

Prologue

Storrs

Mom has gotten a call to come pick up a dead bird. This happens when both your parents are ornithologists. So we climb in the car and drive off into the hills of our town, where empty, disused barns sit on the side of the road, and a valley stretches below thick with trees and the remains of farmland turned graveyard to itself, unploughed, grown over and unfamiliar to the feet of humans or cows.

We come up to Becky Lehman's house, all thatched white with the big, front-facing windows (which the birds keep dying across, of course), and pull into the driveway. Mom goes inside to collect the bird from Becky, while I tumble through the front garden, bored and listless with youth. Let's say I'm nine. It doesn't really matter.

Cars whip by on the road, fast and hungry as predators. Across the road, an empty barn beckons, the flowers growing on the hill. In a rush I run across, clutch the cold metal barrier, about to clamber into a world undiscovered.

Then I hear my mom's shout from behind me. I turn, see her holding a Ziploc bag with something small and dark inside, and terror on her face.

Come back here, she yells. You might get hit.

Back in the car, I sink into my seat in shame as she tells me off. What if I had gotten hit? What if my body broke across a windshield the way the bird in the bag did against Becky Lehman's glass? We are quiet on the drive back.

At home, she puts the dead sparrow in the big freezer. There are usually at least a few small bodies in there, tucked away amongst the bagels and hot dogs and the de-feathered, oven-

ready bodies of larger birds. When there get to be too many, Mom or Dad will put them all in a large plastic bag, and take them to the university, where they can be put to use.

I am unfazed by this practice—nothing about it strikes me as unusual. It is just part of what my parents do, who they are.

Growing up, I suppose I never really considered what it meant to have ornithologists as parents. I knew my parents studied birds. I knew most of their friends were birders—this strange class of people with binoculars about their necks and notebooks in their back pockets, whose idea of fun was sitting in a field or hiking through the woods, looking for a flicker of feathers, listening for calls from the high branches.

I knew that my mom would come into my kindergarten class to show us how to hatch chicken eggs. I have dim memories of the incubator we used, how she showed us the eggs nestled inside it, explained how they needed to be kept warm to hatch properly. I remember balls of fluff. What I don't remember is the hatching—the birds, or my own.

But to be fair, most of us aren't able to see the effects our parents have on us until we have already left our childhoods. We don't realize all the ways in which we have been kept warm, kept safe so that we could emerge into our lives.

It probably wasn't until my adolescence that I started to realize my parents were real people—human beings with full and complicated lives that existed beyond their care of me and my brother. And it wasn't until a few years ago that I really began to appreciate those lives more, and the impact my parents had on me.

There was never a point in my life where I wasn't exposed to nature. From dead birds in the freezer to traipsing through the preserve near our house, the natural world was always a part

of my life. I remember going on camping trips with my family where we always packed binoculars; and our Thanksgivings and Christmases always featured a walk of some kind.

There was a book my parents read to me as a child called *Owl Moon*. Written by Jane Yolen and illustrated by John Schoenherr, it tells the story of a young girl and her father going out on a winter night to look for owls—a practice known as owling. Based on Yolen’s own husband and their daughter, the book speaks eloquently to what it’s like to bird. “[S]ometimes there’s an owl and sometimes there isn’t,” the child narrator tells us. “...When you go owling you don’t need words or warm or anything but hope.”

I remember going owling with my parents once, when I was old enough. I remember the darkness, and the gravel road we waited on in the middle of the trees. The silence through them was resounding. Unlike the child in *Owl Moon* and her father, I saw no owl that night, and I remember being frustrated. I’ve always been disappointed when real life didn’t measure up to the stories I read and had read to me in book.

As a kid, I was impatient with how long you’d have to sit in one place to see a bird, and how I could never identify them, never retain the information necessary for me to recognize calls or wing patterns or plumage. I spent most of my time on those expeditions with my parents making up stories. Lost in my own head, in the imaginary worlds I would create for myself, I would follow them along paths and through trees, largely oblivious to what was around me.

Looking back, I wish I had been more present. I wish I had appreciated how much my parents were giving me.

But just as you cannot truly know your parents growing up, how can you truly know your own environment, until you realize there is something beyond it? It took me moving to Boston to college, and living in an urban environment, to realizing how important nature had been to my

sense of my self. Now, with my final semester coming to a close, I wonder how I can take what my parents taught me and put it into the work I do.

In a time of unprecedented environmental crisis, one of the biggest struggles facing our species is how we view ourselves in relation to nature. For the greater part of our recent history, we have taken an attitude known, in the field of philosophy, as “human exceptionalism... where humans are set apart from the rest of the natural world.” As Australian anthropologist Thom Van Doreen noted, in an interview with National Geographic about his 2014 book, *Flight Ways: Life and Loss at the Edge of Extinction*, “we have a long history, in the West at least, of thinking of ourselves as either the sole bearers of an immortal soul or a creature that is set apart by its rationality and its ability to manipulate and control the world.”

This view is intrinsically connected to the stories we have told ourselves about the natural world, and about our relationship with and responsibility to it. As Van Doreen puts it, “Stories are one way we make sense of the world and decide what it is that matters and what it is we will invest our time and energy in trying to hold on to and take care of.” It is clear then, that to respond to the current crisis, we need new stories.

I don’t just want to wander through the forest making up a story, and not noticing what is around me, anymore. I want the forest, and all the birds living in it, to be the stories. I want to be able to tell stories that honor my parents and people like them. Stories that make the natural world vital, in every sense, both to me and to others.

Here is one.

Counting the Dead

Great Gull Island

Margaret Rubega wakes early—around five-thirty in the morning—and climbs from the sweetness of sleep into a morning cool and gray with the haze of pre-dawn. She leaves the barracks, goes over to the carpenter shop that serves as headquarters, and puts water on for coffee. As the water boils, she cleans up the debris from the previous night's revelries, wrappers and empty wine bottles and whatever else the others forgot to clean up before sleep took them.

Once the coffee is made, she goes and sits on the bench outside the shop, and with her back against the brick wall, she watches the sun rise across the seventeen acres of the island. The lighthouse on Little Gull Island is visible from here, as is the coast of Connecticut, eight miles away. Farther off in the distance, Plum Island, Fishers Island, and Long Island murmur against the waves of the Sound.

She watches as shadows slither away between the battlements, or what remains of them. The military base here was built in 1897, to defend Long Island in the upcoming Spanish-American War. Ultimately, the Spanish never invaded, and Fort Michie remained operational until after World War II.

Now, what used to be one of the largest gun emplacements in the United States sits empty, with no military presence to pump it hot and full of life, the gunnery a kind of gravesite to war.

But the island is far from deserted. A different kind of army occupies it now.

For the past seventy years, Great Gull Island has been part of an ongoing project surrounding the two species of tern that frequent the island in the summer months—Common and Roseate Terns. Both species were nearly hunted to extinction in the late nineteenth century as a result of the millinery trade, their feathers used to decorate hats. Sometimes, the whole bird would be stuffed and made into a headpiece.

This, combined with the construction of Fort Michie, largely drove terns from Great Gull Island in the first half of the twentieth century. Then, the American Museum of Natural History (AMNH) purchased it in 1949, and the Linnaean Society of New York—a group of ornithologists, naturalists, and birders—were sent out to return the island a habitat that the terns might return to.

New nesting populations of both Common and Roseate Terns began appearing on the island in the 1950s, but hunting on the East Coast still kept the number of breeding pairs in the Northeast low. Then, in 1969, the Great Gull Island Project became formalized when a team of researchers and volunteers began staying on the island, six months out of the year, to monitor and work to preserve the tern population.

This work has continued for the past fifty years, the tern population of the island increasing more than tenfold in that time—as of 2014, over 26,000 terns lived on the island. It is arguably one of the most successful revivals of any bird species in the Northeast.

Rubega sips her coffee, breathes. Eventually, the others will wake, and emerge, and breakfast will need to be made, and she will make it. Then she will suit up, and head out into the colony with the rest of them,

If you are trapping, you eat a donut (“or something equally unhealthy”) before going out. Once you have set the trap, you return to the camp, wait fifteen minutes, and then go back out to check if you have caught anything. If you have, you bring the bird back to headquarters, band it, weigh it, measure it, hold it for two to three days, and then finally let it go.

There are also feeding watches, where you sit in the colony in two-hour blocks, writing in how much chicks get fed and what they get fed. And there are plenty of assorted manual tasks waiting back at headquarters. There is always something that needs to be done here.

It has been that way since she was eighteen, and stepped off the boat for the first time with her friend into a hail of shit and screeching, birds raining down on them, hundreds of gulls and terns visible all the way down the shoreline. Her friend never came back after that; but forty years later, she still is.

But this summer, there is no shit falling on her. There is no need to wear an old cotton shirt several sizes too big, its sleeves long over her arms to protect them from falling excrement, or the enormous straw hat protecting her hair, her face, her eyes from attacking birds.

This summer, the birds are dying.

Rubega started going out to Great Gull in 1979, right after graduating high school. After taking a marine biology class, she got involved with Project Oceanology at UConn’s Avery Point campus, and was recruited by someone there to come out Great Gull.

She tells me that one of her first memories of the island (after getting off the boat and being shit on) is walking into the carpenter shop to find Joe DiConstanso and Malcom Coulter having a Tobasco eating contest. That is, they were putting Tobasco on the strangest foods they

could find, and daring each other to eat them. Malcolm Coulter was putting Tobasco on an Oreos at the time.

“I remember thinking, *Wow these people are weird,*” she tells me, “*but kind of in a cool way.*” By the time she had finished working on the island that summer, there was little doubt in her mind: *I think I’ve found my people.*

“Everybody was completely immersed—all in—on something they were completely committed to,” she says. “It was the first group of people that as a group, everyone was passionate and engaged in what they’re doing.”

It is this sense of passion and engagement with nature that brings so many people to Great Gull Island; and the sense of kinship created between them that brings so many of them back. Rubega continued going out to Great Gull during her undergraduate years at Southern Connecticut State University, and while she was living and working in New York City.

Then, in 1986, she left for grad school on the West Coast. She didn’t move back to the East Coast until 1998, when she got a job as a Professor in the Department of Ecology and Evolutionary Biology at the University of Connecticut (UConn), and the Connecticut State Ornithologist. And she wouldn’t return to Great Gull until 2003.

Now, in 2019, waves crash against the boulders that ring the edges of the island. The water temperature of the Sound has risen by a full eight degrees in recent years, and, as a result, all the fish have vanished—either dead or fled to colder waters.

This has left the terns with nothing to bring back to their young, much less for themselves. Adult weights are the lowest they’ve been in the fifty years they’ve been taking

them; and yesterday, during a feeding watch, Rubega watched one parent try to feed its chick ants. Today, she goes back to the same spot, and that chick is dead.

And it is not the only one. With two plastic grocery bags, she hikes through the colony, past bristling Phragmites grass and lush bittersweet, to collect their small bodies. Bodies that burst from eggs weeks ago only to break into death. Thousands of cracked shells, littering the grass. None of them got the chance to fly. For two hours, she lifts them from the only spot they have ever known, and heaves them into the hiss and crackle of the bags. She doesn't wear gloves—"gloves make you fumbly" and "you're going to end up smelling like death no matter what you do."

When it gets too hot to be out in the colony anymore, she brings the bodies back to camp to count them. She pours them out onto the pavement, sorts through the rank, stinking balls of fluff. These ones could never even be made into hats, their feathers half-formed and already rotting into the final statistic, the small black number she will jot down: almost 4,000 dead, passing through her bare hands, out of the 28,000 they banded the previous week.

"It's field work, by God!" she tells me the next morning over the phone, using what little service she has on the island to call me before I fly to Ireland that evening, and what little joviality she can muster. My mother, who taught my whole class how to hatch eggs, who brought me out of my shell and into this world, who fed me and kept me warm until I left her nest—she now counts the bodies of the birds who never make it to the sky.

I have no memory of the first time I set foot on Great Gull Island, in the same way I don't remember the first time I visited my grandparents' house. We only visit occasionally, but it is a place that has always been there, in the distant edges of my consciousness.

It has been several years since I was last on Great Gull, so my memories of visiting are not the strongest. Like the island, they seem to be located somewhere across the water from me—visible from the shore on a clear day, but still distant, and often inaccessible.

Here are some things I do remember:

The coolness of the early morning as we waited for the small fishing boat. The rocking of the waves and the buffeting of the wind. My puffy coat, keeping me warm. The ring of rocks around the base of the island, coming into view as we approached. The long dock. Tall, prickly grass. Carrying...something through it, I don't know what. I know it was important. The beating sun. A cluttered room, with people studying something I could not understand. A barbecue sizzling out front. Lying on the floor in a sleeping bag, darkness all around me, but my mother close by.

And the cave. Most of all, the cave.

Well, it wasn't really a cave—more of a narrow underground tunnel, between the abandoned army bunkers, on the far side of the island. But there is no natural or electric light, so it felt like a cave, the kind of claustrophobic space where the hero of one of my books would get lost or trapped in.

Sometimes, a whole group of us would go down there, armed with headlamps and flashlights. I remember clutching onto my mom's hand very tightly as we made our way through the darkness. When we reached the tunnel, we would have to move through it in single file, because of how narrow the space was.

I remember the crushing silence and the shuffle of bodies. The graininess of the stone as my clothes scraped against the wall. You were never sure when the tunnel was going to end, when the darkness would stop. You just had to keep moving forward. Trying not to imagine the

roof caving in, or running out of oxygen. Putting one foot in front of the other. My mother's soft hand in mine.

And then, finally, a stripe of light at the end. A high window, cut out of the stone. A pair of sparrows (or were they swallows?) twittering in it.

Talvikki Ansel, a poet who is a former Great Gull Islander, describes her experience of the island in her poem "Stray Into, Away." She writes with a beautiful specificity, of "[f]ormaldehyde / to preserve embryos, tern eggs / that never hatched. A medallion / of sun glinting in the white basin," of a "kestrel landing on the concrete sill / at our faces, as we stood and stared / out to sun and mobbing terns / from the shade of the old bunker."

Great Gull is never explicitly named in the poem, but it is recognizable to anyone who has been there enough times. For me, the poem seems to bring back memories of the island that I do not have actually have:

In and out of the abandoned tunnels, swallows
 chattering in the doorway, mud nests
 built on the rust gun hooks they've used
 for fifty, a hundred summers. Five
 white-flecked eggs in the dark, the size
 of my finger pads. And all in one day,
 loose skin an down, bills opening. Damp
 air, the parents all fussed up
 iridescent.

On Great Gull, the speaker says, “Things seemed / to have no moorings.” The island is a kind of free, liminal space—while there are human structures on the island, they are largely disused, taken over by nature; and the humans that are on the island exist in balance with the birds and other natural life, observing their beauty, and learning more about them.

This vivid picture Ansel paints of Great Gull is offset with the constant sense of distance in the poem (alluded to in the title), as the speaker addressed an unnamed “you,” presumably another Great Gull Islander: “What we were saying is gone, we only / meet occasionally, you still go back. / First miles of water, then the grey / hazy stitch on the horizon, one boat / and all that room to stray in.” There is distance both from the physical island, which the speaker (it is implied) no longer goes back to; but also from the past that the island represents.

There also seems to be a sense of guilt, on the speaker’s part, for not returning to the island: “Here’s the kestrel, here’s me / walking away from something not finished... me not saying / if I’ll come back or not. What makes / a good end?... I’m like the army now, using a place and moving on.” The gap presented here between the poet and the island raises questions about humanity’s responsibility to the natural world. Are we disconnected from nature? Can we simply use natural spaces and move on? Or are we losing a part of ourselves when we do.

Ansel’s poem also reflects on the passage of time, and the inevitability of death: “The sparrows / I watched eat grubs in the compost heap / have rotted now, for sure, on the tide line / or dropped into waves. Who’s there?” Ashes to ashes, compost to compost. We all eat and are eaten, are all recycled back into the earth.

So why does the idea of death scare us so much? What is it we’re really disturbed by?

By the time she was my age, Rubega—my mother—it’s hard to know what to call her—was already familiar and comfortable with the bodies of dead birds. She was taught to skin on Great Gull Island with the bodies of gulls, and would also practice on dead terns.

“Anytime anyone found a dead body, I’d give it a go,” she tells me. Bob Dickerson, who taught her, told her she was good early on. “And Bob Dickerson didn’t give praise lightly.”

Rubega described the experience of learning to skin birds in a story she told as part of The Story Collider’s podcast. Speaking from the perspective of her younger self, she said:

“...it’s the very first physical activity I’ve ever tried that I seem to be able to do instinctively, effortlessly, better than other people. My hands just seem to know how to ease the skin off of muscle and bone, what’s underneath is complex, and enthralling.”

This natural skill came to attention of one of my mother’s professor when she was studying as Southern Connecticut State University, and she skinned numerous birds for the collections, unpaid. Then, her senior year, she got a work-study job round skinning owls.

The process of round skinning preserves the skin of the bird in a way that allows you to study its plumage, Rubega tells me. “You stuff it, but not as though it’s alive, but so it will fit securely in a drawer,” she says. “It’s not taxidermy. Nobody is trying to make it look like it’s alive.”

Ansel describes this process in the poem that opens her 1997 collection *My Shining Achipelago* (which I discovered on my mother’s bookshelf a few years ago), “Study Skins”:
 “Grit of cornmeal, borax, / the neck droops over my hand, / limp wings. Clean slit / from the cloaca, I peel back / skin from the breast—gently / not to stretch it. How neatly / it all fits together.”

Reading this poem, I picture the body of a bird, laid out on a table, “[t]he innards / textbook perfect: gleaming / liver lobes, the heart / clean as a thumb, trachea— / windpipe— fluted hollow / holding the breath.” My mother’s hands, working it apart and back together again.

I ask her if it ever bothers her, handling something that is dead like this. Or, rather, why it doesn’t.

“I’m not unaware that the bird used to be alive,” she tells me, choosing her words carefully. “I’m not unsympathetic to the fact that it’s dead.

“At the same time,” she says, “it’s not especially emotional, because it’s already dead. Somebody might as well make something out of it.”

And when you open up a bird you get a portrait of the last twenty-four hours of the bird’s life—you can learn (particularly from the stomach contents) what happened to it and where it was during its life. “For lack of a better term,” she says, “you find a trail of life on the inside.”

After thinking about it for a moment, she adds, “It’s kind of a way of taking back something of the life.”

So collecting dead chicks on Great Gull is nothing new or staggering to Rubega. It is indeed *field work*, with all the grittiness and grace that comes with that term, that sacred task.

But I can also tell that it bothers her, that it is grueling to collect so many dead chicks. The Roseate Tern is already federally endangered, and to see such a high rate of infant mortality in a population that has made such a spectacular comeback is disheartening, to say the least. A proper report needs to be written up about it, but Rubega only goes out to Great Gull a couple weeks every summer. Her job at UConn keeps her busy the rest of the time.

I ask her why, then, she keeps going back. It takes her a minute to answer.

“Nostalgia,” she says finally. “Commitment to the birds. And to Helen.”

It is impossible to tell the story of Great Gull Island Project without talking about Helen Hays. That’s because without Helen there is no Great Gull Island Project. It was Helen, working a relatively low-level job at the AMNH, doing secretarial work and preparing study specimens, who was invited, in 1963, to go out to Great Gull Island to see how the terns were doing—the first time anyone from the museum had since 1955.

It was Helen who, after landing on Great Gull, saw the potential for a longer-term study, and worked for the next six years to get the funding and approval for that research. It was Helen who recruited a team and started living out on Great Gull during the field season in 1969. And it is Helen who has kept the Great Gull Island Project going for the past fifty years.

That is easy to say, of course, but I’m not sure it can quite capture the magnitude of Helen’s achievement, or that impact she has had. Let me try again: For the past fifty years—more than half her life—Helen has been the engine of the Great Gull Island Project. She is singlehandedly responsible for keeping it alive, and, in turn, responsible for the incredible success it has had in reviving tern populations. She is responsible for the recruitment, training, and management of hundreds of volunteers, many of whom have returned to Great Gull, or gone on to have a career in science, or—like Rubega—both. Everyone who has ever passed through Great Gull as a volunteer has a story about Helen; and if, like Rubega, you have a long-term relationship with the island, you have more than a few stories.

My own memories of Helen, like those of the island, are limited—I mainly remember her as the dumpy old lady who greeted us when we got off the boat, who held court at the carpenter

shop, sitting in a wicker chair. I remember her shriveled, smiling face. I remember following her through the colony—following her pretty much everywhere. I don't think I ever had a real sense of who Helen was, or what she did; but it was always clear that she was in charge on the island.

To call Helen a force of nature is, of course, ironic, given the work she does. It is also a little too accurate. And strength has been necessary, over the course of her career. After graduating Wellesley College with a B.A. in biology, and studying the breeding biology of Ruddy Ducks at Cornell University's Delta Waterfowl field station in Manitoba, she was denied a master's degree from both universities. The argument made at the time was that her work was "not relevant." I suspect, from some of the stories I have heard, that the real reason was that she was a woman, working in a field dominated by men, who never once compromised herself or stood down to anyone.

Decades later, her dedication to the birds on Great Gull earned her an Honorary Doctorate of Science from UConn in 2015. Here is what *UConn Today* had to say about Helen:

Over her 45 years on Great Gull Island, Hays has amassed the longest continuous life history data set on any North American bird, which will serve in the future for understanding the effects of climate change on Long Island Sound. An internationally recognized expert on the biology of terns, she was among the first to discover the devastating effect of polychlorinated biphenyls (PCBs) on wild birds, work that contributed to the development of regulations protecting humans from this widespread pollutant.

These are extraordinary achievements, of a magnitude most scientists *with* master's degrees cannot claim. And Helen has done all of this, according to her CV, *as a volunteer*.

Helen has not stopped going out to Great Gull, but she may have to soon. She recently turned eighty-eight, and, like the birds she has devoted more than half her life to, she is running out of time. It is becoming harder and harder for her to make the voyage out to the island every summer, to do field work, to organize volunteers. It is remarkable she has been able to for this long. And soon, she will no longer have the option to.

It weighs on Rubega—I can hear it every time we talk about Great Gull. Not just the weight of watching a beloved mentor grow old, and incapable of the things she was once capable of; but also the weight of inheritance, the weight of the future. Finding someone who can take Helen's place will be hard, if not impossible, especially when she has put so much of herself into the Great Gull Island Project, and so much of the Project has depended on her. And the people like my mother, who have hung on the longest, and showed the most devotion to Great Gull and to Helen, are not in a position to take up her mantle. Most of them have jobs and lives that they cannot leave to manage Great Gull in the way Helen has been able to.

But there is still plenty of passion about Great Gull. Last September, around a hundred people gathered in the Chester Meeting House (being unable to go out to Great Gull because of dangerous weather—weather of a kind is only getting more and more frequent) to celebrate Helen and the Great Gull Island Project's 50th anniversary. The blue paper sign detailing the agenda for the event hung on the front of the lectern—in true Great Gull Island fashion—with the words “Order of Battle” at the top.

One by one, members of Helen's army from over the years came up to the lectern to give speeches and testimonials about her, and the effect she has had on their lives. People who battled their way through the field season with her, struggling against the sea, sky, wind, rain, heat in order to secure a better future for the tern colony. People who helped rebuild the dock that was

destroyed in Hurricane Sandy. People who have collected bodies, who understand that there will always be fatalities when it comes to nature

Many of the speeches were sentimental, complimentary, and personal in nature. Rubega gave one of the last ones about Helen. She had this to say:

It looks like I get that last word... I obviously have to agree with everything that everybody has already said about what a fantastic mentor Helen is. I don't need to repeat that... I do think, however, that some words have not been said about Helen that need to be said. Ornery [laughter from the crowd] and obstinate. Relentless. Helen Hays has never taken 'No' for an answer in her life. Am I right? [sounds of assent] This is the secret to Helen. The secret in the background is, all of you experienced what you did because Helen wasn't doing it for you. Helen was doing it for the birds. She made a decision. She committed to that decision. And we have all been fuel. [laughter] Fuel for the engine. We are fuel for the engine. We have to be fuel for the next fifty years for her, and for those birds. In the present times, if you take nothing else away from your experience at Great Gull Island, you should take away Helen's sterling example. It doesn't matter how high the wind is, we are gonna carry those line sights out to the blind. [laughter] Do not take no for an answer. It's up to us. That's what I took away from Helen Hays. Nothing's been more valuable. Thank you.

It might be worth mentioning here that Helen never married, or had any children. When CBS News did a segment on Helen back in 2012 (lazily titled “Woman dedicates life to endangered birds on N.Y. Island”) they seemed to make much of that information. Towards the

end of the segment—after watching footage of Michelle Miller interview Helen on Great Gull—we see Miller, back in the studio with the other CBS anchors, and the following exchange happens between her and Gayle King:

Miller: “And she’s looking to gather all this data. She looks over all her data during the next six months. So she’s...she’s, y’know, she’s—”

King: “She’s okay.”

Miller: “She’s *okay*.”

King: “I feel better knowing she has a place in the city, because when you said ‘Never married, no children,’ I thought, ‘Does she have any *friends*?’”

There is a clear note of condescension here (and throughout the whole segment, frankly) that personally infuriates me: the implication that there is something strange or unnatural about a woman who is unmarried or childless, much less one who has devoted her life to science; the automatic assumption that it makes her a kind of outcast. I am frustrated, too, at the segment’s need to emphasize how supposedly unusual Helen is, rather than focus on the birds, or how incredible her work with them has been.

I wish that CBS had been in the Chester Meeting Hall the day of that celebration. Not only to see how many people Helen has touched, but also to see how vital her work on Great Gull Island is in a grander context.

I wish I could have been there too—I was in Boston, attending classes at the time it happened. But I listen back to the recording of the event and feel something huge and unnamable swell in my chest. I think it is a kind of gratitude, mixed with a kind of awe, but it goes deeper than that. I listen to the way my mother says “*In the present times*” in the recording of her speech at Helen’s celebration, and I hear the sense of doom, the sense of urgency, hidden behind it. I

know that, to her, and to everyone else in the room, this is about so much more than just some birds—but is also entirely about those birds, that those birds represent something so much bigger.

At one point during their interview, Miller asks Helen, of the terns, “Why do we care about these mean...little...puppies?”

To which Helen responds, almost casually: “Oh, well, I think we care about them just because it’s careless to lose a species if you know they’re endangered and you know some of things they need. And if you have some of those things, then you should try to put them together.”

For Helen, it is not complicated, and it never has been. It’s not about us; it’s about the birds. We have an obligation to the other life that exists on this planet, a responsibility to not eliminate other species if we can avoid it.

I wonder what it means to commit to these ideals. I wonder what it means to devote your whole career to one seventeen-acre stretch of land, and the birds that live on it. To get closer and closer to the end of your life, to spend perhaps your last summer with the birds you have given that life to watching so many of them die. To know that the species you brought back from the edge could tip back over so easily once you are gone. Both because there are forces at work that are so much larger than you, but also because so many people have simply been careless. Because they care less.

When we talk about the effects of man-made global climate change, the whole topic usually feels too big and too abstract to handle, to hold in our minds. We can understand intellectually, for example, that because of the number of greenhouse gases trapped in the Earth’s

atmosphere, the ocean's temperatures are rising at a rate even faster than previously thought. We can understand that this has led and will continue to lead to "increases in rainfall intensity, rising sea levels, the destruction of coral reefs, declining ocean oxygen levels, and declines in ice sheets; glaciers; and ice caps in the polar regions."

But it is harder to grasp all of that emotionally, to conceptualize what it means in a real, tangible way—especially for those of us in the West who don't live in places that are being impacted by these changes yet. Some do not have this luxury. For the people of Puerto Rico, the 3,057 people who died as a result of Hurricane Maria make the effects of climate change very real. Because that statistic is not an empty one—there is blood behind it. Like my mother with the tern chicks, people had to count the bodies—the bodies of their family, friends, neighbors.

Ironically, it is the people who are the least responsible for the global climate crisis—the most impoverished people—who have been suffering the most as a result of it, and who stand to lose the most in the years to come. Meanwhile, the people who have caused most of the problems have not truly felt the consequences of their actions yet—and thus have the privilege to continue to remain indifferent—and probably will not until it is too late for anything to be done.

How high does the death toll have to be before we notice? How many more babies will have to die before we care? How much do we have to care before we grow concerned enough to act?

When I think about climate change—and, more broadly, the effect human beings have on the natural world—I think about extinction. Not simply death, which comes to all of us, and is one of biology's few constants. Much as it disturbs and frightens me, I have to accept that as something natural.

But extinction—that is something different, especially on the scale that we are currently seeing. Sodhi, Brook, and Bradshaw note that, “Although extinctions are a normal part of evolution, human modifications to the planet in the last few centuries, and perhaps even millennia, have greatly accelerated the rate at which extinctions occur.” It is clear that, in addition to the climate crisis, we are currently in the middle of a mass extinction event largely caused and precipitated by humans—many scientists have called it “the sixth extinction,” a term made popular most recently by (and also serving as the title of) Elizabeth Kolbert’s 2014 Pulitzer-Prize-winning book.

To my question earlier about how much we have to care, Kolbert has this to say: “To argue that the current extinction event could be averted if people just cared more and were willing to make more sacrifices is not wrong, exactly; still, it misses the point. It doesn’t much matter whether people care or don’t care. What matters is that people change the world.” This gives one a new perspective on the issue—the mere fact of humankind’s ability to significantly change the planet makes it clear that, whether we care or not, we have a responsibility to that planet.

Even from the most self-promoting perspective, this is the case. After all, as Kolbert says, “*Homo sapiens* might not only be the agent of the sixth extinction, but also risks being one of its victims” and if nothing else, our self-preservation should motivate us to pay more mind to nature and our interactions with it. At the same time, Kolbert says, though, “the fate of our own species concerns us disproportionately...that is not, in the end, what’s most worth attending to. Right now, in the amazing moment that to us counts as the present, we are deciding, without meaning to, which evolutionary pathways will remain open and which will be forever closed.” This is not something we can take lightly.

Most people are, understandably, overwhelmed by very concept of extinction, much less the idea that they are partly responsible for a mass extinction event. Many will fixate on particular animals, and how sad it will be when they no longer exist in the world. The polar bears, which are losing habitat due to climate change, are, of course, very popular. So are such endangered species as pandas, rhinos, and elephants—species that are foreign in the West, and which we therefore view as exotic, as something we only see in zoos and nature documentaries and children’s picture books. In stories—the stories we have been told about nature, where it is imagined as something distant from us, existing on some land across the water, visible but separate.

Few people even know about the deaths of Roseate Terns, much less pay any mind to them. And those birds are just one example of the numerous endangered species whose deaths go largely unnoticed, and whose extinction may well go the same way. As Van Dooreen notes, “There isn’t a single extinction tragedy. Each case is a unique kind of unraveling, a unique set of losses and consequences that need to be fleshed out and come to terms with.”

We will be seeing many more deaths in the years to come, and many more instances of extinction, unless we act quickly, and in a significant manner. In some cases, it may already be too late—but that does not excuse us from the imperative to try. We are going to need find ways to make the vast crisis we currently find ourselves in more real to us.

Both Van Doreen and Kolbert seem to feel—as I do—that one of the best ways to do this is through stories. Both *Flight Ways* and *The Sixth Extinction* are filled with various extinction stories. One of the most vivid ones Kolbert tells find hers in a cave in Vermont filled with dead bats, which Kolbert and the scientists she is accompanying must collect—much like the bodies of the terns Rubega collects on Great Gull.

Kolbert's descriptions being in the cave with the dead bats are, appropriately, gruesome: "In the hours we had been slipping around in the cave, the carnage had grown even more grotesque; many of the bat carcasses had been crushed, and now there was blood oozing out of them. In an earlier version of this story, published in *The New Yorker*, Kolbert writes, "It struck me, as I stood there holding a bag filled with several dozen stiff, almost weightless bats, that I was watching mass extinction in action."

I think about the tunnels on Great Gull Island, how I imagined them as caves. About how, when you're making your way through them, all around you is darkness and possibility.

What if the roof caves in? What if you get stuck between the narrow walls? Is the air safe to breathe? What other creatures walk with you in the dark, shuffling and shifting in single file like the beasts Noah led onto the Ark? When will the tunnel end, and light crack through the darkness, flooding our eyes? What if it never does?

In this dark tunnel in my mind, my memory, I keep moving forward. I feel a soft hand in mine, squeeze it, trying to feel a little safer.

I think about Helen, and all she has sacrificed for the sake of a future she cannot be sure of. I think about all the lives she has touched, all the lives she has lost, all the lives she could have had.

And I think about my mother, counting four thousand dead chicks, sorting through their bodies with her bare hands.

Works Cited

- Ansel, Talvikki. *My Shining Archipelago*. Yale University Press, 1997.
- Cheng, Lihing, John Abraham, Zeke Hausfather, and Kevin E. Trenberth. "How fast are the oceans warming?" *Science*, vol. 363, no. 6423, 11 Jan 2019, pp. 128-129.
<https://science.sciencemag.org/content/363/6423/128>. Accessed 5 Oct. 2019.
- Dickinson, Mardi. "BCR 140: Helen Hays: Great Gull Island 50th." *BirdCallsRadio*, 26 September 2018. <https://birdcallsradio.com/bcr-140-helen-hays-great-gull-island-50th/>. Accessed 23 Oct. 2019.
- Hays, Helen. "Great Gull Island History." *Great Gull Island Project*, 2011.
http://greatgullisland.org/Great_Gull_Island_History.html. Accessed 23 Oct. 2019.
- "Helen Hays '53." *Wellesley College*, 2009,
https://www.wellesley.edu/alumnae/awards/achievementawards/allrecipients/helen_hays_53. Accessed 24 Oct. 2019.
- Kilgannon, Corey. "A Revival, One Tern at a Time." *The New York Times*, 20 July 2012,
<https://www.nytimes.com/video/nyregion/100000001676115/the-bird-whisperer-of-great-gull-island.html>. Accessed 23 Oct. 2019.
- Kolbert, Elizabeth. "The Sixth Extinction?" *The New Yorker*, 18 May 2009,
<https://www.newyorker.com/magazine/2009/05/25/the-sixth-extinction>. Accessed 15 December 2019.
- Kolbert, Elizabeth. *The Sixth Extinction*. Picador, 2014.
- Leakey, Richard E., and Roger Lewin. *The Sixth Extinction: Patterns of Life and the Future of Humankind*. Anchor, 1996.
- Rubega, Margaret. "Margaret Rubega: Tell Them Who You Are." *SoundCloud*, Uploaded by

The Story Collider, 15 Apr. 2019. <https://soundcloud.com/the-story-collider/margaret-rubega-tell-them-who-you-are>. Accessed 23 Oct. 2019.

Rubega, Margaret. Personal interview. 22 July 2019.

Sodhi, Navjot S., Barry W. Brook, and Corey J. A. Bradshaw. "Causes and Consequences of Species Extinctions." *The Princeton Guide to Ecology*, Princeton University Press, 2009, pp. 514-520, http://assets.press.princeton.edu/chapters/s5_8879.pdf. Accessed 15 Dec. 2019.

"UConn Names 2015 Honorary Degree Recipients." *UConn Today*, 1 May 2015, <https://today.uconn.edu/2015/05/uconn-names-2015-honorary-degree-recipients/>. Accessed 24 Oct. 2019.

CBS This Morning. "Woman revives Great Gull Island's tern population." *YouTube*, Uploaded by CBS This Morning, 3 Sep. 2014, <https://www.youtube.com/watch?v=4OcUxAnvQD8>. Accessed 23 Oct. 2019.

Worral, Simon. "How the Current Mass Extinction of Animals Threatens Humans." Interview with Thom Van Doreen, *National Geographic*, 20 Aug. 2014, <https://www.nationalgeographic.com/news/2014/8/140820-extinction-crows-penguins-dinosaurs-asteroid-sydney-booktalk/#close>. Accessed 15 Dec. 2019.

Yolen, Jane. *Owl Moon*. Philomel Books, 1987.