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Environmental Communications: Case Study of New York City's Double Crested Cormorant

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*Environmental Communications: Case Study of New York City's Double
Crested Cormorant*

By: Marisa Galdi

ENVP 4000

Professor VanBuren

May 10, 2012



Stop and smell the flowers: Earth Day, 1970, New York Courtesy Associated Press

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Chapter 1: Introduction

The process of raising environmental awareness and connecting citizens to their environment by use of communications and the media has developed in recent years. More specifically, using media such as radio to paint a picture or image through words of the environmental problems we face on a daily basis has grown increasingly popular. One of the rewarding aspects of working in radio as a reporter is being able to successfully act as the listener's eyes using a single, yet powerful tool, creative speech. If successful, the radio feature

story written over the course of my internship should make the listener feel as though they are at the scene standing beside me, experiencing the story first hand. Having spent the semester as WFUV Radio's Environmental News Reporter, I was able to pay special attention to water related issues involving New York's Hudson River, particularly New York Harbor. After two weeks of researching, I stumbled upon an interesting statement on one NYC environmental organization's website. Hudson River Park is a park along the Hudson River that extends from 59th street down to Battery Park in Manhattan. Their main mission is centered on reconnecting New Yorkers with the waterfront they so abruptly lost sight of throughout the decades. Under their website's habitat section, they mention the comeback of a diving bird known as the "Double Crested Cormorant" over the last few years, after having nearly vanished in the 1970's. After weeks of researching and interviewing numerous individuals (i.e. New York Audubon Society, environmental scientists specializing in the diving bird, environmental school teachers, bird watchers, and a woman who spent half her life living on a boat on the Hudson), the story began to unravel before me. I uncovered interesting information about this bird, as well as the Hudson River in relation to the effects of water pollution. Through the course of my thesis report, I will describe my experience in putting together a long-form super spot piece for the radio. I argue the effectiveness and importance of linking the environment with communications and media to create strong public awareness. My radio piece about the Double Crested Cormorant's comeback in New York Harbor serves as a case study proving just that.

Chapter Outline:

My report will include the development of my pitch, an account of my interviews, the transcription of my finished story, as well as an attached link to listen to the story online (found

at the end of the report). To establish a firm thesis foundation, my internship report will analyze the history of the Hudson, once branded as “dirty,” and the history of environmental reporting. By looking at both pasts, I will be able to highlight the progress made since due to a wide array of environmental changes (i.e. The Clean Water Act, and banning of the pesticide DDT in 1972). My close examination of history will be intertwined with an analysis on environmental reporting. Through a series of books, I will unveil the logic behind such reporting techniques and how one can use his or her communication knowledge in the field of radio to present issues like this one in an effective, meaningful manner. Chapter two begins with a brief explanation of my pitch at the radio station, promoting the Double Crested Cormorant and its encounter with pollution. Therefore, I have included some history of the Hudson and New York Harbor to set the stage and create a solid groundwork for building my case study on the double crested cormorant. This background will also include a section (Chapter 3) describing some of the management and control efforts that have paved the way throughout environmental history and advocated for change. In support, I will present several case studies and descriptions of specific groups that had grave impacts on the Hudson during its downfall from pollution. From there I will move on to explain the research I conducted before beginning the reporting process, and what exactly I found. After establishing a history of environmental reporting, as well as guidelines for 21st century reporters, I will then give a full account of my work at the radio station, the process I went through from start to finish, as well as the final transcript of the segment that aired on WFUV radio.

Chapter 2: My Pitch/ History of the Hudson: River and Pollution

Environmental beat reporting has gained respect and peaked the interest of many in the communications and media industry. Therefore, journalists have somewhat of a moral and

ethical obligation to deliver the connections and consequences between the environment and the people's lives. However, such a task can be problematic at times considering the "two are woven together, but the templates that help reporters easily turn a local fire into a news story don't exist for the global environment" (LaMay, 14). Therefore, while we may not need scientific experts, environmental reporters should be literate and possess somewhat of a substantial background in the subject. In all cases, a reporter must be well rounded in their understanding of politics, economics, security, education, health, and more considering these topics fall under the "environment umbrella." That being said, while such a heavy topic can be fated by numerous obstacles, journalists must do their best to push through and clear paths for the people towards clarity and understanding of such issues. In many media organizations, "environmental beats are being established once more after having vanished for a number of years" (LaMay, 18). And they're not the only thing. If there's one bird New York City is known for--it's the pigeon. But, a bird, more specifically a diving bird, known as the Double Crested Cormorant has been making a strong comeback in New York in recent years as well.

In order to properly understand the change in numbers of this particular bird species and more, we must start at the beginning. And, that beginning is the Hudson River. The Hudson, while called a "river" by name, can be defined as an estuary or partially mixed estuary. The formation of such estuarine conditions can be traced back to nearly twelve-thousand years ago. Fresh water and salt water both come together, resulting in a layered structure. Occurring over a stretch of mixing between the freshwater river and the ocean, "higher salinity water is overlain by lower salinity water" (Levinton and Waldman, 5). It is further downstream in the New York Harbor where the lower salinity water becomes salty. Hence, the harbor can be referred to as the *transitional zone*. The Hudson River's source has been traced back to a pond on the western side

of the highest peak in the Adirondacks called Mt. Marcy. The pond was nicknamed ‘tear of clouds’ by naturalist and supporter of preservation Verplanck Colvin, when he discovered it in 1872 (Levinton and Waldman, 13). From Tear in the Clouds to the Verrazano-Narrows (New York Harbor), the river stretches more than five-hundred kilometers (13). Therefore, the introduction of DDT and PCBs into the Hudson in the 1900’s was so detrimental to so many areas throughout New York that its effects can still be traced today.

Toxic metals, various organic compounds, and mainly pesticides have predestined the lives of organisms and ecosystems within the Hudson River. Considering their preset link to one another by way of the food chain, the consumption of such chemicals and toxins by fish resulted in a decline in many bird populations over the course of decades. In addition, these chemicals and toxins have been the direct result of problems like low dissolved oxygen levels (problematic for organisms), and the closing of fisheries and beaches. For more than a hundred years, “New York Harbor has been subjected to tremendous loading of pollutants from a 16,000-square mile drainage area,” including the discharge of millions of gallons of untreated sewage (Beirne, 1). As loud, emblematically speaking, as this may sound to a listener’s ear, it’s only the beginning of the problem. Several case studies explored throughout my research will help bring additional light to the problem.

The discharge of raw sewage isn’t the only tragedy that hit the Hudson River. Between the late 1940’s and 1977, General Electric (GE) “discharged an estimated 200,000 to 1.3 million pounds of polychlorinated biphenyls (PCBs) into the Hudson River from two electrical capacitor manufacturing plants...” (Levinton and Waldman, 349). In a 1977 settlement with the New York State Department of Environment Conservation, General Electric agreed to stop directly

discharging PCBs in the river. But, PCBs still continue to leak from their factory sites to the river today. As a result, the levels of PCBs in the Hudson River rank among the highest in the nation. The public became aware of PCBs in the Upper Hudson region in the early 1970's, but it wasn't until 1976 that the New York State Department of Environmental Conservation banned commercial fishing for striped bass in the lower Hudson region. A need for public awareness is why environmental reporting is around today, and serves as a necessary component for any society to function somewhat successfully. After research and investigations were carried out to better determine the source and impact of these chemicals, two-hundred miles of the lower Hudson River was labeled a "Superfund" site. That being said, by 1984 this designated region of the river came to be one of the largest Superfund sites in the United States; federal law states, "listing a Superfund site sets in motion a series of policy and management steps to evaluate the extent of the problem, identify the parties responsible for the contamination, design and implement cleanup and restoration, and assess economic damages" (Levinton and Waldman, 349). According to the Environmental Protection Agency, the name "superfund" was established by the Compensation and Liability Act of 1980. This law that was ratified in response to Love Canal and Times Beach in the 1970's, is a long-term effort to promote removal of contamination, and community and states involvement ("U.S. Environmental Protection Agency"). A combination of such involvement, and environmental reporting helped commission studies and programs, therefore initiating a movement of environmental control efforts in the Hudson. It's the combination of such influencing factors that has helped species like the Double Crested Cormorant return to the Harbor in great numbers.

Chapter 3: Control Efforts/ Agencies with Management Responsibilities

It was particular events affecting the Hudson River that pressed public concern and drove action on a Federal level in the late 1960's and early 1970's. This time period in environmental history gave birth to the National Environmental Policy Act (1969), and the Federal Water Pollution Control Act, which promoted a series of sewage treatment and water quality goals and standards (Levinton & Waldman, 321). In addition, the U.S. Environmental Protection Agency, the New York Department of Environmental Conservation, the New Jersey Department of Environmental Protection, and the New York City Department of Environmental Protection formed as a structure of environmental management programs designed in response to the people's growing demand for mandates. This emerging petition was something new, and nicely complimented also new state and federal legislations. It gave rise to new jobs and created a need for positions like environmental managers who were now devoted to correcting problems and encouraging public debate. Westway is one example of a powerful case that focused its energy on an environmental issue in the Hudson River. In an effort to provide residents with more access and connection to the river, the Westway project was geared towards "rebuild[ing] the crumbling West Side Highway and...a new highway was to be sunk in a landfill created in the Hudson River," extending over four miles. Such a project created great debate, and eventually its plans were taken to court and thrown out because of "the potential impact of the proposed landfill on the population of striped bass in the Hudson River" (323). Other cases like the Hudson River Power Case and Hudson River Foundation also helped spark environmental research and placed specific emphasis on human impact.

Polychlorinated Biphenyls are "very stable organic compounds with chlorine atoms in a variety of configurations that are used as insulators in transformers and other industrial applications," and they are among the most incommensurable challenges Hudson River control and

research groups have ever faced. The case study mentioned earlier involving GE and the leaking of PCBs from their factory sites into the Hudson River “has motivated one of the most high profile and vitriolic environmental debates in the United States” (325). Rachel Carson’s *Silent Spring* informed environmentally illiterate citizens about these toxic organics, and led to the discussion of its health risks in years to come. Eventually, scientific research and conducted studies would show the public that PCBs can cause developmental and neurological disorders, cancer, reduced disease resistance and reproductive problems in both human and animal populations (325). Issues that journalists would soon take an interest in and the media would begin to inform the public about.

Sewage construction and wastewater collection first developed in New York City around 1696. However, it wasn’t until the 1800’s that many of the sewers in Lower Manhattan were constructed (Levinton & Waldman, 337). In fact, “The first waste water treatment facility was built in New York City in 1896, [but] it was just a floatable stream facility to protect the beaches at Coney Island” (Levinton & Waldman, 337). That being said, the city’s sewerage system was one of the main things that demanded immediate attention, as well as control efforts and management. The history of sewage disposal dates back to the seventeenth century, when settlers would dump sewage from their individual pails into the waterways. Since then, like pesticide pollution, raw sewage problems have led to the closing of fisheries and beaches, and have been a main cause of contamination in fish (also causing people to get sick). The 1906 Metropolitan Sewage Commission was eventually formed to study this problem in the harbor. They commissioned a water quality-monitoring program in 1909 to better understand water pollution in New York Harbor, and it’s still around today. The first set of findings was released to the public after a year of monitoring. It exposed the water quality conditions, laid out a design for a

new sewerage system, and provided recommendations for public policy changes. A final report was released four years later, but it took another three decades to begin constructing the city's new sewerage system. By the 1980s, the city's final two sewage treatment plants (out of 14 total) were constructed (Levinton & Waldman, 337). Although the Hudson River treatment plants were late in coming, "with treatment plants coming on line, water quality improvements have been observed" (Levinton & Waldman, 337). This is just one example of a case study that proves the need for management organizations and commissioned research. The Metropolitan Sewage Commission is just one of many that has resulted in the Hudson's (particularly New York Harbor's) comeback, and therefore the increase in fish and bird populations like the Double Crested Cormorant.

Chapter 4: My Research Specific to the Double Crested Cormorant

Before unfolding the full process taken to reach the story's completion, it is first important to understand the stages and steps that go into developing a story idea. Upon being made "environmental reporter" for WFUV 90.7FM Radio, I took it as my responsibility to familiarize myself with the overwhelming number of environmental advocacy groups and organizations within New York City. Through email and website exploration, I eventually came across Hudson River Park located at Pier 40 in Manhattan. Dedicated to the Hudson's habitat and care, the organization works to reconnect New Yorkers with the waterfront through planning, construction, education, history and events. It wasn't until I browsed through their website that I found the following excerpt regarding habitats along the river's shoreline: "Double Crested Cormorant: *Phalacrocorax auritus*...is a diving bird whose presence has increased over the last few years" ("Hudson River Park"). Listed among four other birds, I found it interesting that the

Double Crested Cormorant was the only species whose description did not include a further explanation of this claim.

One of the number one rules of thumb in reporting, before moving forward with an idea, is generally the most overlooked. It is essential to search the worldwide web to gain a feel for already published related articles, and more importantly, to see if the same story has already been uncovered by other media outlets in your local area. Generally speaking, WFUV tends to steer clear of re-purposing stories that have already been done by the more popular news outlets (i.e. the New York Times). While we aren't perfect and sometimes use other stories as a starting point, the goal of reporting overall is to bring to light something new that the public has a need to know about. After searching "the comeback of the Double Crested Cormorant," I failed to find news articles relevant to New York Harbor. Instead I found one or two articles in New York, but they were relevant to the Great Lakes Region. In fact, the Department of Environmental Conservation published an article specific to the Double-Crested Cormorant in the Great Lakes Region, titled "Cormorant Management in New York." This marked the starting point of my research and later will serve as a balancing tool from preventing sensationalism in my story. From the article and interviews I learned that management efforts are underway in the Great Lakes because the increase in this diving bird has created several problems. I could have easily made my story sound like the Double-Crested Cormorant's comeback is a big problem in the New York Harbor as well. However, I learned through interviews that research has yet to prove that (further discussed in Chapter 6). Avoiding sensationalism and crisis reporting is one of the hardest things for reporters to resist, especially when their job depends on ratings. Hence, I continuously see stories glorified and puffed up in the media on a daily basis.

Like Hudson River Park's statement, the Department of Environmental Conservation also claims the following on their website: "Cormorant populations have increased markedly across New York in recent years, likely a result of a cleaner environment and fewer pesticides causing reproductive problems" ("New York Department of Environmental Conservation"). Once again, leaving me wondering and curious as to what they mean by *reproductive problems*. After reading the DEC's article, I quickly understood the diving bird's comeback in recent years was nothing but a headache that needed management in the Great Lakes. It was said to cause problems with vegetation on nesting islands, other species, and fisheries in the Great Lakes Region. So, does the same automatically go for the New York Harbor region? If yes, does the issue require management, and are management plans already in place, etc.? These were all ideas and questions acquired through extensive research, which I will later ask a series of appropriate individuals during my interviews.

Chapter 5: History of Environmental Reporting

Like the Double Crested Cormorant, media coverage of the environment has made a comeback and continues to climb, especially in recent years. By the 1980's, an "experienced, well-educated group of journalists...reported they were devoting nearly a quarter of their time covering environment and energy subjects, primarily in breaking news or feature stories" (Valenti, 3). At the time, much of the environmental stories being turned around were written and researched by scientists. Decades ago, environmental stories were easily disguised and blended with science, business, government stories, and more. But a separate environmental beat will soon stand alone and grow as its own, and no longer be a mere extension of others.

In 1990, the *Seattle Times* won the Pulitzer Prize for its national coverage of the Exxon Valdez oil spill (LaMay, 17). However, more interestingly, this marked only the third win in

Pulitzer history and the first time in over a decade that an environmental story had been recognized and honored in such a way. Around the same time, in 1988, *Time* along with other leading media organizations vowed to increase their environmental coverage, turning the decades' former commitments around (LaMay, 17). In years to come, the strength of environmental reporting will eventually result in its front-page debut for some of the top American newspapers. In addition, media outlets will eventually assign environmental specialists to cover the environment, paving the way for a growing industry and increasing interest among viewers and listeners. After having once vanished for years, media organizations are establishing environmental beats, and publications like *BusinessWeek*, that once hardly paid attention to environmental reporting, now hire full staff solely for that focus (LaMay, 18). The trending environmental beat and reporting has become so determined that it now stretches across all mediums, including magazines, television, newspapers, internet, and more.

It is proven that the ambitious attitude of environmental reporting and amount of staff assigned to its coverage has increased remarkably in the late 1980's, early 1990's. However, aside from such growing efforts, "the environmental beat of the 1990's is not very different from what it was in the 1970's" (LaMay, 19). While the number of reports and issues may have increased, the quality of environmental reporting hasn't changed much. So, that being said, what did change? One case takes a look back at environmental reporting during the time of the Chernobyl accident. It notes the commonality of missing information, especially regarding technical details, in environmental reports. For example, coverage on Chernobyl failed to include the types of radiation that could harmfully impact humans, and background information about the nuclear reactors being built by the Soviet Union at the plant (LaMay, 20). As you will see in my radio report, it is essential to provide background information, especially when dealing with

scientific suggestions. However, you must craftfully do so without “dumbing down” the audience. By setting the scene for the listener, you allow them to take control over the story and decide on their own how they would like to proceed and participate (LaMay, 23). This also helps the reporter avoid subconsciously joining the debate and forming decisions for them.

The fact that the quality of environmental coverage has remained much the same as it was twenty years ago is almost embarrassing to say the least. The main reason being that environmental issues have changed tremendously. We are much more environmentally literate and aware today. In fact, “Environmental issues are now being debated at the presidential and prime ministerial levels, yet the media are covering them much as they did in 1970” (LaMay). It would be unfair to claim nothing has changed at all; journalism is growing in the rest of the world as well. But, for the amount of time and staff being devoted solely to environmental beats, I feel as though environmental reporting has not proven itself when looking back at its history. While media has tremendously served as an impacting communicative tool, the environment is such a growing concern; eventually every reporter will have to maintain enough knowledge to decently cover the issue.

Chapter 6: Process Part 1: (research, pitch, interview)

Step one after widespread investigative research and the green light from your editor is to organize every thought into a condensed few sentences, or pitch. For example, “Once threatened by the use of PCBs and DDT, the numbers of the Double Crested Cormorant have increased in recent years. But, what does their comeback mean for the Hudson River, more specifically New York Harbor...” One risk you take with reporting is at any moment your story can be canned. For example, if calling around and speaking with sources eventually determined the evidence of their comeback was not substantial, the story hits a dead end. The risk is generally higher with

environmental reporting because it's a constantly changing field and keeping up remains hard. In order to produce a solid story, you need concrete evidence which usually comes from several years' worth of collection. By the time that research is made public, the chances of a new claim being made regarding the same issue is highly likely.

Creating a general series of questions for interviews is a great analyzing tool that also helps organize your thoughts. It is a safe way to make sure nothing goes unanswered. In regards to questions, it is important to note two things. All questions are subject to change depending on who they are directed at. In addition, some questions will be used to build background and character; therefore the reporter may already know the answer to them. By asking questions whose answers may seem obvious, you are verifying basic facts for the record, while building a foundation for your story and warming up the interviewee. Building a connection or relationship with the individual you are interviewing can help drive that individual to giving you that one of a kind sound bite later on in discussion. Without doing so, you'll be surprised how many people freeze up and shut down the second a microphone is shoved in their face and they are bombarded with the immediate firing away of your somewhat preset list of questions. My general list of questions to start consisted of the following:

Can you tell me a little about the bird in general? How might its increase in presence change things (affect the ecosystem in a negative way)? What are their feeding habits like and could this be detrimental to fish populations as their numbers increase? What does their comeback say about the Hudson River in regards to pollution? When did they first start to disappear? How long has it been since they started to come back? In the Great Lakes Region, federal and state agencies are trying to manage their populations...what about in New York Harbor? Were there any trends in this species prior to their decline

that may pose a risk now (their habits)? How did DDT specifically affect this species in the Hudson River? Are any studies or management plans being carried out now?

Once again, such questions depend entirely on who the interview is geared towards. For example, my questions when speaking with a bird watcher require more visual, descriptive answers specific to his or her personal encounter and run in with the diving bird.

Chapter 7: My Interviews: The Story of Each Character & Developing the story

Rule of thumb number two, never feel as though you must stick to your already thought out questions. A good reporter listens closely to the answer, which in most cases will lead to another idea or question instead. If you are set in stone on your already set questions, you will find it more challenging to pay close attention to what the individual is saying. Instead, you will most likely be thinking about the next question you plan to ask.

When constructing a list of possible interviewees, always reach out to more than necessary to guarantee you won't come up short in the end. My initial list of individuals I wished to speak with does not match the final list of individuals I actually spoke with. It's also common that a reporter doesn't wind up using all of the interviews he or she has conducted in the actual final cut of their story. For the interview process I contacted different types of people to make sure I covered all sides of the issue, combining dry science with a creative voice. For example, I reached out to local bird watchers who have had a personal encounter with the bird and likely the most credible group to verify whether or not the cormorants are, in fact, making a comeback in New York harbor. The individual I ended up actually interviewing and using for this angle of the story was writer and naturalist Leslie Day who spent more than thirty years of her life living on a

boat in the New York harbor. She was kind enough and willing to take me down to the pier and onto her boat for the interview. I also contacted Tom Panzone with the Department of Environmental Conservation to get a more scientific angle. A group like the DEC would be able to provide valuable statistics and hard evidence from research that has been conducted in the past. However, after not hearing back from Tom on several planned occasions, I was able to fall back on the Director of Conservation NYC Audubon, Susan Elbin. Through Susan I was also put in touch with two students who have been working with her for years, studying the Double Crested Cormorant's diet and nesting habits first hand. Finally, I was given a personal tour and spoke with Nicolette Witcher from Hudson River Park, the cause of my research and story in the first place.

Leslie Day moved to New York City in 1975 where she met her husband and later raised her son. I sat at the end of dock C (one of the original docks at the 79th street boat basin) where she lived for thirty-six years. Spending time bonding with the Hudson River in an unusual way, she was able to find her life's work as a naturalist, nature writer and science teacher. She said, "This will always be the place where I learned most about the natural world and New York City." Day compared her neighborhood of boats to a tight nit, small floating town. She was able to take me back in time to when she first joined this "floating town," and was one of the most interesting people to speak with. She could recall and describe the appearance of the diving bird back when DDT and PCBs in the waterway first impacted fish and bird populations, and could compare it to current times. When Day first moved to the 79th street boat basin, there wasn't much wildlife in the river. She said the river was very polluted and the raw sewage from the upper west side flowed directly into the Hudson. It wasn't until they outlawed DDT that the cormorants were around in pretty good numbers. Today she watches as the cormorants migrate

back up in the spring in huge flocks. “I think their numbers are really strong now. When we take trips around Manhattan Island, you can see them everywhere. One island near the United Nations is covered with cormorants” said Day.

Since the diving bird lacks oil glands, the large, prehistoric looking bird would often be spotted hanging out with their wings spread to dry off. Leslie Day would often see them perched on pilings and docks when they weren't in the water diving for food. Sometimes, she said the cormorants would dive under water for several minutes right near her boat, and come up with eel in their gullet.



Day said the Hudson is cleaner now than it's ever been, returning most of its native fish and therefore bird populations. However, she doesn't think their increase in numbers is enough to pose a threat to the river's current ecosystems. Living on a boat was her way of having her cake and eating it too. As she describes it, being umbilically tied to New York harbor kept her in

touch with the natural world and enabled her to observe the river's stages over the course of several decades.

As Director of Conservation and Science for New York City Audubon, Susan Elbin identifies projects that will help the society carry out its mission to protect wild birds and their habitats throughout the five boroughs. She began working on Double Crested Cormorants in the New York harbor in 2005. Cormorants all over had declined before bans were placed on the use of pesticides like DDT, and DDT was still persistent in the environment. According to her research and others, cormorants were tremendously affected by DDT. As a result of their fish diet, cormorants would digest the DDT that was accumulated in the fish tissue (bio-accumulation). The DDT would cause them to have thin eggshells. The cormorants couldn't incubate their young and young would hatch with deformities when they were incubated. However, Elbin credits the passage of the Clean Air Act, the harbor being cleaned up, and the banning of the use of DDT with the cormorant's success.

Much of what we have learned about Double Crested Cormorants comes from biologists up in the great lakes region, where the cormorants recent increase in numbers is being frowned upon. According to Elbin, the cormorants are colonially breeding birds. In other words, if you go into a nesting colony (which she does in the harbor), you will find hundreds of cormorant nests...not just one.



Photo by: Lynn Cabbage

As a result, they produce a lot of guano or feces in one area. Guano is used for fertilizer, however like anything, too much fertilizer can kill plants instead. This is one of the bigger problems occurring in the Great Lakes Region now. Guano lands on the plants and since the cormorant's guano is more acidic and they nest so closely together, the trees ultimately die and fall over. This results in a negative impact on vegetation. Elbin says they are currently tracking this issue in the New York harbor. She said, it is one negative impact that could potentially happen, but is not yet happening in the harbor. Another issue taking place in the Great Lakes involves fisheries. Sport fishermen fear the cormorants, now larger in numbers, are eating all of the game fish like eels. But, Elbin assured me again that we have not seen an impact on fisheries in the harbor so far. She said their thriving presence is a good sign for the harbor, and says a lot about the water quality now. As of 2011, the NYC Audubon recorded a number of more than thirteen hundred pairs of cormorants in the New York harbor. That's compared to about nine hundred back in 2005.

Hudson River Park's Nicolette Witcher is the Vice President of Environment and Education. She spends every day working in a building on the Hudson and is often found driving her golf car up and down the waterfront with a pair of binoculars and bird watchers guide book in arms reach. Before the interview, she brought me along for a ride to observe the Double Crested Cormorants with my own eyes. She frequently sees the bird diving down underwater for food. One time "the cormorant struggled for a good five minutes before finally giving up and letting the fish go...ready to try again." She described the bird as fairly large with a long skinny neck, hooked beak, and orange throat. Many cormorants live in NY Harbor and nest in the islands near the mouth of the harbor. Her facts coincided with my own research stating that they nest in colonies, taking over the entire island, and their defecation (because it is such large

amounts in one concentrated area) harms vegetation. Witcher grabbed her binoculars with excitement once she spotted cormorants perched in the pile fields, wings spread out to dry off. She blames DDT, raw sewage, and lack of conservation and restoration efforts for the cormorant's reduction in the past. For example, "DDT would cause their egg shells to thin considerably, so when cormorants would sit on their nest, the eggs would break." Around the same time, there were more chemicals leaking into the water on top of raw or minimally treated sewage. But, "Since the 70's, with legislation passed to ban DDT, the Clean Water Act, and more, there's been significant strides in improving water quality and habitats, encouraging more fish." Once you have a cleaner Hudson, with more fish, you will have more cormorants. Witcher agrees with Susan Elbin that the diving bird's growing numbers have not reached levels of concern that are actively being addressed in the Great Lakes Region today. In fact, she says the comeback of the Double Crested Cormorant serves as a good representation that the Hudson River is still alive.

Once I completed my scheduled interviews, and could safely say I was not lacking information or sound, I moved onto the development and editing process. I went through at least ten different versions of what I thought would be my final script. Looking back, it would be generous to say two sentences remained the same from my first version to my last. In order to keep organized, I transcribed each interview to ensure I didn't leave any pieces out (as discussed in the "History of Environmental Reporting" chapter). Going through each transcribed section, I then begin to mark up my print out with notes, underlining key pieces and highlighting possible sound bites. After working in radio for four years, being able to pick out a five second sound bite from an hour long interview has become second nature to me. I have always been trained to write around my sound bites, and therefore did exactly that for this story. Being that this was the first

time I ever produced a long feature, it was much more challenging in comparison to the usual thirty second spot consisting of a single sound element and several sentences. Then I broke my story down into sections: introduce the problem, provide background, present current research, and compare the problem to that of the Great Lakes Region. From there, I categorized my pulled sound bites into their appropriate section and filled in the gaps. Once my story reached the final stage of editing and was approved by the news manager, I was able voice it. I combined the final voiceover with natural sound taken when I was on the dock with Leslie Day, and down at the pier with Nicolette Witcher, in Protools and finally finished my semester long feature story.

Chapter 9: My Story Transcribed

If there's one bird New York City is known for--it's the pigeon. But, a bird, more specifically a diving bird, known as the Double Crested Cormorant has been making a strong comeback in New York in recent years. Many of them have flown the coop for the winter, but some will stick around through the colder months. WFUV's Marisa Galdi has more...

Walking along the Hudson River in New York City, it may no longer be considered "strange" or "uncommon" to spot a double crested cormorant. The diving bird was once threatened by the use of the pesticide, DDT. But, their comeback, especially over the last few years, has been catching bird watcher's attention. It doesn't take binoculars to make out the bird's distinct black stocky bodies, striking orange-yellow throats, and particularly long necks.

Leslie Day is a writer, naturalist, and science teacher. She's spent much of her life bonding with the Hudson River in a unique way. She lived on a boat at the 79th street boat basin in Manhattan for 30 years. I sat on a dock and talked with Day about her personal up-close

experience with the Double Crested Cormorant. She describes the diving bird in a praising light...

“They are beautiful birds, they’re quite large and prehistoric looking. They have beautiful emerald green eyes.”

The cormorant’s green eyes aren’t the only thing that makes them stand out. Unlike most birds, their wings aren’t waterproof. Day says she would usually see them perched on pilings, telephone poles, light fixtures, and buoys, with their wings spread out to dry off.

The bird eats fish and will dive underwater for up to 3 minutes at a time. Day used to watch as the bird would disappear under her boat and come up with a big eel...

“It would struggle in their gullet and you could see it going down, down their esophagus.”

Susan Elbin is the director of conservation and science for New York City Audubon Society. She’s been researching and studying Double Crested Cormorants in New York harbor for the last seven years. She says the cormorant population had declined when the pesticide DDT was still persistent in the environment...

“They had thin egg shells and they couldn’t incubate their young, and young would hatch with deformities when they were incubated.”

The cormorants would get sick when they ate fish--about a pound a day--that were tainted by DDT. But, Elbin says the Clean Air Act and the banning of DDT helped clean up the harbor--resulting in the Cormorant’s success.

Much of what scientists and researchers in New York have learned about the Double Crested Cormorants comes from biologists in the Great Lakes Region, where the birds have been abundant for years. They say the birds are harming vegetation. Because the birds nest in a concentrated area, the pile up of feces can cause trees to die and eventually fall over.

And sport fishermen in the Great Lakes complain the birds eating habits are wiping out their game fish. Susan Elbin says people hear about these problems in the Great Lakes and assume they're happening in New York harbor.

Efforts are underway in the great lakes to control the bird's impact. But Elbin says, so far, her studies show there's no reason to do that here...

“What we're finding is that the Cormorants will eat whatever is plentiful. They're not going after the game fish.”

The fact that there are fish in the Hudson for the Cormorant's to eat is a marvel in itself, according to Nicolette Witcher. She works at Hudson River Park on Manhattan's Westside. As Vice President of their Environment and Education unit, she's often asked by New Yorkers whether there's anything alive in the Hudson. She says, now people see the shore birds like the Cormorant diving for food, and it's a great reminder the river's still alive...

“I know it seems like a funny question but it gets asked fairly frequently because there's still this mentality that the Hudson's is a very dirty, polluted place, and there's just no fish in there.”

Studies show there were 13-hundred pairs of double crested cormorants nesting in the New York Harbor this year. I'm Marisa Galdi, WFUV News.

Chapter 10: Conclusion

Despite the rocky road the Hudson River, namely New York Harbor, has endured, it has come a long way since the early 1900's. It is thanks to management and control efforts like that of Hudson River Park that various populations of organisms have returned to its brackish waters. Among those is the Double Crested Cormorant, a diving bird that suffered from the introduction of pesticides like DDT and PCBs, raw sewage contamination, and more. But, it isn't just management and control that brings about change. Much of it has to do with public awareness raised by the media. Twenty-first century environmental reporting has helped connect the public to issues that many are already literate about, resulting in even more of a drive for policy change. Whereas the findings from the water quality monitoring program commissioned by the 1906 Metropolitan Sewage Commission weren't made public for several years, studies and findings today are presented almost immediately by news organizations and reporters. I believe we still have a long way to go. However, the establishment of environmental issues as its own beat in the world of reporting, has helped impact the way certain generations think and respond to such issues, and has aided in the revival of certain species that once neared extinction.

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