On July 28th, 2016, a bright, midday sun beat over a thickly asphalted parking lot. Although there were no pedestrians and the air was completely silent, a war was unfolding right along the edges of the smoldering blacktop. Kimberly Burgos and I, two Rockland Conservation & Service Corps (RCSC) interns, went to the vacant parking lot in Piermont, New York towards the end of our internship, to conduct a field survey and help map out the geographic distribution of invasive plant species in New York’s Lower Hudson Valley. Despite an intense drought that had plagued the county for much of the summer, Kim and I found an infestation of Tree-Of-Heaven (*ailanthus altissimus*) plants encroaching onto the site, each of which was competing with its native neighbors for air, water, and nutrients.

Kim, a self-proclaimed Instagram and Snapchat enthusiast, took pictures of the plants as I scribbled down their GPS coordinates, both important inputs for the blockbuster survey organized by the Lower Hudson Partnership for Regional Invasive Species Management (PRISM).

During the PRISM survey, I could not help but feel guilty for some of the ways I had aided invasive species in their ongoing war against native plants. As an avid gardener at home, I had always loved the beautiful appearance of nonnative grasses and flowers on my family’s property. Thus, over the years I had bought many ornamental plant varieties like Scotch Broom (*cytisus scoparius*) and Chinese Silvergrass (*miscanthus sinensis*) to improve the aesthetic appearance of the lawn. I was unaware that these well-intended actions were disrupting local ecology, as many nonnative species become invasive when introduced to new habitats such as my own yard.

This surveying experience with invasive species captures the essence of the evolution I underwent during my Sorensen Fellowship. I was constantly learning new community-specific information about environmental topics that I had only understood more generally beforehand. What did an invasive plant look like in the New York area? Which forms of pollution were most prevalent in Rockland County itself? Many of the region’s environmental issues were imperceptible until you dug a little deeper below the surface. As my account of the summer will demonstrate, my internship experience was ultimately shaped by what I
My internship experience was ultimately shaped by what I learned from these types of subsurface challenges to the environment, to the community, and to my own perceptions.

A Duo Formed

Nearly two months prior, on a fresh and sunny June morning, I was in pure terror as I drove up the Palisades Interstate Parkway. This would be my first day of work and the commute would be the farthest I had ever driven independently; I would have to leave my self-contained suburban community and drive north up the intimidating Palisades Interstate Parkway all the way to CCE-RC in Stony Point, New York. The Palisades Interstate Parkway and Interstate 287 were the two main arteries of Rockland County, and literal drivers to its economy, with commuters buzzing to and from various corporate, government, and non-profit offices throughout the New York metropolitan area. The irony of my driving anxiety was that the whole trip lasted approximately 20 minutes, and my reverse commute meant that I was surrounded by only a few cars, as most commuters were going south and east towards New York City.

On that first day, after holding on to the steering wheel for dear life, I merged off the parkway at exit 14 and arrived at Stony Point. I pulled up to CCE-RC a half-hour early, and for the first 20 minutes of the day found myself parked alone in an expansive parking lot, which was showing its age with large potholes filled in under parking spaces and thin cracks that wrinkled its surface. Ahead of me were a set of old oak trees, with wide canopies pushing past the artificially clipped grass, and across the street was a beautiful area of milkweed plants, which, I could see upon closer inspection, were each being caressed by bees and monarch butterflies. The vibrant flowers fronted an old and charming building at 10 Patriot Hills Lane. The CCE-RC building, with its granite stone façade, high columns, and a portico, had such distinctly sophisticated architecture that I could only assume it was built with the support of a generous donation from Cornell University funders.

Once the wonder of working in both a literally and figuratively ivy-covered building wore off, I discovered that the building was more akin to the parking lot than to the Ivy League. It was an aging part of the landscape, and was in desperate need of repair. While working at CCE-RC, I became familiar with the leaking parts of its ceilings, torn parts of the walls, and outdated bathroom stalls that had shower curtains in place of doors. The building had been converted into an office in the past 20 years from its original use as a residential institution called Letchworth Village, which housed and treated the mentally and physically disabled. Unfortunately, the Village had been marred by a dark period in its history, when patient abuse and neglect were reported. The blast of negative press about the Village had made it a household name throughout the region, and even before the residential institution closed in the 1990s, it had developed a “haunted” reputation.

At the time that I first arrived to CCE-RC, I did not actually know that I would be working at the uniquely historical space for the rest of the summer. I was excited to be a RCSC intern, but would not know my site placement until the second week of my internship. For the first two weeks, the RCSC Program Coordinator, Kathy Galione, and the RCSC Outreach Coordinator, Eric Fuchs-Stengel, ran the show, and made this Rockland County Youth Bureau program a memorable and unique learning-based experience. There were 27 interns in total, aged 18 to 25, each of whom brought unique experiences and skills, but all coming with an interest in conservation work.

Some of our training work was focused on understanding Rockland County’s natural resources by seeing them in person through guided hikes and clean-ups. Other parts of our training work...
involved team bonding through trust-building games and activities. Finally, one of the most important parts of the program was preparing us interns with the necessary skills for the expected work at our different summer internship sites. It was during one of these skills training programs that I first spoke directly to Kim, the observant, and sometimes shy, recent college graduate who would become my partner intern at CCE-RC.

Kim and I shared a skill that was otherwise unique in the program, and that neither of us yet knew the other possessed: we could both speak Spanish. I had developed this language skill in school, starting with basic vocabulary lessons in pre-school and continuing on through honors and AP courses in high school. Kim learned to speak Spanish by being raised in a Puerto Rican household and speaking the language with family members daily. We would both demonstrate our linguistic knowledge during a mock community outreach program. For this program, Kim and I played the roles of two Spanish-speaking community members – a novio y novia, husband and wife – who walked by the other interns’ stations to test their ability to interact and educate us about RCSC. Kim’s and my contribution to this training program was important not only because tabling (speaking publicly to pitch a program or provide educational insight) was a major part of many of our internship roles, but also because the Rockland community had many Spanish-speaking members who would be passersby during community outreach events. Kim and I both had fun with the opportunity to act and demonstrate our mutual skill, and I learned that my language proficiency was an important ability that I could utilize in a work setting.

Ultimately, Kim and I were placed to work together at CCE-RC, a site known for engaging with diverse community groups. We would see language and other skills come into play as we built off each other’s strengths to become an effective team, and we would each be moved by our experiences and our expanded knowledge, but in distinct ways.

Two Fish Out of Water Find Recourse
Two weeks into my internship with CCE-RC, I strode down a wooden dock near Bear Mountain State Park, at the northernmost point of Rockland County. I looked out onto the Hudson River, an estuary with tides produced by its connection to the Atlantic Ocean downstream. As the wind gusted along its gently shifting brackish waters, I breathed in the salty breeze. I looked out with Kim by my side, admiring the vast estuarine ecosystem. The river is home to many fish, crustacean, and bird species, some permanent residents of the watershed and others coming seasonally, from the ocean or lands afar. Running past major cities, suburbs, and rural communities, the Hudson River remains a reminder to all of New York State’s natural beauty. It was also an important model of progress: the Hudson River, like thousands of others around the country, had been saved by a legal amendment, commonly known as the Clean Water Act.

In 1972, Congress amended the Federal Water Pollution Control Act, now generally known as the Clean Water Act, establishing an objective “to restore and maintain the chemical, physical, and biological integrity of the Nation’s water’s.”

This groundbreaking law was passed at a time when “river fires, toxic spills and other crises had cast a national spotlight on water pollution” and Americans sought to make the nation’s waters “fishable and swimmable” once again.2

Kim and I spent much of our summer working along the Hudson River, for a partnership between CCE-RC and the New York State Department of Health’s Hudson River Fish Advisory (HRFA), to ensure that the pollution that had marred the river’s past would not endanger the health of current Rockland County community members. While the Hudson appeared hospitable and was certainly cleaner than it had been in decades, its water and soils still contained traces of harmful and invisible chemicals called polychlorinated biphenyls (PCBs). These PCBs had been dumped upstream by industrial polluters decades earlier,
persisting in the ecosystem because they are easily stored in organic matter, such as the bodies of the fish swimming in the Hudson River. Therefore, there are many health risks associated with eating Hudson River fish, and the HRFA has established specific guidelines to minimize the impact on those who choose to consume them.\(^3\)

Kim and I were stewards of this knowledge, traveling to different sites along the Hudson River to post information and speak to locals about best practices when fishing its waters. Not being native to Rockland County, Kim and I traded off the role of navigating towards our destinations, using our phones’ GPS systems to find each of the county’s public beach and dock sites. During our trips, we each learned to drive CCE-RC’s bulky minivans over narrow wooden bridges, down steep roads, and through heavy traffic. After an array of unique and sometimes challenging drives, we would find ourselves repeatedly mesmerized by the Hudson River. We would constantly take pictures and videos while on site, proud and happy that being “at work” also meant being in one of the most beautiful places on Earth.

Once we got ourselves situated at each station, we posted laminated signs with a list of fish that could be eaten from the estuarine river’s waters. The main mantra I internalized, when first learning about the HRFA program, was that it “depends on who you are, where you are, and what you catch.” To illustrate the complexity of these guidelines, the HRFA advises women of childbearing age to never eat fish from the Hudson River because of the impact it could have on their fertility. Meanwhile, under HFRA guidelines, men over 15 years old are able to eat specific fish, like the striped bass – but only if they catch the fish between the Rip Van Winkle Bridge and New York City Battery, and only eat up to half a pound per month.\(^4\)

Doing this work, I often wondered why the HRFA would advise people to eat fish at all if they had to follow all these specific guidelines? The reality I learned is that fishing is a significant part of many of the residents’ culture, and if eaten appropriately, these fish provide many nutritional benefits, including high quality protein and healthy fish oils.

At Rockland County’s northernmost HRFA posting site, on a wooden dock that faces an iconic suspension bridge, Bear Mountain Bridge, Kim and I saw all our developed skills and knowledge come into play. After posting the HRFA sign at the end of the dock, we saw a group of men walking a short distance from the bridge, along a small gravel-filled beach on the river’s edge. Each of these men carried an array of fishing gear, and judging by their conversation, it seemed they all spoke an Asian language that neither Kim nor I recognized.

I felt compelled to encourage this group of men to read and learn about the Hudson River fish before they cast their fishing rods into the water. I walked up to the men and said, “Hi, we are working with the Hudson River Fish Advisory. We just put up a sign about which fish are good to eat from the river. You should check it out!” The group was initially unresponsive to my recommendation, so I assumed none of them understood what I had said. Kim and I kept pointing towards the graphic poster that would help them determine which fish to eat, but felt disappointed seeing that none of the men walked over to the dock. After a few minutes of attempted conversation, Kim and I turned around and started heading to the car to leave.

Just as we entered the minivan, an older man from the group ran up to the car and knocked on the front-seat window. Kim rolled the window down, and the man cautiously asked, “Are we not allowed to fish here?” We were relieved to hear him speak in English to us, and quickly responded that people are allowed to fish in the Hudson and that we were just trying to advise the group to read the HRFA poster to know which fish were healthy to eat. He responded “Oh... because of the chemicals. Thank you!” We were happy that the man came up to the car and that we were able to communicate the information effectively, but it also reinforced the importance to us of bringing the HRFA fish advisory guides in other languages on future trips. As we started to drive away, we still wondered whether the group would take our advice. Fortunately, we saw all the men wave and smile at us and start walking towards the sign on the dock.

This experience was just one of many efforts that Kim and I made to educate anglers and other community members about guidelines provided by the HRFA. Late in the summer, Kim and I drove down to one of the southernmost public access points of the Hudson River in Rockland County. This was a mile-long
Come On, Come On – Turn the Radio On!  

After many weeks of venturing around Rockland County to directly educate community members about HRFA, on July 14, 2016, I spoke on a local Rockland radio station, WR CR 1700, to educate the broader Rockland community on a large scale. This radio station was housed in Pomona, New York, towards the back of Palisades Credit Union Park, a stadium that also was also home to the Rockland Boulders baseball team. For this feature, I was expected to represent many intersecting parts of my professional role. As an RCSC intern, I was representing both the Rockland County Youth Bureau and CCE-RC; as a community educator, I was representing the HRFA and PRISM programs; as a student, I was representing my environmental studies program, Brandeis University, and the Sorensen Fellowship. Whether from my own motivations or the expectations of my supervisors, I came into the radio show interview with the task of crediting all of these different actors during my introduction to the show.

For a full week prior to my radio appearance, I spent time practicing all of the topics that I anticipated needing to address during the program. As the event date approached, I spent time with Jennifer Zunino-Smith, the new Environmental Educator for CCE-RC, to review my prepared notes. On the day of the show itself, Jennifer sat next to me as a fellow talk show guest. I had prepared to speak to audience members about the dangers of eating more than a half-pound per month of select fish species from the Hudson. In addition, I was ready to advise women of childbearing age and children to avoid eating Hudson River fish entirely. I was also prepared to discuss what I had learned about the history of polychlorinated biphenyl (PCB) contamination in the Hudson, “legacy pollutants” of the river’s industrial age that lingered in local fish species’ fat and other tissues.

I would also be expected to answer questions from the interviewer, Michael [Mike] Wilson. Mike was a part-time radio show host, a part-time professor at Ramapo College of New Jersey, and a part-time horticulture lab technician at CCE-RC. Working at CCE-RC, Mike was able to prepare me before the show regarding the order and type of questions he would ask. I had accordingly written down many pages of notes to prepare to speak on each topic in as much depth as time would allow. However, Mike was unable to prepare me fully for the questions that would be asked by radio listeners, who would call in and ask anything that

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Second, Ann Marie Palefsky (CCE-RC’s Interim Executive Director), other supervisors, and even my parents would be tuned into the program.

Third, I planned to share the show’s recording with my Sorensen Fellowship advisors, friends, and Facebook followers.
Call-ins would first speak to Steve Possell, the station’s radio broadcaster, who would listen in to confirm their questions’ relevance before directing them to our line to speak.

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Walking up to the grated stairway of Boulder Stadium, I saw the WRCR 1700 radio station at the top of the staircase ahead. I had dressed up in a button-down shirt for the day with the thought that if I looked professional, I would feel professional. Unfortunately, wearing this long-sleeved and [for me] semi-formal outfit, I started to sweat, and my mouth got dry under the mid-summer sun as I made my way up the stairs.

When I arrived inside the sound-padded and (fortunately) air-conditioned space, I was greeted by Mike and Jennifer, two key figures from my CCE-RC family. We kept our preparation discussion to a whisper to be sure that our voices would not get picked up by the microphones before we began the interview. During the half-hour radio program, I would address various conservation topics, from environmental health issues to horticulture and storm drain management. I felt extra-prepared to speak on the environmental topics of my program, but went into the interview concerned about how I would properly credit all of the actors involved in my summer internship role.

In the recording booth, I sat with Jennifer and Mike facing a wide window, which brought in natural light and views of a small section of woods beyond the stadium complex. Across the room stood Steve Possell, an older man who tinkered with the knobs and buttons of his radio station equipment for a few minutes before bringing us on air. Once the show started, I saw how he stared off and seemed to be listening intently to the sounds of the show in his headset. I had learned the day before that Steve was blind, and that radio broadcasting was a unique niche in which Steve could use his senses of touch and hearing to accomplish his job responsibilities.

As the recording started, I felt my nervous tension reach its peak. For my introduction, I had to provide a diversity of details about my internship position while keeping the exposition under 60 seconds. As I started speaking, I felt myself cringe with each “um” and short pause I gave. However, I managed to successfully battle my internal self-doubt, and after getting over that hurdle, managed to mention both the Sorensen Fellowship and my environmental studies program. Transitioning from the technicalities of my title and position to my experience at Brandeis University helped me loosen up. By the time I got to the question section of my interview, I felt genuinely confident, a critical characteristic for someone who is offering advice.

Mike and I spent about 10 minutes in a back and forth conversation about my work and the message I had for community members regarding eating marine species from the Hudson River. After giving both a general overview and specific recommendations from the HRFA, the phone lit up and the radio station received its first call of the day. I held my headphones tight against my ears to listen closely to this first caller.
The speaker identified himself as Brian, a 66-year-old Stony Point community member, who had spent his entire life fishing on the Hudson River. Brian expressed a combination of curiosity and concern about the contamination of a particular species he had fished for years, what he called a “Snapper” or “Baby Blue Fish.” Brian had strong pride in his experiences fishing, “being born and raised on the Hudson River” and even swimming in the river in his youth. Brian’s story reminded me of Santiago’s from Ernest Hemingway’s *The Old Man and the Sea*, as he was a nostalgic man who spent his entire life fishing among local waters and was confronted with a challenge larger than he could accept.

Unlike an interview, in which I might feel pressure being under the lens of a critical observer, I was relieved that this question came from a community member who was inquiring from both a genuine and personal place. At that moment, I sympathized with his passion for the Hudson, but knew my responsibility to relay the facts. He should eat no more than half a pound of the “Baby Blue,” a colloquial term for Bluefish, per month. He listened and I affirmed his story. While I may never know if Brian heeded my advice, I know I did my due diligence to teach him and, most importantly, educate the audience of the relevance of these recommendations.

As questions from both Mike and the audience continued, I kept up my energy answering them with the confidence I so often felt when speaking about environmental topics. These sets of questions were ones in which I could really prove myself, as I implemented my biology and chemistry knowledge from high school, college, and CCE-RC in order to quickly answer them. After almost a half-hour, we came to the last minute of the show. As Mike gave his outro to the interview, my confident adrenaline declined and was replaced by warm comfort as I took the time to collect my thoughts and look out again at the trees and shrubs below. In that moment, I felt a sense of completion, and knew that I had succeeded in delivering important environmental messages to the Rockland community.

### Putting Academics to Work

Returning back to the beginning of this essay, one of the other major programs Kim and I were involved with during our CCE-RC internship was helping with training and protocol development for the Lower Hudson Partnership for Regional Invasive Species Management (PRISM). This opportunity to help CCE-RC’s Horticultural Educator, Annie Christian-Reuter, and the Partnership with the project was particularly meaningful for me as an environmental studies major. I had just spent my Spring semester participating in a course called “Citizen Science: Bridging Science, Education, and Policy,” and the PRISM’s blockbuster survey that the partnership was developing was a perfect example of citizen science [or the inclusion of everyday citizens in scientific research] in action.

Kim’s and my first task was developing quizzes to assess the effectiveness of the training programs that CCE-RC and other CCE sites would be holding as a first step in initiating participants into the blockbuster survey program. The program volunteers would have to complete this training to brush up on invasive species, and to understand the various protocols involved in the blockbuster survey. In addition to those assessments, Kim and I had to maintain the CCE-RC’s invasive species garden, which had many plants that would be used for demonstration during the training. Kim and I both loved the opportunity to go out each day to water and check up on each of the plants. It helped break up some of our more indoor-oriented days and allowed us to learn the identifications of each of the species.

A few weeks into the PRISM program, Kim and I had the opportunity to do some hands-on fieldwork with the program developers. We followed experts in botany and horticulture as they explained the steps involved in properly assessing the area’s biodiversity. The park where we did our fieldwork was called Schunnemunk Mountain State Park, and it was shocking to me to discover that the seemingly natural setting had been significantly affected by humans by the introduction of invasive species like the multiflora rose and Japanese honeysuckle. Not only had these species entered the area, but in some locations we found them in higher concentrations than native species like common milkweed. All of this
After putting time and energy into the PRISM project, CCE-RC’s goals came to fruition as the extension site hosted two successful workshops to educate community members and initiate their participation in the PRISM survey. During these sessions, I presented information on using GPS devices and, with Kim, ran the pre- and post-assessments. For both presentations, CCE-RC had a higher attendance than expected, and during the second session, there were even a few RCSC interns who came to participate and to support us. Ultimately, it was great to both conduct the blockbuster survey in Rockland County and to inspire and educate large groups of community members to become involved in the citizen science project, which would serve as a basis for mapping out and understanding ecological shifts in the area.

Lessons in Perspectives
Towards the end of my internship, I took the time to sit down with Kim and learn and compare our different experiences over the course of the RCSC program. One important and surprising lesson I learned from Kim was how gender played into our different impressions of our roles. Primarily, Kim described to me her feeling of empowerment as a female in the RCSC role, specifically noting the liberation she felt when taking on hard outdoor tasks during our training hours. While I was at first nervous that my physical strength would be a limiting factor in these tasks, Kim worried about how gender would play into them. Would these tasks be looked upon as male-only roles?

Both Kathy and Eric instilled in us that while our tasks would be challenging, no one would be judged for our gender or strength, and that we would all work hard while respecting each other. Such tasks included towing mulch and cutting branches, and even smashing rocks and pushing logs, and Kim and I both took them on directly, along with our peers, despite some of the concerns we may have originally had. From this conversation with Kim, I began to see and appreciate how Kim herself was someone looking to break barriers, and someone who truly embraced the service opportunities of the RCSC role.

Another important lesson I learned from Kim was the privilege and importance of green spaces. Kim, like me, had come from Bergen County, New Jersey; however, Kim came from a semi-urban community called Lodi that had limited green space. Many Lodi residents, like Kim, lived in apartments, which created a barrier for those looking to make large gardens or compost systems on their own properties. In contrast, I had lived in a more suburban community, called Old Tappan, where the average homeowner had a half-acre or more of land to potentially use for gardens, composting, and other direct outdoor functions.

Given our different upbringings, Kim and I had slightly different sentiments when it came to our horticultural work. I came in familiar with horticulture, excited to continue learning about subjects relevant to my own home garden and landscaping experiences. Meanwhile, Kim’s energy derived from a desire to break new personal ground while working with the earth. She was specifically intrigued by the practice of composting, and would always have extra enthusiasm when speaking about that topic with community members. In addition, I noticed that during many of our outdoor activities, she had an extra eagerness that was motivating to both of us.
The summer of 2016 was one of many times in my life that I had the opportunity to spend significant periods of time outdoors, either for recreation or work. For Kim, this was a new opportunity that she had longed for since realizing her environmental passion. Ultimately, working with Kim made me aware of some of my own privileges and the differences in perspectives that two people can have, even while partnering closely.

Conclusion on the Interstate

To celebrate the work that all the RCSC interns had accomplished over the summer, Kathy and Eric put together a closing party out on a beautiful blue lake in the middle of Harriman State Park. With the sun shining, the interns all jumped into the refreshing body of water. We were happy to spend an entire day enjoying nature after devoting a whole summer to protecting it.

After swimming for two hours, the corps members sat together on a wooden dock looking at the lake and discussing their respective plans for the upcoming year. But even while talking about the future with my cohort, I could not stop thinking about the program we had just completed. After an intensive three months of pushing myself beyond my comfort zone, muscling through gritty physical labor, and grappling with my own privileges, I felt truly changed as I left my internship.

As we packed up, it started to drizzle, a welcome event for the region plagued by heat and drought. The sky had gone from a crystal blue to grey, and the lake’s reflective surface became fractured by the drops of rain, and yet the piercing August heat held its final grip. As the rain started to come down harder, I shared a final hug and goodbye with Kim, then both Kathy and Eric, and ran to the car with a sense of accomplishment in completing this major stage of my Sorensen Fellowship journey.

Pulling out of the state park, I wondered if the RCSC program was unique. Were there any other county programs that built county “pride through service” as RCSC had? It is hard to imagine how effective global conservation efforts could work without first getting young adults involved in improving the environmental conditions of their local communities. This is precisely what the RCSC program did for my cohort.

As I drove down the Palisades Interstate Parkway one last time, from the top of Rockland County all the way home to Bergen County, I thought about how lucky I was to become a part of this nearby community. Suddenly, a flash of lightning came down and a crash of thunder broke, and as the rain reached its greatest intensity, it drenched the roads and the car with nature’s most fundamental element. For a few seconds, traffic stopped entirely, as all of us commuters were consumed with this sudden reminder of Mother Earth’s presence in our lives.

As the rain settled, the commuters drove forward once again. I too pushed onward, neither nervous nor sad, but motivated to learn more and excited to think how the members of the RCSC group, myself included, would each find ourselves continuing to impact local communities and conserving the global community we all ultimately share.
Notes


