoccurring behind my feverous eyes were landscapes of white openness, an infinite plain. A thin grey horizon met the white sky and floor, but that was the only detail. Objects would emerge from the grey line. Across the field of white, thunderous roaring vibrations shook the plain, before anything emerged. Squealing and hammering the ground, a train slowly accelerated out of the horizon growing louder and larger tearing across the space as it drove closer towards running over my head. Just before the front plow and hard steel wheels squashed me, I would wake up sweating with my heart beating hard. Running downstairs, I would go sit by the fire with a dog away from the train in my room. My parents read the

newspaper behind me on the couch while I dozed off again lying on the carpet in front of the flames.

Under the hush of snow falling steadily, the sound of the Amtrak train's horn blew in the distance. The typical echos from the mountains were silenced by the falling sound dampening material. Rhythmic clacks came from the train crossing over the trestle. Unlike in my dreams, the train moved across the horizon, like the grey line, and it remained quieter, slower, and gentle. I knew where I was, off of that direct line of a train crash, far away from panic. The scene returned to the snow and all was hush.

I scanned the horizon with my binoculars. Each flake magnified cutting off the solid shapes and colors of distant trees, sticks, marsh material. The jumbles of flakes tumbled as they fell. And before turning to go up the hill, a streak slit through the vertical snowfall. A Northern Harrier, a hawk, was scanning the frozen marsh. Its head was dark brown, with the darkest patches resting behind its eyes, set back like an owls'. Looking down into the spaces that lie between each reed and cattail, the patchwork of snow-covered ground where a bird, mouse, vole or other creature could hide was endless. The tiny cracks, the crevices, the exposed spots all were open for the sharp-eared hunter. Unlike other hawks, hearing is the stronger sense for these birds. And listening down to the snow covered ground, it circled gently, low and steady, much like the train, moving in rounded out rows back and forth over the frozen land. A small patch of white extended like a band across its tail, blending in with the sky making the small patch of brown tail in tow look like an isolated shape. Weaving back and forth, the bird gradually made its way

towards my side of the marsh, where some red-twig dogwoods, and red maple trees extend a dryer portion of the land into the sea of cattails. It was brilliant and beautiful to watch the birds head through the magnifying lenses of the binoculars. The hawk stared straight downwards, unfazed by the snow and with determination for success. Just across the frozen channel, above a patch of snow capped cattails, the bird suddenly tucked its wings inwards, jutting down just feet above the dried plants. It dove like the snow, straight down into the marsh. The bird vanished into the mass of brown.

Various sparrows live in the marsh here over winter. Camouflaged brilliantly with the long fields of cattails and other marsh plants, the little birds maneuver over the snow and in the air eating seeds, hiding for cover often off of the white patches of snow and into thick patches of vegetation. I don't know what the Harrier saw or heard on its hunt. It can only be imagined through the sight of my binoculars. Soaring overhead, the hawk may have heard and seen one of these sparrows scuffling about, out loose in the narrow patch of snow between cattail reeds just below the sharp senses of the hawk. This little bird must have seen death headed talon first, accelerating out of the sky towards its little head. Of course this could have been a mouse or vole too, using its even more powerful ear, the ruffling of snow by a digging vole could be picked up, creating a pinpoint on the ground below. Dipping down, the hawk could have pierced the snow with its talons, feeling for the vole.

Whatever was lurking in the cattails, it narrowly dodged death. I leapt out of bed before the massive train destroyed me and my feverous eyes, by just avoiding who knows what. It could be

possible that this attack will be a dream in the memory of the prey, a recurring nightmare of mortality. Leaping up vertically again, the Harrier emerged with empty hanging talons. A miss. And a good save. Returning to the search, the bird resumed soaring low and steadily disappearing into the snowstorm towards the back of the marsh near Tivoli.

The icy Hudson River and Catskill Mountains in January

**The Ducks**

March 21, 2021

Even though my footsteps were as quiet as they could be up on the steep south facing shore, the Wood Ducks leapt up out of the water far below. Many layers of mature trees stood between me and the marsh on the steep bluff. Still, squabbly screams erupted, loud and voluminous, telling this whole corner of the marsh that I was there. These little ducks are rather unassuming as they typically go about dabbling around in the water, and when I spy them through my binoculars, they are always looking around to see who is watching as if attack is imminent. Being sharp and attentive, they took no chance with me as I weaved through the trees above the water; I was the threat on the horizon.

The females Wood Ducks, who show modest color of various brown shades, blue spots on the wingtips, and white eyeliner are more inconspicuous compared to the the males with red bills, green and white heads rounded back to a point from forehead to back, rusty breast, and dark brown and white lined body. These ducks were the first to leap up hollering from the marsh. Following them was a flock of about twelve Black Ducks, a larger brown mallard looking duck, and two Green Winged Teals, with rusty heads, green patch, and brown speckled body, jumped into the air too, whistling as they flapped their wings and lifted upwards. I was feelingp hesitant about disturbing the water any longer, so I stopped moving towards the next patch of open trees. The whole mass of birds circled in tight little flocks over the marsh, they did two loops overhead,

and then sped off to the other side of the tidal marsh, far away. The whole place emptied out. I stared out at the duck-free plain.

Lifting my binoculars back up again, a dilapidated wooden cube came into view. It was off center from its support beams and stood crooked amongst the vertical cattails. This wooden structure is one of the last remaining duck blinds that are still standing in the North Tivoli Bay. Used as a platform, shelter, and camouflage, duck hunters occupy these blinds, decking them out with more camouflage like cattails, or other vegetation. The hunters then go inside and hide from the ducks. Like a spy booth, small windows are used to peer out for ducks and to point rifles out of. Since New York State now has ownership of the land and wetlands it is managed by the state as a wildlife preservation area. No new structures are allowed to be built requiring hunters to find their own spot to hide outside during the fall hunting season.

Hunting of ducks in spring is illegal. I've never heard shots out in the water in spring. However, the birds that come through on their way back north again in the spring still act like I'm carrying a duck license and rifle. Despite being hundreds of feet away from them, my scurrying must trigger the memories of threatening humans, living with the fear that they could be shot here.

What is the meaning of this place for them? Most of the ducks use the estuary as a stop over for migration. It probably brings up feelings of congregation, rest, meeting other ducks, diving or dabbling for fish or insects, eating plants, a safe stopover, but the marsh also means hunters with guns working in any direction and could strike at any moment. Some of the ducks could have

had layovers on ponds closer to humans, other neighborhoods or parks south of here. Some of the ducks could have even stayed for a bit on their northward journey in the Central Park reservoir in the city, where they don't act shy at all.  Plenty of ducks there, and plenty of people too. I sort of wish that they could read the signs on the trailheads, the table that lists the hunting seasons, but the threat of hunting for them is thought to be always.

Knowing that I could do no more harm, now that all the ducks had now flown away out of this section of the marsh, I scrambled down the steeply pitched hill towards the sun and water below. Despite it being March, the cloudless day allowed the sun to bear its full strength. Brown reeds of the Cattails that extended for acres and acres in front of me created a heavy band of sheen that rose upwards above the sea of brown. Like a thick glaze, the shaggy points of the cattails blurred together; I could stand there on the edge of the marsh all day long enveloped in the rising heat.

It would be selfish of me to stay long, to sit for a while under the sun, watching the tide slip slowly out through the muddy canals. A passing group  of four ducks flew in overhead, circled, then turned back around for another patch of water after witnessing me standing on the high tide line at the border of the forest and marsh. By moving back up the hill, towards the fields, and town, I could put to rest some of that duck anxiety. So, turning around, I scaled the hill and disappeared back into the trees, letting the marsh be with itself and the ducks and the sun overhead.

Early in the Duck Migration, North Tivoli Bay, facing west

**Ghost Woodcock**

April 2, 2021

I have yet to see a Woodcock this spring. So it is quite possible that the ones that I have been hearing are ghosts. As twilight grew, and the blue sky transitioned even darker into black night, the whirling and buzzing sounds of the woodcock surrounded the meadow. Desperate to see the bird, I planted my muddy feet into the wet ground and held still. Listening into the dusk, sounds of bzzzzzz….bzzzzz spurted out of the grass and thick bushes. The sound could have been fake, as if a person was winding up a toy or amplifying a phone vibration behind the sticks and trees.

Raising my binoculars up to my eyes, I stared at the bush where the sound came from and I slowed my breath to still the frame. Endless criss crosses of dead grass lumped on the ground made the muddy meadow blurry. Saplings and thick woody bushes stuck up above the grass and turned the eye-level horizon a thick grey band of sticks. It was impossible to find a bird that also looks like dead grass in this mess of perfect camouflage habitat.

Without sight, I would have to locate the birds with my ears. Poor at pinpointing, this sense is inferior to eyes at finding where a bird specifically is. Ears are good at recognizing that something is around, but they often mess up directions. As I remained still, the ghost birds grew ever more confident and others joined in making the pinting buzz sound.

According to online videos, Woodcocks also perform a dance when they pint (the name of the Woodcock sound). Walking forward, the camouflage bird bobs up and down its rounded foot long body. Holding its head and long pointy beak still, the bobbs emphasize its shoulder and foot motions. Sounds overlays of Billie Jean by Michael Jackson describe the tempo of the bird dance. Another video showed the bird bobbing to Bob Marley. Could these have been rehearsed?

Out in the meadow, I needed to keep walking to avoid being swallowed by the darkness of the night. The stars were out and the ground turned into an even larger camouflage of sticks. The pinting buzzing sound continued around me. Every ten seconds or so one would go off. They moved like moving targets, a buzz never came from the same spots either, and as I stepped forward, swirling sounds circled in the air. Unable to determine the spot they were coming from, the whooshing and light tweeting sound darted above me in all directions. In the sky, the bird sounded like a trill whistle, light and airy, but fast and scattered. I put my binoculars to my eyes again, this time facing the sky and air, looking for some object to be flying around. Nothing.... I moved further forward, towards more buzzing, and more sounds lifted off and circled around above me. The springtime ghosts never crossed my eyes, but continued making their presence known during their evening of song and dance.

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