GrubStreet

essays, short stories, and poems about the natural world

OUR PLANET OUR STORIES

writing from GrubStreet classes

2024

Our Planet, Our Stories

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PREFACE

Erin Weiss, Director of Programs, GrubStreet

Everywhere you look, there it is: the crisis of climate change. Writing about the environment, and the many constant, overwhelming realities that plague it, presents major challenges: How do we write with specificity about something that is omnipresent? And how do we write vividly, and with urgency, about problems that are unfolding at scales so large that they often lend themselves more easily to numbers and charts than they do to words?

In the fall of 2023, GrubStreet hosted a series of free and low-cost workshops, called Our Planet, Our Stories, that aimed to help writers find creative ways to engage with this urgent global issue. The classes–Writing Climate Fiction, Writing Climate Essays and Op-Eds, Apocalyptic and Dystopian Fiction, Nature Writing, Ecopoetics, and Writing Climate Justice–were attended by more than 150 writers, and they approached this enormous topic from many angles.

The *Our Planet, Our Stories Anthology* is a collection of writing that emerged from this series. In its pages, you will encounter the natural world experienced from many perspectives, explored in many genres, and in urgent need of your attention.

GrubStreet is the place where writers from all backgrounds and ages develop their craft – and themselves – through the power of writing and sharing their work. Thanks to the generosity of our donors, we are thrilled to be able to share the work of GrubStreet writers with you. We hope this anthology can be an opportunity to engage deeply with the crisis of climate change, and to let these creative approaches enhance your understanding, deepen your appreciation, and clarify your hopes for the future of our planet.

The Venerable Horseshoe Crab

ESSAY

Muireann O'Callaghan

The first time I walked by a horseshoe crab, I didn't know anything about their resilience, or the demand for their blood at $60,000 per gallon, or the fact that they have remained unchanged in chemistry for over 300 million years. I only noticed a beige, one-foot-wide horseshoe-shaped shell that looked like a protective army helmet with small spikes at the sides and a spear for a tail. Any appendages hide under that shell. There are no protruding pincher claws like on a blue crab, and no exposed legs like on a regular rock crab. Initially, horseshoe crabs don't appear vulnerable. Unless they are trapped, like the one I first walked past.

I was beachcombing with my young daughter and son in Stonington, Connecticut. We had recently moved from rural, north-western New York, and while waiting for our house to sell and looking for better-paying jobs, my husband, kids, and I temporarily lived with my parents near the shore. I remember it was a warm morning in late May 2008, and we walked under a fog that hovered the beach. Feeling somewhat unsettled, I saw things around me in a state of vulnerable flux. When I noticed the horseshoe crab, exposed above the tide line and stuck between granite rocks, I felt it had somehow been moved beyond its scope of survival. I assumed it landed in a delicate position and died.

That morning as the fog began to lift, we took in the things of the shore: the lull of waves, churning of pebbles, moan of foghorn, cackle of gulls. Whether it's the charge of negative ions in the salt air or the vastness of sky and sea, walks near the water remain a panacea for me. It's a thing I learned to do when I was a child growing up on the southern coast of Ireland. I'd hear adults as they walked along cliff paths say they were out to "clear their head." Part of me often slips back into memories of that close Irish community, the place I felt safe and at home.

The following two days that May, we walked past the lodged crab, camouflaged in a mounting pile of sand and seaweed wedged in the rocks. At the time, I didn't know that horseshoe crabs, formally named Limulus polyphemus, spawn at the wrack line during high tides on the full moon and new moon in May and June. I didn't know this crab was a female because of her large size and was only meant to visit the shore temporarily. As I was busy offering full fists of sand to the gods of the horizon, letting mica and quartz slip through the gaps of my clutch, I heard chatter behind me that something was alive.

"What's alive?" I called to my kids. They were crouched, digging.

"The crab. It moved." They looked at me for answers. I knew they'd want to get it back to the sea.

"Oh, but it's been stuck there for three days. There's no way to move those boulders. Maybe that's its home, and it gets food when the water comes up at high tide." I tried to think. My breath became shallow. I felt that recurring nostalgia for home take shape in the pit of my throat. The sea reminded me of my childhood home, and it called to me in tones of loss and worry for a future. My mouth was coated with a dense film that tasted of the bladderwrack strewn in piles around us.

"See? She's moving," my son pointed. He was right. The more he dug on our side of the rocks, the more it seemed to undermine the sand where the horseshoe crab was stuck. I heard one of them tell me, "She's shifting. We can make a tunnel." It's hard to disappoint children. When they're on a mission, they don't want to be told it's hopeless.

Later I'd learn the horseshoe crab is not even a true crab; they're more closely related to ticks and spiders. In years following, we fell in love with the annual appearance of spawning horseshoe crabs; it would become a spring ritual for our family to stay up late at night and shine a flashlight into the ripple of breaking waves, looking for the soft circles of nests and movement of the couples—the smaller male clutched onto the dominant female. My husband and daughter would join part of a team run by Project Limulus that tags horseshoe

crabs to track their journeys. I'd write an article about horseshoe crab resilience for the town's local *Patch* and imagine these ancient beings traveling from deep off the continental shelf to lay their clusters of about 4,000 eggs here.

I'd learn that when the female spawns, hungry migrating birds like Piping Plover follow along and poke their long beaks into the egg clusters. The birds eat mostly everything, so that on average, only ten eggs from that one night's work will make it to mature adulthood ten years later.

The kids pawed like dogs suddenly, more furious and determined. I sank to my knees, bit my lip, and dug with them. I thought about the translation of my own Irish name. I am the foam on a broken wave. With each heaving rise of sea, there is a heaviness that must be distributed. We all have our burdens.

I'd discover the horseshoe crab's burdens. The global warming of ocean surfaces makes egg and larval survival more vulnerable, and the rising sea level threatens their spawning habitat. The more I read, the more overwhelmed I felt by the frenzy of threats from human predators. A horseshoe crab's sky-blue, copper-based blood easily clots around bacteria, so this prize discovery has led to the bleeding of horseshoe crabs, in the name of healthcare, in the name of testing vaccines and intravenous drugs, in the name of saving many humans. After the process of bleeding a third of a horseshoe crab's blood from its soft body under the shell, scientists return the crabs to sea where thirty percent of the crabs who undergo the bleeding will die.

I won't want to know more about their vulnerabilities. No, I don't want to know about the pickup trucks that would drive onto the beach and load up their flatbeds with spawning horseshoe crabs. No, I don't want to believe that taking even the regulated number of them as bait for eel traps is a necessary sacrifice.

It's as if I know this trapped horseshoe crab needs to survive. I am directed to dig a channel to the water, and I do as my kids tell me. And then she drops down into the gap, a splash of sunlight shining on her arc of shell before she disappears for a moment and emerges from the hallowed space under the rocks. She's fast. She knows

the direction. Her hidden legs propel her, as if she hovers atop the stretch of sand in a race toward the water. There is no sound when she slips into the water, just a wake of translucent ripples and a trail of bubbles. My ribcage expands with the swelling of the sea's green and silver surface.

One day I will collect dried horseshoe crab molts and position them on the shelf above my desk. I will remember how a horseshoe crab survived for three days outside of the sea; and that my kids and I got up off our knees and stood in silence to see her return to the deep place of her home. I will feel simultaneously safe and sad as I stand on an eroding beach.

I haven't seen as many spawning horseshoe crabs in recent spring seasons. They are supposed to be venerable survivors. Scientists now have other solutions for testing drugs, so shouldn't the horseshoe crab bleeding labs be reduced or eliminated? Shouldn't we be able to leave them spawn without stealing them for bait? As they become vulnerable to the eroding shoreline, can we dig with determination to dislodge threats? Can we trust it is possible to survive?

After the Hottest Summer: A Meditation

ESSAY (an excerpt)

Elaine Olund

"It's too early to despair; it's always too early to despair. The world itself is a mystery school and teaches us what it needs. It gives us impossible tasks and impossible journeys, and all we can say is that we love the world without knowing outcomes, because it is the only world we have, and because we never do know outcomes."
—Zen teacher John Tarrant

I. Wild-Eyed

I scroll through the news alerts, burnt out from a day spent pushing pixels around. War, school shootings, the hottest summer on record, addiction, suicides, the horrors of menopause, artificial intelligence taking jobs, billionaires in pissing matches… *put that phone down. Breathe.*

As a side-gig, I teach and practice mindfulness. I know what mucking around in the newsfeed does to my nervous system, and yours, too. I escape to Buttercup Woods, to hike in the gorgeous fringe of forest that cradles my otherwise urban Cincinnati neighborhood.

Is entering the woods the feeling of coming home? Or is that just a romantic notion—that I am meant to be one with nature? I mostly live in a house, in a city, in a car. I live in the phone in my pocket, in disembodied text messages with far-away loved ones. I live in the drone of air conditioners, their endless thrum-hum-hum. The woods usually help me feel soothed, calmed.

But today, panic hangs thick in the smoke-tinged air, blown here from the burning boreal forests in Canada. It's hot; the trail's hard as concrete. All around me are fallen trees, mainly Ash, succumbing in ever-greater numbers to Emerald Ash Borers. Their trunks crisscross the ravines like huge pick-up-sticks.

The trees cannot escape the bad news any more than I can. Mindfulness only goes so far. Meditation won't stop the rising heat.

Much of the Midwest is in drought, and here in Ohio, it's dry. I do my best to focus fully on the sounds. On the crunch of twigs and dry foliage underfoot. The sounds skitter me to a childhood spent escaping troubles at home by riding through woods, splashing in streams, climbing lush Ash trees.

A wild-eyed, galloping part of my psyche takes off. She's headstrong as a half-trained pony; her hooves kick up dust clouds, zigging and zagging between tiny gaps in the stressed trees, smacking my knees against bark, not caring if my hair snags sticker bushes. She's the part that tells me there's no way to escape, that no matter what I do, disaster lies ahead, waiting.

For years I've read and written about life on a hotter Earth, which used to seem generations away—far enough away to hope for technological miracles. But the predicted changes are playing out, faster than many scientists thought, faster than anyone hoped. Faster than I can cope with.

Breathe. Come back. Yes, the air stings. Stomp your feet. Be here now.

See: there's the red flash of a woodpecker. Blue sky shines through starry holes in the thick canopy. A slash of sun on moss, that primordial green. The woods, hot and tired as they are, are still here.

II. Deluges

There's an equation that maps it out: for each degree Celsius of warming, the air's capacity for holding water vapor goes up by about seven percent. An atmosphere with more moisture produces more intense precipitation events.

One morning in July, I'm sitting on the porch sipping coffee, casting about for a yoga theme, thinking about how intention and surrender correspond with inhalation and exhalation. The air's sticky and the garden, parched. Predictions of rain have fizzled for weeks. A trace here, a tenth of an inch there. Dribbles.

A knot of dark clouds congregates low above our tall red-brick house as I jot notes; a light-fingered breeze tickles my arms. Suddenly a giant tosses a barge-sized water balloon. Wham! The narrow street that runs past my house transforms to a shallow, fast-moving river in seconds as three inches of precipitation cascades down, choking the storm sewers. The rain rises up over the curb, over the sidewalk and keeps on rising until it kisses the silvery hubcaps of the old Volvo parked out front.

And then, just like that, it stops. The street-river ebbs. This time.

What does 'intense precipitation' mean, exactly? I'm learning along with folks all over the country, and all over the globe.

Montpelier, Vermont was pounded with two months' worth of rain in one day. Closer to home, in Kentucky, a storm dumped 11.28 inches on Mayfield. The phenomenon is worldwide. Intense precipitation events popped up everywhere as temperatures broke records: Hong Kong, Greece, Libya, Taiwan, Brazil.

But back to Cincinnati, back to where nothing really terrible has happened. Not yet.

A few days later, walking the quarter-mile to my car from the yoga studio, the weather abruptly shifts, day to darkness. Petrichor rises. Crouching under the post-office awning, I pop open the umbrella I keep in my backpack, betting that I can beat the rain.

I run flat out, and lose the bet.

Water sluices off me, the driver's seat drenched as I dive in, soaked to my underwear, socks sodden, shoes sloshing. Silvery sheets rain down as if I'm inside one of those drive-through car washes. Images from far-away floods float to mind, floods where dams burst, where homes and trees and people slide into rivers.

You're safe, you're here. Breathe.

The rain slows. I laugh, dry off using a handy flannel shirt from the bag in the backseat awaiting its Goodwill moment. I blot my soggy

backpack with a ratty old sweater, but to no avail: a few drops of water have slithered in. Later, I'll find they've sizzled the circuitry of the laptop nestled deep inside.

III. The Truth Is

The truth is, ours is a culture that collectively values money over mountain tops, extracts and burns fossil fuels, spews toxic waste into the open sewer of the sky and then chuckles in disbelief when called out. It's a culture where football players earn multi-millions but new parents don't even get a month of paid leave to bond with a newborn baby.

The truth is, ours is a culture of busy-ness, with little priority on nurturing or caring for the earth.

The truth is, I am part of this culture. And so, I fill up my car, I turn on the A/C. I'm a fat dot in a carbon-hungry pattern. It's easy to blame culture, or anybody else but myself.

The truth is that carbon emissions are at an all-time high. It's business as usual while a projected one billion people globally face the prospect of displacement or forced migration by coastal-specific climate hazards in just a couple decades.

The truth is, responding to what is happening requires focus, presence, calm. It requires loving the earth as it is, now. The truth is, I need to meditate more and panic less.

IV. Small, Immediate Choices

The July heat eases as the sun sinks, turns golden. I'm done with my desk job for the day. Now it is time to focus on loving this moment, just as it is. I drink in the summer music—cicadas singing high in the oaks, cars on the distant interstate, far-off chit-chat between neighbors, the cacophony of sparrows throwing their nightly rollick, a siren drowning it all out, then waning.

Stepping out barefoot, I plant my feet on clover lawn. I take a deep, slow breath, gaze into the broad Fibonacci face of a sunflower as tall as I am, a cheery, dear face alive with bees hard at work, their legs golden, fuzzy, pollen-heavy. I feel a jolt of joy

The air smells of Canadian trees ablaze. I feel a jolt of urgency.

This morning I read that the surface temperature in the Florida Keys soared to hot-tub temperatures, threatening the reefs, the fish, in a sort of underwater wildfire of heat.

A momentary overwhelm roars up, leaves me—and maybe you? — feeling raw, helpless.

Breathe. Let what comes after overwhelm arise. Make a small, immediate choice.

Maybe one small, immediate choice is to love what is here, right now. To mourn what's lost and focus, too, on the beauty that still remains. To make a both/and meditation of that.

My shoulders soften. Whatever happens, I don't want to miss this green-veined love, this smooth-petal yellow wonder, this blue-sky joy. I want my children, and your children and their children and theirs to live in a blooming, buzzing world.

Let feeling rise, buzz like the bees on a hot July evening. And from that feeling, begin. Make one small, immediate choice. And another choice, and another.

I'm talking to myself, here. Feel free to eavesdrop, if you like.

Lessons in Reclamation: A Tanka

POEM

Black the Creator

Earth is teaching us
how to return home to our
-selves over again.

How to suck the poison, how
to swallow the slaughtering.

Much of New Orleans Could Go Underwater by 2050[1]

POEM

Black the Creator

Bulbancha kisses	the gulf's gaping mouth,	its mourning breath thickens the breeze
hungers for land	and the people here it's grumble	channeling threat to brass benediction
footworkin airwaves	across the Treme	where St. Phillip and Villere flood
and enters a tide of	printed tees and ones,	a surge of color scheme while
tourists	rock-skip to	the quarters
these people know	death/depth	is illusory and all living things keep
living	submerge to return	the way
dark bodies float,	to rise the way	oak roots crown concrete
pushing	thru,	thru and thru

1 Nolan, A. (2023, March 6). Much of New Orleans Could Go Underwater by 2050, Due to Rising Sea Levels. greenmatters.com

Conversing With The Moon

POEM

Black the Creator

How can the tides be held?
If they cannot be held, are they capable of being loved?
All fluid and free, forceful and unpredictable.

That which cannot be contained is most certainly comparable to God, isn't it?
Have you ever watched tears swell?
Declare sovereignty and destroy everything built up?

And isn't that God-like?
To create something only for it to destroy itself...
And aren't you still supposed to love it then?

Could the source of destruction also be the source of love?
Is there anything an ocean cannot be or become?

Smoke-Colored Glasses

SHORT FICTION

Alyssa Hull

So buried in grading and preparing for exams—the last final exam she would ever give at that school, or any—she barely noticed the smell in the house. It smelled as if something had died, which didn't seem completely unlikely: the old house, an 1880s brownstone, hosted a squirrel or a family of them every fall through spring, despite their continuous failure to pay rent. Only in the evening, when a friend texted her about the air quality index, that she realized that what she smelled was not death, exactly.

Pictures of New York showed the city shrouded in an orange apocalyptic haze. Apocalyptic, genuinely, that was what the papers called it. Mornings driving to work in the smoke-laced fog, afternoons spent packing up books and student projects so that she could haul them to her car. Breathing the air outside left her feeling as though a rubber band had wrapped itself around her heart. People, mostly her, wondered aloud if graduation would be delayed, or moved indoors instead of out on the quad, or delayed and then moved indoors (the ultimate disappointment).

The wildfire smoke cleared enough by Wednesday that the graduation practice went on as scheduled. That afternoon, behind the school building, she met a friend and much-beloved former colleague who'd left the previous year for a teaching job at a different school, in a nearby city. Her friend came to help her because she knew what it took, physically and emotionally, to leave a classroom behind. Together, they dug up the rubber tree planted by the gardening club earlier in the spring. Now over five feet tall, the rubber tree resisted their efforts to load it onto a cart.

She returned to her classroom to search for the bag of potting soil already packed away among boxes of books. When she came back out, she found her friend surrounded by eight, and then ten, and then

twelve students gathered around her in the parking lot. The seniors flocked to her after their graduation rehearsal ended. Blue surgical masks pulled down beneath their chins revealed wide smiles, as these seventeen, eighteen-year-olds abandoned their pretensions and put-on pantomimes to adulthood. Their happy faces made them look again like the child selves they had spent the last three, four years restlessly trying to grow out of. On its cart, the rubber tree, curved bow-like under its own unconstrained growth, threatened to roll back down the hill.

Rethinking Nature and Culture: A Pitch for Personhood

ESSAY

Heddi Vaughan Siebel

"You only care about trees! You have no respect for people!" cried my friend after hearing about my readings on environmental personhood. I was dumbstruck, but not surprised, by her binary thinking. Our culture has constructed a false competition that separates humans from the other living nonhuman entities of nature. It is as if, people and trees don't physically interact or exist on the same planet; as if, caring about one precludes caring about the other. The words of French philosopher Bruno Latour came to mind, "We need to rethink the relationship between nature and culture."

We were circling our beloved, wooded reservation of 155 acres that includes our city's water supply and showcases a "naturalistically" designed park by 19th-century landscape architect Frederick Law Olmstead. Cyclone fencing and poison ivy vines aside, we were grateful to relax in this man-made nature and watch the birds drawn to its water and trees. In the past, I painted the architecture of its mature maples and sensitively sorted conifers. Now, as my friend and I walked with a river of philosophical differences between us, I realized that my years of landscape painting had profoundly changed me. When you paint the landscape, you leave your world to enter another with new rules: balance and integration with nonhumans. I felt there was more to learn by leaning into these new rules.

We reach a smaller, ancillary pond. On one side roll the low hills of a golf course; and on the other a connector road where tires rumble on the tarmac. We gaze into the pond scanning through the choking islands of aquatic plants for the black and white flashes of merganser pairs.

In the last weeks of January 2024, two pieces of news slammed me: one with terror and the other with hope. Terror came with the report that 2023 shattered records for being the hottest year. According to Columbia University Climate School scientist Radley Horton, "There's growing concern among scientists that we may have underestimated just how sensitive the climate, the earth's temperature, is to greenhouse gasses as they increase." Hope came from Colorado where, for the first time in the United States, a town appointed two legal guardians for the Boulder Creek watershed to protect its rights to flow and be pollution-free.

Could rethinking nature not as property but rather as a legal entity strengthen environmental protection? Since Christopher Stone first asked "Should Trees Have Standing?" in his 1972 paper, the notion of granting rights of personhood to nature has been both argued and ridiculed in the United States. While frustrated at home, the movement for nature rights (supported primarily by indigenous groups) is inspiring somewhat successful environmental action worldwide. In 2008, Ecuador was the first country to amend its constitution to include Rights for Nature as a means to bring more efficacy to environmental controls. Bolivia followed Ecuador in 2010 with a Mother Earth Law. Unfortunately, this is a series of statutes rather than constitutional changes and may risk weakening under pressure from economic interests, ambiguity of language, and enforceability. In India, the movement grows as state high courts have bestowed rights onto glaciers, rivers, animals, and Mother Earth. New Zealand's former National Park Te Urewara, shed its park status in 2014 and was granted personhood.

Environmental personhood "designates environmental entities to the status of a legal person. The concept recognizes that nature has rights and that a court of law should enforce those rights. As a result, the environment is given robust and expansive legal protections independent of its connection to human interests," writes the late Gwendolyn J. Gordon in the Columbia Journal of Environmental Law (2019). "New Zealand's Te Urewera Act," Gordon emphasizes, "is an unequivocal rejection of a human-centered rights regime for

protecting nature as property." Granting Nature the rights of legal personhood could help mitigate climate change by altering cultural assumptions, and according to Politico "...granting basic legal rights to nature can help protect it from threats like deforestation, biodiversity loss, chemicals pollution... "

For those who might find it absurd to grant "robust and expansive legal protections" to nonhuman life forms, consider the legal personhood of U.S. corporations given, albeit questionably, in 1886 through the Equal Rights Protection under the Constitution's 14th Amendment. According to Gwendolyn Gordon, this protection shifted the fairly benign concept of corporate concerns for the contracts and property of shareholders into "a real entity theory wherein the corporation was its own creature with its own interests...Personhood...would come to make the corporation much more powerful." This power was exercised in the 2010 Supreme Court decision Citizens United versus the FEC which ruled that limiting corporate spending on a candidate's independent broadcasts limited speech and violated the corporation's First Amendment freedom of speech.

For decades, I logged long hours observing trees, mostly New England's second-growth reforestation. Observation opened a secret portal that connected me to trees with the intimacy of friendship. The experience happened in two 'times': human time marked by the strobing light that penetrates the forest, bounces off leaf litter, and reflects oranges or greens onto bark; and 'tree time'—the agency of moving branches—acting at a very, very slow rate. My husband called me a tree whisperer, but now, with new studies on tree sentience, I realize I was just looking closely and seeing their beingness.

Suzanne Simard, the Canadian professor of forest biology who peeled back antiquated theories about the lives of trees in old-growth forests, makes a case for tree personhood saying"...trees and plants have agency. They perceive, relate, and communicate... cooperate, make decisions, learn and remember." Before Simard's research trees were regarded as solitary competitors in a forest. Her field inquiry reeducates us by revealing that trees in a natural forest connect symbiotically with miles of underground fungal threads that link tree roots in a mycorrhizal deal of sharing and exchanging resources.

Playfully called a “wood-wide web” fungi aid tree roots in accessing water and nutrients. In return, the tree allows the fungi a portion of its sugars. In her memoir, *Finding the Mother Tree*, Simard describes how, when fatally threatened, a “mother tree” will dispense sugary food reserves to its offspring through the mycorrhizae. An old-growth forest is “ a vast, ancient and intricate society,” writes New York Times journalist Ferris Jabr, “There is conflict in a forest, but there is also negotiation, reciprocity, and perhaps even selflessness.” Perhaps a deciding test for sentience may be whether trees feel pain. Is there even a word for this? The question of plant pain, posed by Peter Wohlleben, author of *The Hidden Life of Trees* to František Baluška a biologist researching plant neurobiology at the University of Bonn was answered in the affirmative. About Baluška’s study, Wohlleben writes“ [T]here is evidence for this at the molecular level. Like animals, plants produce substances that suppress pain.” Such substances would not be necessary if there were no pain Wohlleben deduces.

I am not a lawyer, but rather a visual artist who observes trees: a human heartened to see the Nature Rights movement gaining traction in this country. I believe that we have the imagination to overcome outmoded binary thinking and make bold cultural changes that can support sustainability. To my friend, I say, “Yes. I do care for trees. And I do care for people.” We are all part of a vibrant, and complex ecosystem that must be protected. Sometimes I dream of bringing *everyone*, including the U.S. House of Representatives, outside to observe and paint the landscape; to veritably *feel* the being of the nonhumans. Regrettably, the climate is warming more quickly than predicted. Do we have time to rethink nature and culture? To find the political will and imagination to grant nature personhood? Maybe. If the trees are telling us this, we should listen.

Wire

POEM

Teri Stein

They call it casualty wire,
the barbed filament looped
around the bellies of buoys
in the Rio Grande.
Both warning and promise,
strung like so much tinsel
winking in the sunlight.
There is sunlight for sixteen hours a day in Texas,
in the last week of June,
leathering the skin,
stealing water from the body.

There is both too much water and
not enough,
mouths dusty, the desert baked inside.
The horse crippler, the saguaro, the prickly pear,
they hoard the water in their hearts,
but at this point in the journey,
there is nothing
left for you to keep.
All you can hold now
are the hands of your toddlers.
Enlaced in yours, their fingers
cannot grab at the silvered concertina,
leering, lying in wait
to slice flesh to ribbons.

Unlike those of the hackled dogs,
the teeth of the wire are still.
It is possible to circumvent them,
the way you have eluded
the cartel, the puma,

the longing for home.
There are parts of the Rio Grande where the wire cannot go,
where the water becomes *coyote*,
first offering safety,
and then, the vanishing.

The river electric with dogs, horses, people;
a wall of muscle and sound,
a whip crack bisecting the thrum.
The crowds labor in the cycle
of push and surrender.
The wire transforms the water to sluice,
the bodies to water.
On the other side,
there is nothing anyone
would recognize as freedom.

It was the week before Independence Day,
and it would have bled into the next week
(and the one after that, and all of those that came before),
leached of color,
trapped under the heat dome,
but for the medic, who sent a postmortem.

There are bodies in the river,
children's bodies, twined in the wire,
split open by flight or rescue;
a mother drowns in search of her swallowed children;
an ensnared teenager miscarries,
the dark gush of her blood
indistinguishable from the river itself;
a father 's leg gashes while unloosing his son;
heat and fatigue steal the breath
of a four year old girl;
mothers and their nurslings,
nesting on the banks of the Rio Grande,
ordered back into the water,
ordered back.

I believe in what we are doing here,
the medic emailed his boss.
I just think we should not be quite so good at it.

Of Time and Terns

ESSAY

Alexis Rizzuto

Sitting on the rocky ledges overlooking the Sagadahoc Bay in Maine, I hear the eider parade before it arrives. It comes along morning and afternoon: one or two females lead a flotilla of a couple dozen ducklings (called a crèche). The mothers' and aunts' soft grunting and the fuzzy babies' quiet wibbling calls announce they're about to come around the bend. They dive and come up with baby green crabs to swallow. Sometimes the group alights on a seaweed-covered rock and takes a collective nap. Given their lifespans of up to 20 years (unusually long for a duck!), I may have seen the same mothers with new broods for many years, or seen one-time ducklings—if they survived—with broods of their own.

I've been coming to this rental cottage with my family for 30 years, watching this bay fill and empty for a week or two every summer. The bay is about a mile long and half a mile wide, with open ocean at one end and a saltmarsh on the other, dotted white with egrets. At high tide, it's not deeper than ten feet, while at low tide, it becomes a mudflat you can walk across to the next pine-covered island.

It's not only the ducks I have watched grow; over the years, my nephews have developed from bare-bottomed toddlers on the beach, to kids who would hunt hermit crabs with me, to shaggy-haired teens, and now beyond the age I was when I first stayed at the cottage. One's a lawyer, another in cybersecurity. But no matter what's going on in their lives, pretty much every summer, we gather at this place, and I watch the water.

Over the bay, ospreys soar and gulls squawk loudly, while the terns add their descending "keer, keer" call to the chorus as they scan the water, hover and dive for small silver fish. I look for the flash when they come back up, announcing a successful catch. "Got one!" I shout.

Terns resemble small gulls, with a black cap and forked tail. I wonder how many thousands of years have they been fishing here, in this very spot. How many generations? And how long have people been sitting on this rock, watching them? Terns evolved 40 to 50 million years ago. However, the last ice sheet here melted only 12,000 years ago. This island was home to the Abenaki who arrived shortly thereafter. "They called it Erascohegan, "good spear fishing," until 1649 when Chief Mowhotiwormet (known as Robert W Hood, or Robinhood) "sold" it —as much as Native Americans' concept of land allowed for ownership —to English fisherman John Parker, and it became Parker's Island[1]. The deed shows the chief's signature as a deer-like pictograph. A hundred years later, the place was renamed after King George I and has since been known as Georgetown.

So, the terns and the people who watch them may have been here for the last 11,000 years.

My rocky perch sits between woods and water. Behind me, the leaves of birch and wild cherry trees rustle and a chickadee calls a sweet "fee-bee." The forest here is mostly fir and spruce, trailing old man's beard lichen. Ferns and mosses grow below; the hermit thrush's ethereal song adds to the impression of a primordial forest. A few yards away, deer browse in the bushes, and a chipmunk scampers in the wild blueberries. For a second, I hear the vibration of a hummingbird's wings as it zooms by. But the forest is not ancient, much of it having been cleared for grazing by settlers. And the trailing lichens, which grow only 3–5 centimeters per year, have been reduced to a rarity by air pollution.

I wonder who has sat here before me and what they thought about. Turning from the woods to the water, I think about what it would be like to be a tern. They have no shelter, no tools, no possessions other than the fish in their mouths—if they can keep them from being snatched by other birds (a behavior called "kleptoparasitism"). But they have strong, agile wings, keen eyes, feathers to keep them warm and dry, sharp talons and beak: all perfectly designed to catch the fish they need to keep themselves and their offspring alive. They

1 https://www.georgetownme.com/?page_id=4420

have their voices to call with, each other to mate with. Their colony for protection, and to share news of good fishing spots. The wind to fly in, the water to fish in, the land to nest upon.

I wonder what a good day is for a tern. Wake up, stretch your wings, preen, go fishing, feed your kids, rest for a bit, repeat until it's time for bed? I watch the terns dive, and if they take off with a glinting fish, I know where they are going. A beach at a nearby state park has a protected nesting area, and I've been on that end of their flight as well, watching both parents return again and again with food for the waiting chicks—sometimes 10 times in an hour. They nest near a channel, called Little River, which flows with warm water as the tide is going out, and cools off as the tide turns back in. It's my favorite spot for floating, and a favorite spot for terns to hunt for the schools of tiny silver fish that hide just under the sand, but are kicked up by our feet (sand lance). When my nephews were small, I'd float them down the river on little inner tubes, with the terns calling and diving all around us. Once I found a sand lance already dead and threw it up in the air to see if anyone would catch it. Someone did.

Perhaps my nephews will soon be floating kids of their own down Little River, and their kids may do the same. The bay, the tides, the terns seem eternal, and human time dwarfed by geologic time. Surely these waters were here before us and will be here after us. But what will we have done to them? Rachel Carson spent time not far from here, and wrote *Edge of the Sea* about practically the same coast where I sit. Even then, in 1955, she was observing the changes that warmer ocean temperatures were bringing to this ecosystem. The green crabs that the eiders eat were not historically seen further north than Cape Cod; now they stretch to Nova Scotia. She also noted that herring were declining at least in part to warmer waters, which also invite new species from the south. As with many other things, she was prescient. Recent marine heat waves in the Gulf of Maine—which is warming four times faster than the global average—have had devastating consequences for the state's tern (and puffin) colonies, as the slim herring moved north or into deeper, cooler waters, and butterfish moved in. The new fish is too round for tern and puffin chicks to swallow, so they will actually starve surrounded by food they can't eat.

Carson probably couldn't have imagined that by 2023, the world would be experiencing temperatures not seen in 125,000 years. The coastal bedrock was here then. Through the ages, it has witnessed the world freeze and thaw several times over. It has seen waters teeming with life; it has been covered in ice a mile high. Will it be witness to an ocean too warm and acidic to support anything but toxic algae and slime? Life will find a way, perhaps evolving into new forms we can't envision, but it is this world I love, these hermit crabs, these terns, these nephews. Last summer—the hottest on record—we felt climate change on our skin; on the ocean side of the island, in water we've only known as frigid, we swam through large swaths of unnerving warmth.

Most of Maine's Common, Roseate, and Arctic Terns nest on a few carefully managed islands. Researchers, interns, and volunteers keep predators away, and monitor the colonies. Common Terns are known to be especially fierce in protecting their eggs and young. They are called aggressive, even "bellicose." One researcher told me that while measuring the distance between their nests, she taped a paint stirrer vertically to her hat, since the birds would target the highest point on a suspected predator. A journalist wrote that she stuffed her straw hat with towels and socks, "anything to blunt a sharp beak."[2] Their calls are described as shrill, harsh, screeching. They are known to poop on people.

To all this I say: good. Who knows how long terns (or humans) will be able to survive under the conditions we are creating, but as long as they are here, they are fighting with all the might their five ounces allow. They'll scream, they'll peck, they'll aim poop if they have to—to defend life. What will we do?

2 "A Moveable Feast" by Kathryn Miles, *Audubon Magazine*, Fall 2019

Whales

POEM

Sophia Pinto Thomas

They flashed across the flip of gold—
an illustrated sound—
could never follow where they flew,
the whales across the sound;

they learned to switch within the right,
between beyond, and seas—
so all the ocean—all around—
would hold their silent sings

& if they weren't meant to be
the newest, ancient monuments?
then how explain—their acres grace
or swimming, breathing—consequence—

The Tiger

POEM

Sophia Pinto Thomas

Riotous are Irises!
pouncing for a thing—
the tiger stripes his tail across
the leaves—so silently;

He, of whiskers delicate,
and jungle sensitivities—
is someone—bringing aqueducts

between the wealth of kings

from hungry, wanting minds.
The ripples in his pelt repel
a tale—that kingdoms—die,

and riotous—are Irises
between his gaze and mind!
& how explain—the tiger/lily,
growing—bridging—life

The Bat

POEM

Sophia Pinto Thomas

The bat has gathered closely all
the silk/shot threads of evening—
Closing on himself his wings,
he flits across the night;

The bat has gathered fully all
his furthest echoed wishes—
Adorns himself in sharpness
to be soft—within the night,

where he defies the light.
He glances through the treetops—
seamlessly surveying
all the evening, deep in thought;

and flying—with a sightless gaze
of twilights optimistic—
The bat has learned to gather
every color of the dark.

A Spring in Winter

SHORT FICTION

Curtis Sarkin

I hadn't seen sun in eighty days, and it'd be another eighty before sunrise. These times marked when the outer city was at its most vulnerable, when the solar reserves were unstable after months of dark, and one electrical error was enough to send a borough as impoverished as Rime into a deadly freeze. I'd noticed the lights in my tenement flicker, seen the datascreens lose their signals, felt that eerily harsh chill on nights when not every room got its share of heat. Telltale signs that another winter here could be my last.

I entered the building's communal shower, knowing it could be some time before I'd have a proper wash again. Tenants shivered under the water as I found a vacant spot, the pipes unable to retain much heat so far from their hot spring source. Snowy frost roaches skittered along the walls under the flickering shower lights, even the tepid water too warm for such creatures. I shuddered as the inconsistent water stream turned from tolerable to icy, thinking back to better times and warmer places, of the temple bathhouse by the great geothermal lake. Five winters had gone by since I'd been forced away from that seemingly noble life, ten Earth years for those who still clung to the old calendar. Dominoes of decisions leading me here to the least desirable parts of the city of Permafrost.

Once I'd dressed and packed, I walked through the rusting hallway, passing the usual tenants, human and otherwise. A trio of tall crustaceans stood by a wall, their chitinous mouthparts chittering as they looked me up and down with their geodesic eyes. A birdlike polar saurian ruffled its white, insulating feathers as its clawed toes clacked upon the metallic floor. Less adept life forms in the hall were wrapped head to toe in whatever clothes and fabrics they had, enough to shelter their fragile forms. We were never meant for this planet.

We all had our reasons for such an existence, whether we were impoverished, outcasts, on the run, or any combination of the three.

This secretive nature meant we were rarely looking to converse or socialize, but still, there were those little moments of solidarity within the building's community. Sometimes it was a simple nod of acknowledgement in a corridor, neither of us knowing the other's name. Occasionally it was more, sharing bodily warmth and anonymous lust, seeking each other out when we craved another's touch. Exchanging few if any words afterwards, our unspoken pasts were still our own, despite this level of intimacy, connections already severing by the time our sweat cooled.

Many had accepted this building as a literal dead end, not that much safer than the killing freeze outside. Hell, I would have stayed here another winter if the last one hadn't been so bad. Nearly half of the tenants died in the chill when the entire block's heaters gave out. I still recall standing at my balcony, draped in a blanket, daring to look down to see their remains carted away in unmarked coffins to be left outside the city limits in the Everfrozen Cemetery. In a way, I'd been relieved I hadn't truly known them, almost glad I didn't have to fully mourn these strangers. I found myself sickened by the uncaring nature of such thoughts, but there's a mental survival in keeping empathy levels low. The wealthiest and warmest inner boroughs rarely invested in improving heaters way out here, seeing these periodic die-offs as assurances that the overall city didn't overpopulate.

The elevator creaked as it descended to the lobby, as if the machine itself was whining about the cold. The other passenger was also human, a man from my floor who I'd last seen about a week ago. He gave a little nod of recognition, and scratched his stubble, and that's when I noticed both his hands and forearms were robotic, and crudely attached to thin, sickly-looking arms. He'd had hands of flesh and blood last I'd seen him, so whether he'd gotten into a nasty fight or simply lost those to the chill, I wasn't sure. I made my way to the elevator door, returning one final nod to the man, and took in the sights of the first floor saloon for one last time.

A cheap chandelier flickered, broken bottles in place of crystals, the decoration daring to pretend this was a better-off establishment than it truly was, with its walls of chipping green paint and gaudy art.

Shivering beings in threadbare coats hunkered over at the bar, sipping concoctions laced with addictive ichor, a hallucinogenic escape from this cruel reality. It'd be a long way to a warmer region, but I wasn't going to let this desolate place become my tomb. I buttoned the last buttons of my coat under my poncho, tightened the straps on my boots and backpack, donned my kerchief and goggles, and adjusted my wide-brimmed hat. I made my way through revolving doors, into the stale and windless freezing dark.

The derelict tenement houses lasted a few blocks, buildings on top of buildings, repaired and rebuilt over centuries, strange mashups of whatever limited materials underqualified architects could jumble together. An immobile stack of exploratory rovers looked like haphazard building blocks, scaffolding surrounded a defunct vertical starship; there hadn't been an attempted space launch here since before I was born. The hours passed, and the landscape changed little as I trekked onward, Rime so vast a borough that it seemed it could go on forever, windows a mosaic of illumination and darkness.

I half expected these icy streets to stay as dead as they were cold. By the time I neared the border of Rime, I was instead greeted with the chatter of nearby pedestrians and faraway notes of bass thumping through the dark. In the distance I saw a misty plume rising, the welcome sign of a hot spring. I knew of no hot springs in Rime, so it was a new eruption, attracting all to its warmth. What had started as a crowd of dozens soon became hundreds, maybe thousands. Their voices were upbeat and jovial as they conversed in several languages, the surprising sounds of happy conversations, the likes of which I hadn't heard for many winters. The distant music calling us like a siren's song, we followed the plume of hot air, all of us making a beeline to the lure of promised heat. Humidity increased with each step, and I pulled up my fogging goggles, hot mist caressing my forehead. Onward I trekked, the heat thawing my tense joints, closer and closer to the spring's source, smiles of both delight and disbelief on the citizens.

Soon, I reached the spring itself, the initial eruption having punched through the metal street, leaving a great pool in the aftermath. While this was a time when Permafrost was at its coldest, its citizens had

come out from their frosty homes in droves, the welcome waters washing away the grit and grime of their clothing and bodies. The eruption became a darkness rave, everyone suddenly out and about to drink and be merry. Near the water's edge was the source of the sound, robots functioning as speakers, music blasting from their torsos as they wandered. Winter coats and other clothes littered the ground, and as the hazy hot mist became thicker, the crowd's clothing became scarcer, skin and scales and feathers and exoskeletons mostly uncovered by their usual garments. Some had waded into the shallows where the pool's heat wasn't scalding, splashing and laughing in the steamy water's welcome embrace. I'd once known the privilege of heat, but for so many here who had never left Rime, this was their first time being blessed with the rarity of true warmth.

Casting my own coat to the ground, I let the hot steam caress my skin through my thin clothes as the sonic vibrations pounded, a massage of symphonic robotic bass as I waded into the pool. I floated on my back, heat reaching the scars and bruises I'd carried for so long, as if baptizing me in these pure waters. I smiled for what felt like the first time in years, having missed such comforts for so long.

Deep down, I knew this celebration wouldn't last. Soon, the elites would claim this hot spring as well, the most valuable new asset in all of Permafrost. Soon, the Authorities would clear the crowds, sending them back to their homes of coldness and lives of hardship. Soon, the commodity of the heat would attract investors, and with that, pristine new dwellings built, the old demolished in their wake. This eruption would change the landscape of Rime forever, until only the wealthy enjoyed its warmth. But now, the spring was ours – a vibrant rave in the cruel darkness, a rebellion against the freeze of the city and against those who hoarded its heat, a giant middle finger to the cold.

Hurricane Bob

FLASH CREATIVE NONFICTION

Marie Cloutier

I'm curling legs under sweatpants and the moth-eaten blanket as winds slam sliding doors inches from my bare feet. Electricity still works; the weatherman talking, reading wind speeds and gale forces and storm tracks and rain inches. Glass strains as the wind elbows it, tense, willing its fibers to hold, pressing and pushing and pressing. My mother hasn't taped up the glass like the news says to; the hurricane can have its way any moment, glass covering me in seconds, shredding blanket and sweats, wet and bloody from shards and storm. There is no such thing as safe.

The Closest Thing to Hope

Essay

Jennifer Nash

I'm sitting on the ground in the new pollinator garden at Cold Spring Park in Newton, Massachusetts. The summer's wildfire smoke has made my heart ache, and I've come here looking for new things I can do to heal.

I watch a bumblebee climb a hyssop blossom. I reach to touch it, and its body is as soft as down. I imagine what my fingers look like to its five eyes: bulbous and senseless. It rises and settles on my hand. It's nearly weightless, but I feel its energy. Its body is a coiled spring.

Hold still, I tell myself as the insect navigates the hairs on my hand and crawls up toward my wrist. I slowly raise my arm and gaze into its face. It looks mechanical, like snapped-together parts. It glistens like black plastic.

A little girl appears, attracted to the garden's floppy blooms, pulling her mother's hand. "What are you doing?" she asks as I sit there studying my bee.

"I'm making friends with it," I say. And as I reach to show her, the bee takes off and lands on her flowered shirt.

"It likes you," I say. Her laugh is the closest thing to hope I've heard all summer, and I stand up.

My own garden is two miles north of Cold Spring Park. Until I heard that little girl's laugh, I spent long hours enriching my beds with orange nodules of fertilizer and arranging displays of double-petaled zinnias against my privet hedge.

My mother taught me what a yard should look like, and for years I followed her example. When I used to visit her, we'd tour her garden together. We were like characters in a Jane Austen novel, strolling

across the closely cropped lawn, drinking iced tea on the deck. Her idea of beauty was a smooth swath of green, a perennial border against a stone wall, a clump of orange marigolds among purple petunias.

If we saw a bee, we'd step away in fear. We felt no curiosity, no care. Mostly we didn't notice insects at all. We saw only abundance. We thought we owned it.

"Look at my delphinium," she'd say. "The blue looks French to me, like the windows of Notre Dame. See how straight it grows. See my new varieties of lilies: Lusty Leland, Apricot Fudge."

The phlox that blooms in my garden now is from my mother's. After she died, I dug up a rooted clump from her back plot. The soil was soft from her years of working it, and I was able to lift the plant out with my bare hands: a fleshy ball of roots and dirt. I brought it home and watered it. It's huge now, from 20 years of tending, and its perfume is my mother's.

When I step outside now to look, my phlox is empty. No bees. My garden smells of my heritage. The bees don't sense it; it's invisible to them. I decide to fix that.

Hope is turning my yard into a pollinator garden. I push my shovel into the dirt and uproot my privet hedge, rip out my lawn with a pitchfork. To lure sweat bees, I plant meadowsweet. To coax long-tongued bumblebees, I plant lupines and bee balm. I fill my yard with milkweed vetch, rough-stemmed goldenrod, and hairy beardtongue. I learn bee habits: the bees that sleep together on dried stalks; those that build colonies underground; the solitary bees; and the ones that like a crowd. I nourish the ones that linger until the first frost, and I leave some leaves to shelter those that rise from the earth in early spring. In the evenings, I look for bees sleeping in flower blossoms.

Hope is imagining myself a bumblebee. I enter each blossom with my furry skin. Pollen sticks to me. I dip from bloom to bloom until I'm laden. I build a nest under a dark log behind the shed. There I feed my larvae—or are they my sisters'? We are one family, and origins

no longer matter. With the sun as my compass, I travel garden, woodland, world. I rise, gather, feed these young until cold stiffens my wings.

If my mother were alive, I'd show her my idea of hope: a world shimmering with colors, scents, and insects.

Trash talks

SHORT FICTION

Viola Narang

My Frankensteins are oblivious to my torments. After everything we've had together, from lick to touch, I feel used, dumped. But I can't talk shit about my creators. So I'm just swelling and decaying, an ugly *cogito ergo sum*.

Gross.

The newest parts of me are gross, unworthy of your care. Others, the ancient, are collectibles for world museums and billionaires' homes. You keep digging dirt for scraps and dregs from the olden times of my beginning. You call it archeology, favoring my earliest life forms: bones, pottery, leftovers from an ancient lunch before Vesuvius struck, some famous artist's underpants. Fine by me, but why such discrimination? What about multivitamins, diapers, syringes, batteries, birthday balloons, plastic wraps from single English cucumbers or the cellulose collective of *Thank You* bags?

No?

Strange. I think this recent waste is a chance for you to see the good in me. It makes my hair shine in the sun, my curvy hips sway in the ocean, my feet adorn pavements in all cities and some pristine parts of Nature after the 4th of July.

If you looked at me longer, held me longer, thought of me longer, you'd be proud of your creation. I've grown up grand.

But you forget about me.

Monsters…

You treat me as if I'm nothing but your trash.

Ten Years after Typhoon Haiyan, I Forgot to Tweet about the Disaster[1]

ESSAY

Andrew Zubiri

These days, I work from home in Boston three days a week, halfway around the globe from the Philippines, sitting in my pajamas and troubleshooting online courses. Back in 2014, I was dedicated to an international development career, and took pride in wearing an official vest when I worked "in the field" for almost a year after Super Typhoon Haiyan had cut through the country's midsection. I occasionally wonder how Leyte province has recovered since I lived in Tacloban City while aiding in disaster recovery.

The first time I landed at the Tacloban airport was for a short project site visit, not knowing I'd be stationed in the city months later. The typhoon had struck in November, when farmers were ready to harvest rice, or had just planted it. Winds and rain walloped crops and downed trees, and most everything, along its path. For hours, the sea claimed dry land and everything and everyone in many coastal towns.

Passing through the terminal was a breeze — the wall facing the runway that ran along the bay gaped open, demolished by the sheer force of the storm surge, the baggage carousel's slats had been destroyed like a crumpled tin can. Porters manually wheeled in our luggage containing items not yet available in the city. I remember walking through the construction zone in the drab and bare terminal. But in photos I now find online, I don't recognize the airport's inviting interior, boasting shiny tiled floors and expanded to hold the growing passenger traffic.

My colleagues and I were driven around in a Toyota Hilux — aid agencies' pickup truck of choice — to visit far-flung communities.

1 A version of this essay first appeared in the March 2024 "Ecology" issue of *Panorama: The Journal of Travel, Place, and Nature*.

Depending on the day, the bed of the truck contained portable banners, seeds, hoes, and other farming and fishing implements. From inside its air-conditioned shell of comfort, we passed a forlorn tent city, mounds of debris, and ruins of houses and lives. Today, it appears all roads are completely passable. One of our former office assistants, a Tacloban native, now works as a car dealer. She posts on Facebook photos of the latest models of sedan, SUV, or a Hilux.

The ornate wooden balustrades of the Santo Niño Shrine along Real St., built by Imelda Marcos as one of her beautification projects in the '70s and later repossessed by the government, were damaged or completely ripped off. From travel websites, I learn that the balustrades have now been replaced. The landscaped grounds and the fresh coat of white paint on the storm-scuffed statue of the young Jesus proclaim the shrine once again open to the public. At the downtown end of the street, the belfry of Santo Niño Parish Church has also shed its scaffolding.

The border between water and earth shifted as the typhoon's sustained winds drove the sea inland. Up to seventeen feet of seawater raced within seconds into coastal barangays, strong enough to beach ships on the shore. Nowadays, some tourists visit a memorial park and pose like Jack and Rose atop the sawed-off blue hull of M/V *Eva Jocelyn*. A new seawall extending over ten miles fortifies the coast, as if awaiting a true test of its strength. Of the twenty annual tropical cyclones that enter Philippine territory, the unspoken question seems to be, which among them could be the next 'big one'?

Behind the apartment I shared with two colleagues was a school. On weekends over breakfast, we'd grumble about the speakers that blared a teacher's instructions or dance music as students rehearsed for some program. I realize now that those mornings must have lent them a sense of normalcy, one day farther away from the rupture of death and disaster or the weight of survivor's guilt. Those students must have finished college by now, and may even be raising children of their own, telling them stories of the great flood, and of grandparents, uncles, aunts, and cousins they will never meet.

I think about the lady whom we started calling "Mommsy," the doting owner of a small cafeteria down the street, who would cook our breakfast staples of eggs and fried rice with sausage or hotdogs. I did not bid her a proper goodbye, and I wish I could ask how she's doing now. I imagine she has saved enough to send her children to college. I'd like to believe she has pivoted from her humble walk-in canteen with green plastic chairs and red tables to another thriving small business. I picture her behind the counter inside the new glass-fronted store I spy on Google Street View. It is blocked by a car, so I zoom in, hoping to see her still hard at work to provide for her family.

On some Sunday mornings, we'd manage to run on the track in the Leyte Sports Complex. People jogged past the swimming pool, dark green with algae, and the mangled mass of iron sheets and trusses of the bleachers' roof. Today the restored roof brings shade to spectators once again. The track is now finished with a new layer of rubber, ready to welcome local athletes, if not host another national sporting event as it did in 2009.

After aid agency representatives posed with members of the Mamanwa tribe, has anyone else visited them since the last flash of the cameras from the photo ops? Police no longer have to go on high alert for site visits by donors from headquarters, the President, the wife or son of an ousted president, presidential hopefuls, or the Pope — when, or if, they were to visit. After former president Noynoy Aquino passed away, perhaps he too held briefings to apologize and explain his disaster preparedness and emergency response strategy to victims in the afterlife.

Media coverage has dwindled. A decade after Anderson Cooper parachuted into Tacloban to spend five days covering the disaster, does he still "honor those who have passed, learning their names, learning who they are and the life they lived"?

Coconut trees were felled by the typhoon, or treetops completely sheared off. The leaves of those that remained standing were permanently damaged, as if combed with a side sweep that captured the direction the wind fled. In farms both far-flung and near the city, farmers must have reaped multiple harvests of squash, okra,

eggplant, string beans — from seeds which our organization doled out, in hopes of staving off coconut farmers' hunger in the months, if not years, to come. By now, the coconut saplings distributed by the government should have started bearing fruit, but not yet reached peak production.

Are the wood and fiberglass hybrid boats our Swedish consultant built still seaworthy? Back then, perhaps fisher-folk were more concerned about the reduced demand for contaminated fish. I hope they have resumed catching mackerel, grouper, and scad, which means locals now enjoy the bounty with only fleeting thoughts of the unrecovered bodies lost at sea.

We feared fertilizers would cake in the warehouse, or farmers would miss the short window of the planting season if not delivered on time. These days, when a former colleague and I message each other, we brush off the enormity of our job counting sacks; tracking their destinations; and arranging their distribution with local leaders. The stress of work caused loss of sleep; facial tics; and troublesome back pain. For years I tried hard to block the memories, afraid the symptoms would return. Now, at the mention of "fertilizer distribution" or "cluster coordination," I'm able to react with a quick laughing-crying emoji.

Locals have removed the "WE NEED FOOD" messages painted on cardboard or the pavement, and taken down signs painted with "Tindog Tacloban" — the city's rallying cry of resilience. The United Nations's "Build Back Better" banners must also have been rolled up. The last of the international aid organizations packed up and locked the doors of their temporary local offices. A few years later, evaluators will have rewritten project objectives, goals, and outcomes into successful achievements: seeds and fertilizers are "delivered," food consumption level is "greater," livelihoods are "restored," early warning systems are "enhanced," and disaster risks are "reduced." Expat staff and consultants have probably moved on to the next disaster — the massive 2015 earthquake that leveled Nepal, or the 2016 Hurricane Matthew in Haiti. Meanwhile, some local staff have become expats themselves.

The U.S. Marines' MV-22 Osprey that dropped off a Japanese medical team; first aid; and food supplies has long since lifted off. Drones that buzzed above, hovering to shoot sweeping aerial photos and video footage of the mass grave in Basper Village, have landed. The rows of white wooden crosses, "RIP" written vertically and the name of the dead horizontally, have been replaced by ones made of concrete. The mound of once freshly turned brown topsoil is now covered in grass — lush, level, and green.

Every 8th of November, I've paid tribute to the lives lost with a self-satisfied, yet, trifling tweet: "Commemorating Typhoon Haiyan #neverforget." But on the tenth anniversary I forgot to post. For better or worse, maybe a decade is finally long enough to forget.

Lift

POEM

Ashley D'Souza

After "Trout Lilies" by Ginny MacDonald

I want to tell him that the small, round, fluffy birds that chip-chip-chip at him from crowded bushes and sidewalks are called House Sparrows; that they're invasive, the earth didn't choose to loose them here, but nevertheless they're here and they've built a home. I want to tell him that the Northern Mockingbirds from my own home back in Texas also yodel from treetops and lampposts this far north, that he probably heard them when we lived in Austin and can search for them, and me, at tennis courts here during the summers. I want to tell him about Catbirds, silly little gray birds that shuffle and scurry and swoop, that will stare you right in the eye and then whine, their statement an uncanny meow.

I want to tell him that I used to look forward to waking up in the morning to him, and now I look forward to waking up to tiny Kinglets with fierce orange foreheads and toothpick legs, whistling airily while flitting from branch to branch, unable to sit still in their lightness. I look forward to visiting my local Great Blue Heron, poised like a statue in the quiet pondside at sunrise, immovable until he alone decides he's ready to uproot. I look forward to catching a cheeky glimpse of the Yellow-Rumped Warbler, anonymous until he reveals a telltale flash of color while lifting off the ground.

I want to tell him that I adored his laugh, but now my heart races when I hear the throaty chuckle of a Nuthatch, rising unmistakable through the teeming chatter of the forest; that his words used to move me, but now when I hear the weep of a Mourning Dove, I can no longer breathe. I want to tell him that his music once charmed me, but now the Carolina Wren serenades me with his ringing,

persistent refrain, the artist always hidden just out of sight but never out of mind — and I am an enchanted audience of one. I want to tell him that it isn't the same. It is more than I could have ever imagined.

I want to tell him that after I broke both of our hearts, mine was left with a gaping hole, and Chickadees flew in and built a nest. I want to tell him that sometimes I feel lost without him, but when I track the hiccup of a Red-Bellied Woodpecker echoing through the woods, my soul is oriented. I want to tell him that while I cannot forget him, I don't think of him when the Kingfisher hovers in the air, suspended in time and space; I don't think of him when she plummets toward the earth. I want to tell him that I chose this and that I'm okay and that it's okay, it's okay, it's okay.

Ode to a Mushroom

POEM

Ashley D'Souza

Oh, to be a fungus
With a shiny red hat
Dew-dropped darling among us
Underground, spreads untracked

Damselfly

POEM

Ashley D'Souza

A damselfly with wings so fine
And body silver-blue
So gently stole this heart of mine
When through my life she flew.

The Re-evolution of Coral

SHORT FICTION

Owen Stokes-Cawley

The swells were small, but the wind still misted Ward as he floated on the surface. He spent little effort kicking his fins below. With a final deep breath, he dove into the deep blue. The pressure mounted inside his mask as the world before him came into view. He paused, taking in the colors and movement of the reef, momentarily distracted from his mission. At twelve meters, the color appeared muted, but back at the surface it would pop. He spotted the brain coral, pale ridges creating a maze on the blue mound beneath, *diploria labyrinthiformis*. This specimen was perfect. He hovered above, staring at the engraved pattern. An urge to breathe snapped him out of the lull.

Ward's next action was regrettable, but he had weighed the costs and benefits extensively. The chisel came out of the sheath at this hip easily, he pressed it lightly against the coral and made small indents where he wanted to break off a piece. He pressed against the same lines over and over until a piece the size of his hand broke away. He put it into the mesh bag clipped to his opposite hip. Another compulsion to breath, soon to be convulsions. He looked around to see if there was anything else he could collect while he was under. He spotted a large urchin a few meters above him on the reef. The long white and black spines of *Diadema antillarum* moved over a coral skeleton. Finally, one that wasn't buried in a crevice. He used his chisel to wedge the urchin off the substrate, avoided the long spines, and guided it into the bag with the coral. His chest began heaving as he kicked hard up to the surface.

The tank stood at the top of a small hill. He walked up and released the animals into a holding tank nearby so they could acclimate before moving them to the larger tank.

As the sun set that evening, the clouds were bathed in orange and pink. The wind blew a calming breeze through the porch as Ward swung in his rocking chair, a cold beer in his hand. In his lap sat his collection book. He crossed out the coral species he had found and added a check mark next to the urchin. He would need more than one of each invertebrate. His shoulders slumped as he looked at the massive list. He had collected a few corals, sure, but he would need invertebrates and even fish to ensure his tank functioned as a complete ecosystem. He had time but not much – the heat of the summer could decimate the reefs this year.

As the sun rose the next morning, Ward walked up the small hill to his tank. The size of the tank still jarred him, taking up the space of nearly half a football field. He checked the measurement levels on the tank and adjusted a few valves. He released the coral and urchin from quarantine. The ladder creaked as he climbed each rung to the top of the tank, trying not to look down; Ward preferred depths over heights. The small platform he had constructed bent under his weight as he sat before letting himself fall into the water. The water was cooler than the ocean. It always would be. He pulled his mask up from his neck and dove down ten meters to the bottom of the tank. He let the urchin go, not worried about where it might end up, but he was more careful with the coral. He had constructed a metal structure in the shape of a mound to simulate the natural reef. He tied the coral to an empty section of metal pipe. Eventually it would grow around the metal on its own, but for now, it relied on the ties.

By midday, the air was sweltering – a new reality. Ward made the short walk home to review the collection list again. The list was burned into his memory, so it was more a habit than anything else. He noted today's coral target, another one that lived at the bottom of the reef.

Warm water had spread into the area overnight. The current felt stronger as Ward dove. He spotted the coral he wanted and mentally prepared for the task as he sank deeper. He used his chisel and extracted a coral piece. As he ascended, something caught his eye, a pure white branching coral on the top of the reef. Ward stopped kicking. His expanding lungs still carried him toward the surface, but

his mind was transfixed on the coral. Its jagged edges stood in stark contrast to the plush textures of the living corals around it. It was beautiful. He closed his eyes as he made his way to the surface. This was the earliest in the summer he had ever seen a bleached coral. It meant he was running out of time.

A bike sat discarded on the ground in front of the tank. Around the side, Ward found a child. He guessed they were around ten years old.

Ward moved slowly as to not frighten the child. “Hi there. Can I help you?” He asked.

The young girl kept her gaze on the tank but responded. “Is this yours?”

“It is.”

The following day, Ward went about his business. When he came back to add the new specimens to the holding tank in the afternoon, the little girl stood with two friends, all staring through the tank’s glass. He said hi but didn’t bother them. As he was leaving, he heard the little girl say, “I told you it was real.”

Each day a few more kids came to visit.

Finally, there was a knock on Ward’s front door. He looked through the window curtain and saw a tall man standing with his back to the door, looking out over the water. Ward had been afraid of this. He didn’t want a parent to shut it down before it truly existed.

Ward’s shoulders tensed as he opened the door. “Hi there,” the man greeted him. “My daughter said you’re the one maintaining the tank up on the hill?”

“I am.” Ward said, cautiously.

“I was just up there; it doesn’t seem very safe for the kids.”

Ward’s face hung as he replied, “To be honest, it kind of got away from me. I didn’t mean for anyone to visit yet.”

“I think I can help.”

A smile spread across Ward's face.
Word of the tank spread.

A local scientist brought her lab to help finish collecting specimens before the summer heat wiped out even more coral. They even helped collect the fish species and double check the temperature, light, and nutrient levels in the tank.

Though people were constantly visiting, they hosted a formal opening once collection was complete. While the party continued, Ward snuck back to his house. With a beer in his hand and the collection book in his lap, he crossed out the last species in his collection book.

In the years to come, the engineers set up a more secure and automated system. The water pumps took in ocean water, cooled it, killed any pathogens in the water with ultraviolet light, and fed it into the tank.

The energy system they set up was brilliant. Wind turbines with geothermal and solar backups would be able to sustain the system for a hundred years with no human interference.

Each year the ocean rose. Each year more coral died.

One day the last coral died. Algae flourished for a short time before it too died out. The fish and invertebrates weren't far behind.

The tank became even more popular after all ocean life collapsed. People from all over the world visited each year, unable to believe their eyes. The last vestige of ocean life.

Eventually, there was no one left to visit.

The sea level continued to rise, and the water continued to warm. Though both slowed down without humans.

One day the ocean level crept above the tank, mixing ocean water and tank water. For the first time in thousands of years, fish swam in the ocean. When the coral bred that year, some of the spawn settled on the rocky shoreline. Soon, reefs appeared along the newly formed coast. It started small but spread.

All of this would eventually happen. But that is in the future. Today, Ward will go diving off a rocky shoreline. Among the color and movement of the reef, Ward will feel compelled to preserve a tiny piece to show others what once existed. Later tonight, he will buy a notebook and start writing down every coral species he knows.

The Voice Ignored

SHORT FICTION

C. Firestone

“Tend to the spaces in between,” the Earth whispers.
Busy minds on Oakland’s street distract.
Lake Merritt is murky. No questions are asked.
It’s ok, the black crowned night herons are returning.
I’m startled by the angry babble of a soul lost in her mind’s matrix.
I find myself thinking, “ That could be me.”
Stepping over broken glass, stepping on broken dreams.
I turn and take the other path, overgrown, weedy.
The wind kicks up and swirls around, whispering…
Church bells ring inside me as I lean again a coast live oak.
My refuge. My sanity.

Enough

POEM

Maria Wasson

Dear human at the edge of time

Enough

Dear you
Dear me
Dear air
Dear tree
I am water
I am carbon
I am earth
And earth is us
We are one, yet we are not aware

Enough

That each choice we make
I take a life
Or add to one

The speed of we humans
Careens
Consumes
Collides
Inside us
Until we cannot contain
Sustain the greed
Our need of more

Enough!

Money, the real god of us
Not the truth

But a delusion
A voracious
Rapacious
Mythical reality
Separating
Dissecting self from earth
On the cusp of splitting
Pushing us off the edge into the abyss

Time continues as it does
We will succumb to the inevitable flow
Of nature
For nature is

Enough

Ode to Tumbleweed, Russian Thistle, (Salsola Kali)

POEM

Maria Wasson

Oh tumbleweed, you begin so tender
Soft, pale green, a carpet of closeness
Hovering, covering the earth
Dirt charms your roots, your hairy leaves
Gently rising, spreading
Spring splashes in
Rain, sun, you grow and swell
Into, well, more than just a soft carpet
Your main stem thickens, quickens
Skyward fast, reaching fingers toward the sun
Until summer comes and you grow and grow
You reach my waist, and if the rain wets you
On you climb, up as well as out, bulging broad
Autumn descends with winds and dust and dry
You come untethered
Roots too shallow to hold you down
And off you go turning cartwheels across the ground
Collecting along fence lines in corners of the barnyard
Becoming your own organic barrier
You may grow as big as a pig, a horse or even a house
Hemming us in
Brown, scratchy, forbidding
Oh tumbleweed

Starry Night

SHORT FICTION

Maria Lytrivi

Mother had abandoned me for about a week when they took me, against my will, to the "old village" at the top of the mountain. She had gone on vacation at some warm island with her friends and had left me in the care of the "Big Boss" and the spoiled brat, her father and brother respectively, in a tiny one-room house where the cold came in from everywhere. No matter how high I climbed at the kitchen cupboards I couldn't escape it, I couldn't fall asleep because I couldn't stop shaking. The fact that the brat wasn't sleeping either wasn't helping. He kept moving around on the wooden floor making it creek.

I gave him a judgmental look but he didn't notice. He was staring fervently at the ceiling. What was wrong with humans? Whether it was screens, ceilings or something else they constantly had to stare at something as if anything extraordinary was going to happen at any time…

He moved again and this time the floor creaked louder than before. I meowed at him in an irritated manner and he jumped up but not from fear (unfortunately). He looked at me with determination and then he tip-toed to the door in order to keep quiet (now he cared!), put his shoes on and left from the unlocked door. There was no need to lock it. In this freezing place that they had brought me the only habitats were us and the cicadas…

The blood rushed through my veins. Where was he going? I jumped down from the cupboard and landed perfectly (as always) and managed to get outside before the door closed behind me.

I had seen my chance and I would take it. I would retrieve the brat and with my action show my loyalty to the "Big Boss" that had been angry at me since we arrived, even if it was unfair. He thought of me as a barbarian, capable of capturing *and eating* (I was still disgusted) the mice that had made our village house their home in the many

decades that it had been closed. The only living creature I would accept to terminate were these ugly cicadas that here, away from any sign of human civilasation were more annoying than ever. They had made my ears buzz all morning with their constant laments as if lost loves[1] were an excuse to annoy everyone else…

The brat moved ahead of me on the dirt-road with big but steady steps. As I moved behind him I was careful not to bump into rocks or rubbles from the construction site near our house (someone who had *obviously* never witnessed the inhuman living conditions I had to survive was building a convention centre in the hopes that they would give life back to the deserted village) and roll down the mountain where hundreds of trees were there to stab you, thorns to pierce your body and tall grass to get lost in and never be found. If of course you didn't bump into an old, tumbledown house first.

I had to admit it, as much as I hated this cold and wild place that had no light (except for that of the moon) and raging cicadas, all these green healthy trees around brought me relief. The past few years wherever we went with mother and the rest of the family I saw withering trees, fallen on their sides, ready to be carried like dust by the wind. There had been many big wildfires. I watched them with mother every summer on the TV and shook. I was afraid that the trees would go extinct and I would no longer have something fun to climb on.

The ground beneath my paws became concreate. My ears rose from the sound of running water. I stood still and looked around. From the small white church I realised that we were at the entrance of the village. There the crying fountain stood (the amount of water coming out of it was too small to say that it ran properly) and on its opposite side, next to the church, the cemetery. Above the fountain was the square with the beautiful plane trees I saw as we drove to our house this morning.

I followed the brat to the square and hid behind the plane tree as he sat at ease on the stone-built bench. His feet were hanging in

1 Reference to the myth of the cicada according to which the bug sings about their lost love before they die.

the void that separated him from the street and his body faced the church and the cemetery.

Now he gazed upon the sky only this time I didn't bother to try and identify what had fascinated him. My attention was on the plane tree.

How tall was it! With endless branches and secrets I wanted to discover… But even if I couldn't explore them all I could get lost in its hollow that had eaten its insides and scratch my nails in the pieces of its trunk that would pop up from everywhere.

I licked my lips happily. I was so beautifully lost in my thoughts until I heard it, the very sound that made me dread hot summer days and enjoy cold summer nights because the cold was the only thing that made them shut-up. I heard a cicada singing.

I looked at the brat. It stood still and it didn't seem like it would leave soon. I jumped on the tree and began climbing.

The cicada sat at the very first branch. The moonlight fell on it making it easy to locate. I attacked. It tried to fly on the branch above but I jumped with all my might, my eyes concentrated on my target, and managed to catch it between my paws before it landed.

I laughed feeling satisfied but my smile was quickly erased. I didn't land on any branch. I was falling, I had to let that ugly cicada go but I couldn't… I couldn't just let it escape! No. It would die with me in my first imperfect landing. I held it tighter in my paws, closed my eyes and prepared for the collision while that stupid bug pleaded for mercy.

I felt a light bump but no pain. I kept my eyes closed. The cicada was still fighting for its freedom.

"Aman[2] with the cicadas!"

Now I opened my eyes and faced no other than the brat looking at me surprised. "You won't leave anyone alive if you continue like this!"

2 Expression that is used in Greek to show annoyance and irritation with someone/something.

With one of his hands he freed the cicada from my grasp despite my resistance.

'Don't worry you'll find another to eat!" he said and hugged me. I thought we would return home but we sat on the bench.

"Since you wanted to follow me you'll now have to endure my presence. The sky is too beautiful to lock ourselves in the house." He looked up again.

What was it with the sky anyway?

I looked up too for the first time and every thought disappeared from my mind. Hundreds, thousands, balls of light were dancing playfully in the sky's dark veil between faint circles of blue, purple and somewhere far away red that were scattered among them. They, the stars, were closer than ever, closer than the balcony in Athens or the lake we gathered with the rest of the cats at night.

"You like it, hah?" the brat (that didn't seem like much of a brat at that moment) said playfully. His hand gently patted my back, and I found myself relaxing in his hug for the first time in my life.

I wondered, if I climbed on the plane tree's highest branch, would I be able to reach the shiny dancers? Would I be able to extend my paw and see them dancing on it, dragging me in the dance as well? Would I be able to stay among them, among the lights, away from the annoying cicadas?

And suddenly the sound of the crying fountain became the world's sweetest lullaby and the cicadas' pitiful song became bearable and the cold air a calming breeze and the little boss's hug was the warmest in the world and his touch the most gentle I had ever felt.

I felt my eyes closing from the tiredness when suddenly my heart jumped from agony. Nowhere else had I seen the shiny dancers so vividly, only at this place that humans had abandoned. Maybe this was why it was so beautiful... I remembered the construction site and the dream of resurrecting this village, of bringing the humans back and with them the electric light that would anger the shiny dancers and cause them to flee as it must have done in the rest of

the world, and loud noise that would drown the sweet sound of the water…

I was once again helpless, facing the fear of loss like I did whenever I saw the wildfires on the TV. Once again I could do nothing.

Ecocide in Gaza, February 7, 2024

ESSAY

Sally Burns

Gaza is a sunny place, a beach lovers delight. A stopover for migrating birds, it has boasted a very high diversity of plant species. It is dry, but not as arid as inland. In another world, if war and climate change didn't exist, I'd love to teleport. I've never been to the Middle East, nor Gaza Strip, but my spirit sees a land and peoples in agony.

On October 7th 2023 news starts to filter out of Israel that Hamas had somehow surpassed Israel's defenses, while invading and killing over 1200 civilians, and taken hundreds as hostages.

Gaza is a tiny place, the size of Philadelphia, but denser than that city, with eight refugee camps. War came to the land, not the small everyday incursion, not the rockets landing occasionally. In October, forty-two bombs an hour were falling on Gaza. The uneasy peace was fractured. The land would soon become another Middle Eastern disaster area.

This war will not just kill people, but accelerate climate change: if not by dropping tens of thousands of bombs, shooting thousands of missiles, then by the ramped-up manufacturing that creates the bombs, guns and missiles, and later rebuilds the war-torn land. But no environmental impact statements were required before this war exploded.

Environmental problems in Gaza before October 7th were dire, even for the global south. Al Jazeera (1) reported that sewage treatment issues led to many water-borne diseases, the cities in this tiny land were overpopulated, and good agricultural land is slowly becoming desert (5). That was before Hamas attacked Israel, before Israel launched a full-scale assault on Gaza.

Israel has radically transformed not only the human landscape, but the ecology of Gaza. The Mediterranean Sea, the air, and the soil

have been damaged. The olive groves and gardens Palestinians, Jews, and Christians have tended for millennia are now so much polluted compost.

When a bomb is dropped on an apartment building what really happens? The fighter plane burns jet fuel, the bomb detonates with huge amounts of carbon released. The people in it, if they are lucky, run out before the walls and ceilings collapse, but maybe not. People are trapped under bombed buildings, 10,000 are missing. The walls and ceilings become dust and debris, erupting into the sky. Solar panels on the roof are destroyed, if not directly by the bomb, then by all the debris flying high into the air. Solar panels were powering Gaza; letting the large extended families own their own clean energy.

By early February 2024, at least one half of the buildings in Gaza had been damaged or destroyed beyond use. (2) Asbestos and other toxins are in the air, the soil and the water. Most of the population is moving from area to area trying to dodge bombs and bury the dead, in a horrid game of whack a mole. Many are living in huge make shift refugee camps.

People wait hours to fill water jugs, and the water is frequently salty, leading to dehydration. Israeli phosphorus bombs have left a toxic, and acidic residue (3). What sewage treatment facilities existed previously were destroyed in this war, many children have diarrhea, raw sewage is everywhere. Cholera and pandemics are arising, starvation is at the door. Winter rains bring the contaminated water to the Mediterranean Sea, the runoff will not stay in Palestine. The waters of Israel and Egypt surround this dangerous land. Ecocide knows no borders.

Palestinians have tended orchards passed down through families for generations. Harvest time usually started with the rains of the fall, but this year, all that fell were bombs. Sales of olive oil, a significant part of Gaza's economy, did not happen this year. Like an Oak, olive trees can live for thousands of years (4); they produce more when they are 100 than 60. Israel bulldozed Gaza's olive groves to make way for their army, they are now a tangle, drying in the sun.

Israel has bulldozed cemeteries, and turned others into make shift bases. In Gaza, where there were orchards, greenhouses, hotels and apartments, now there is sand and debris. The olive trees are piled up, the hotels on the beach bombed, and the apartments are ruble. I wonder does the world want to know? In Gaza, there is no forensic team to wear white suits and hard hats, to assess the damage, no project plan to safely clean up and rebuild.

Who could live in this space now? The numbers tell a story. By early February 2024, at least 27,000 Palestinians have been killed, 65,000 injured (2). Gaza might not be the only speck of land humans have destroyed, but this de-volution is being televised for all the world to see.

Daily, we hear of the expansion of this war – the West Bank, Yemen, and Iran, attacks in Syria, Iraq, Pakistan. Leaders of the war are targeted and killed along with lots of civilians. The US and UK bombing targets in Yemen. Overnight, the US has bombed Iran's "proxies" through-out the region.

I am heartened to see groups of Jews and Palestinian joining together, working for a just solution. Movements are building, here in the US and worldwide – calling for an end to this war. But the war continues, new regions and countries are touched weekly, more precious earth and people are destroyed. From afar, we are all witnessing this ecocide and genocide. Living on the edge of war, here in America, the war is televised. No US war has been declared, no act of congress has passed, no bombs have landed here. Our insularity has threats, but we are still in "Peacetime." We are struggling against what could be the beginning of WWIII, for our planet and its peoples, we can't give up.

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Verses by the Swamp

POEM

Reese Rocan

Poems are vital as a savory, murky swamp,
Calm stream sifting out waste and stray outliers,
Purification ebbs and flows with the tides,
Cascade rain: flood the page–each drop, a stanza.
Fluid images ripple toward the sun's embrace.

Pivotal steps for quality vegetation,
Fruitful foundation for life to take form,
Where salt-marsh sparrows sing for amour,
Nesting above-seeded pools: creation looms.
Spotted fish hugs nursing shores.

Estuary-filled natal-protected rooms and roots,
Fed by honey-scented sea thrift nectar blooms.
Hatchlings evolve til it's time to take flight,
Watching the tide flow in with might,
Sturdy standing alone like a thesis.

Climate shift, sea-flooding, erosion envelops,
Defenseless is the treeless swamp.
Seems like a science fiction plot twist;
Sparrows' extinction by 2050? Do not resist.
Fertile crescent swamps are our fetus.

Refine and shape til they're prestigious.
We must reimagine structure. When pristine,
Crafting of the swamp preserves life,
In an intertwine poetic scheme,
Healing and safeguarding us–like a verse.

Buoyant

ESSAY

Livia Meneghin

I meandered across the gold beach, leaving my belongings in a pile and feeling safe in a foreign land. Each wave pulled sand out to the ocean, revealing more of the black sediment underneath. I, too, was pulled toward the horizon line and away from County Clare's shore. With each incoming wave, whitecaps boldly striped the horizon against an increasingly cloudy sky.

My feet fully submerged, then my ankles. Searching for patterns of dark sand, I slowed my walk. Suddenly, a black English setter with a white face greeted me, splashing in the salty wake. I looked up to find her owner waving hello, patiently matching pace with a small white poodle mix who stepped methodically in the damp sand. He was an old pooch too, though less inclined to frolic or go too deep. I smiled, waved back, and let the little family be.

I was keen to find sea bindweed amongst the couch grasses and sea holly pointing northeast in the growing wind. Their small purple flowers bare white lines acting as runways towards its center for pollinators. The landscape in Ireland's Wild West is full of miniature pops of color, petals that peek out from meadows for only the most observant of passersby to witness. My eye caught and followed a wheatear (a summer visitor to Fanore Beach, like me) mid-flight to the tops of the sand dunes. An area of exposed limestone, blackened from the water due to internal reflection, created a barrier in front of the dunes, however.

I've always had an instinct for walking on rocks. Or at least that's what I tell myself, having been born in Genova, where the beaches are rocky. I've nimbly traversed the massive boulders of Porticciolo's seawall to find a good spot for sunbathing. At Spiaggia di Caprafico, where everyone wore a speedo no matter age, gender, or size, I've quick-stepped across rounded pebbles to get to the sea.

I also recall walking Manchester-by-the-Sea's famous Singing Beach for the first time. It was the offseason, so dogs dotted the squeaky sand that stretched between classic New England rockscapes. I decided to climb one despite wearing old sneakers with little traction. It was a brisk November day, and the wind picked up as I scaled higher. The salt air and the movement for my limbs was intoxicating, delightful even. Of course, though, I slipped and fell. Thinking it was only a bruise, I shrugged it off and carefully made my way down. I then felt a warmth on my leg and touched my leggings. They were wet. When I lifted my fingertips off of the cloth, red lingered on my skin. *Oh, so I guess I'm bleeding*, I said.

Only a tiny scar from that day showed on my knee as I crossed the row of limestone in Ireland. Barefoot, I confidently maneuvered across to the base of the dunes. It was a welcome challenge, a maze with more patterns of black sand revealed beneath gold and rock.

On the other side now, I muscled the relatively steep ascent to witness the Caher River entering the Atlantic. These dunes formed around 5,000 years ago as windblown sand got trapped in the bay and were colonized by vegetation. Such plants, including the spiky tufts of marram grass, are threatened today by winter storms, growing rabbit burrows, and naturally, humans. I took great responsibility in entering such a delicate ecosystem, aiming to disturb as little as possible.

As soon as I caught my breath, raindrops spotted my forehead and shoulders. Heavy and dark clouds dominated the sky, making the water below look a bright blue. There wasn't much time to think, as my string bag—carrying my wallet, water bottle, bus pass, book, and headphones—were exposed to the incoming rainfall. My umbrella too laid inside, useless.

While it took probably an hour to stroll about 600 meters over and up the dunes, I needed to get back quickly now that the rain was turning torrential. Heading down the dunes and across the limestone, I admittedly took the same care with each step as I did walking up and over. Once I returned to flat sand though, and my clothes were already soaked, my body exploded into a sprint—which, for me, only

lasted in bursts. Small questions of regret yelled from an intangible source: *How could you have been so careless? Why didn't you check the weather more carefully? What if your bus pass is ruined and you can't get back?* Surprisingly, I steadily outran them.

Once I made it to my bag, most of the other human tourists and locals were already scrambling up the steps to the car park, or in their vehicles waiting out the storm. In Ireland, the bad weather never lasts long. I first grabbed my umbrella and opened it, placing its handle into the sand and stuffing my bag underneath. I was wet by this point; the paper items I brought along for my afternoon excursion needed sanctuary more.

So, I stood.

On Fanore Beach, in the rain. And I, a beach lover who forgot Ireland was an island until arriving in little seaside Ballyvaughn three weeks prior–who immediately asked my taxi driver, *where's the nearest beach?*–found myself laughing at it all.

But this is not the lesson.

By that point, I was practically the only one left on the sand. Everyone else had taken cover. I remembered four years prior on the island of Thassos. Of course, even in Greece in June, it rains. One stormy day, my eyes were glazed over at the Aegean, more of a gray-teal than its usual shimmering, glittering seaglass. I was so fortunate to be in Aliki, to have marble, pine, and sea as my playground—but it was all inaccessible with rain. I never considered myself a risk taker but decided to go anyway. The rain wasn't heavy, after all. And what a gift that day was.

At least back then I was able to put on my swimsuit, leave my valuables behind. But there in Ireland, the Earth similarly invited me directly in, ushering me into spontaneity and pleasure. I hesitated, noticing I was without a swimsuit or a spare set of clothes. I'd have to strip down to my bra and underwear while still carrying the self-consciousness that comes inherently with any woman who's grown up in America, especially a 'plus-sized' person.

After a deep briny breath, I simply shed it all.

I tucked my tank top and shorts under the umbrella and stepped into the ocean. In the Atlantic, I was buoyant. The water and I embraced each other; I outstretched my arms, leaned my head back, and lifted my feet to the surface, offering as much as my skin to the rain. While unexpected, unplanned, and unexplainable, I was exactly where I needed to be.

For S—(a summertime tanka) after *June Jordan*

POEM

Livia Meneghin

Riverbanks and homophobia
You and me talking Boston
patriarchy fear and running water

I say, “It’s all so much.”
You say, “These sweet cygnets. This cygnet.”

Protected

NOVEL EXCERPT

Victor Young

Churchill is on a polar bear migration route. Bears leave their dens in the spring and travel through town on their way to hunt seals. They go back through town in the fall on their way back to their dens. When I was young, my mother's mantra when I left for school was "watch out for the cars." In Churchill it's "watch out for the bears." I was told that it was illegal to lock your doors because if you met a bear what you did was go inside the nearest building, "no matter what."

Although there is no road to Churchill, there are fourteen miles of road around the town and I decide to see them. A few are loops, ending where they started. Most are just tentacles that reach into the wilderness and stop for no more reason than they start. Anik tells me later that most of the roads lead to places where a good camp can be built.

I drive out to the line of trees where the taiga meets the tundra. It is remarkably distinct. The taiga is a band of coniferous trees that ring the planet in the sub-arctic zone. The tundra usually sits above the taiga and is frozen below its surface all the time. In the summer, the top foot of the tundra will thaw but below that it remains permanently frozen. When you build a house on that tundra, you sink pilings deep into the permafrost and put the house on them raised above the land. That way the heat from the house won't melt the soil and sink the house.

When the top thaws, there is no place for the water to go so the tundra becomes a series of puddles and shallow lakes on a kind of bog-like soil. On the solstice there are almost nineteen hours of daylight. Plants go wild and insects breed in the millions. Small insectivores and rodents are more than plentiful. Now, in October, the insects are gone but I see predators everywhere: hawks, snowy owls, a pure white Arctic Fox.

As I'm driving back, I pass the town dump. Near a large mound of trash I see a man standing over four polar bears, lying motionless. I take the dirt road into the dump and drive to where he's standing. "You're just in time," he says. In time for what, I wonder.

"Are they dead?" I ask.

"No, just tranquilized"

He asks me to help him lift the larger bear onto a scale hanging from a tripod. She weighs 303 pounds. He injects her with some vitamins, then asks me to help him put her into his truck.

He explains, "When the bears are tranquilized they're helpless, predators transformed into prey. I'm taking them to a safe place to let them recover."

After laying the mother in the truck I picked up a little white bear. As I hold the little bear in my arms, she looks up at me. Her eyes are curious but also something else. Does she wonder what the two-legged predators will do, whether I will impact her life, her children's lives? I slow my walk, holding a wild predator in my arms, wondering what her future might be, wanting to hold her longer.

Sometimes time freezes into an instant when we transcend the world we know. Thought gives way to stillness. The mind turns inside out, heartbeat becomes irregular.

Meaning becomes new and everything in the moment becomes unknown to the mind but completely available to the soul. Any action you take in that moment is in harmony with the universe: the music of a black hole, the song of a pulsar, the beating of tectonic plates of the earth, the whisper of a bird's wing, roar of a butterfly's, the dark eyes of a small white bear.

My perception has changed. I see the world not as it is storied but as it is. I feel bonded, looking at the other, connecting the tentacles of my vision to hers. It is not casual but intimate, deep and pure, an intimacy beyond the knowledge of intimacy. I open my being to the universe in the eyes of a young bear. I feel her shudder in my arms,

and see the tiny spirit, ancient, meant to be here while I am not. The space between us is shimmering with a light I have never seen.

I lay her in the truck then put my hands to my face and inhale her musky scent. I want to raise my camera but my face is wet and I can't see through the eyepiece.

Now, thirty years later I have come in the spring to see the bears leaving their dens to hunt on the ice for seals. But it is different now. The white bears are dying, the entire species facing extinction. The most invasive species on the planet is changing the temperature of the world and the ice the bears need to hunt on is melting. Unable to hunt, the great bears are starving. Men and bears lived side by side for thousands of years until men began to change the earth. Now only a few bears survive. Spring has been the time the bears leave their dens, move out to the sea ice to hunt seals, an ancient migration pre-dating the history of man. The bears are hungry from a winter of hibernation. More than a few will remain hungry, unable to hunt enough seals before the ice melts. Females that are starving often lose their cubs.

Humans have found a way to use the surviving bears before they disappear. Some hotels bait the bears so that tourists come and take pictures. Food is set out at specific times to draw the hungry bears in. For the convenience of the tourists, viewing is done on a schedule. One hotel had a man pretending to be a ranger that fed the bears by hand. He'd try to make the bears do tricks for food. Then a hungry bear attacked him, breaking three ribs and one arm. The bear was shot.

Polar bear attacks are rare, historically less than one a year but in recent years have increased by a factor of four. Most of the attacks involve bears that are starving because they cannot hunt.

I don't want to photograph bears begging for food so I find a trip into the tundra led by a ranger, looking for bears in the wild. He doesn't bait bears. In fact, he tells me that it is illegal because they may become dependent on human beings for food. "Strange joke," I say. He doesn't laugh, doesn't even crack a smile.

We drive out onto tundra in an antic cat, a covered tractor-like vehicle with treads rather than wheels. We come to a fire tower, unoccupied in October. I climb to the top and scan the tundra. I see a big male bear about a mile away. I climb down and report what I have seen. The ranger suggests we wait and see if the bear will approach. “We don’t track them down,” he says. They’re under enough stress. This bear has apparently learned to associate humans with food. He moves toward us. I’m sitting on the roof of the cat to get some pictures. The bear circles us and decides to come closer. The ranger orders me inside. He reaches down and picks up a 45 pistol, putting it in his lap. The bear is definitely interested in us.

Bears hunt by breaking through ice to haul seals out of the water. The ranger says our windshield looks a lot like ice. Just as he finishes saying that, the bear rears up on his hind legs, placing his paws on the windshield. I hear someone scream. The ranger starts the cat and revs the engine. The sudden, strange sound of the engine frightens the bear and he turns and runs, looking back over his shoulder at us.

As the adrenaline settles, I feel a mix of emotions. I am glad not to be prey today but I worry, wondering if the bear will find food. There is no ice on the bay. The ranger turns to speak to us, but says only, “A male, probably about four hundred to four hundred and fifty pounds.” The passengers are quiet, trying to breathe.

My final day, I am walking along the shore with a ranger, a rifle slung over his shoulder. We stumble onto the bones of a great bear. They are bleached white, no flesh or fur. I reach out and pick one up wanting to feel something from the touch. I think maybe I’ll take one, make it a sacred memory.

The ranger looks at me. “You cannot take a bone. It’s a hundred thousand dollar fine.” Without a hint of irony, he says, “The bears are protected.”

In Awe of the Armadillo

ESSAY

Catherine Gentry

One morning not long ago, an armadillo showed up in my garden. It pricked up its ears but didn't move, staring up at me with dark eyes from beneath a tangle of melon vines. Not wanting to frighten it away, I went back inside and watched through the window as it munched on what was left of my late summer garden.

I garden like I write, with initial vague and often grand plans that give way to wild and uninvited ideas, as well as unexpected creatures like the armadillo. I've tried planting seeds from the garden store, the kind with beautiful photos and instructions on the packets, but the stronger, more vibrant plants always seem to take root from seeds in my compost bin, leftover bits and pieces nobody knows what to do with. As a result, accidental tiny pumpkins and an occasional mystery melon thrive in a forest of kale and native Texas sunflowers.

I suppose I'm like that too. An accidental transplant, I moved to Houston from New York as a little girl, too young to remember any different way of life. I learned to feel at home with the customs of the patch of ground I inhabited, but I always wondered what else was out there. At eighteen, I decided to find out for myself and headed for the East Coast. My Texas grandmother admonished me not to fall in love with one of "those damn Yankees," but I didn't listen. When he broke my heart and I came back home, she never said I told you so. And she didn't laugh at my friends, who often asked if I rode a horse to school or had an oil well in my backyard, because of course that would be ridiculous. But when I eventually married a Texan, she gleefully gifted me the heirloom family china as well as a stack of dollar bills to take to my bachelorette party.

I never thought much about being from Texas until I didn't live here anymore. The stereotypes felt trite, but the innate sense of independence mattered. That "don't fence me in" mentality, Willie

Nelson and Luckenbach, Texas, doing what you believe is right rather than having to be told by someone else, that felt real. Neighbors were gracious and invited you in for lemonade or iced tea. But it's different now. People running things are so convinced they're right and that shouting it loud enough will make it true. They try to fence people in, or out, without taking time to see what could grow, like the sunflowers that keep showing up in my garden, tall and bright, stretching up and out not caring what anyone thinks. Cultivating a garden according to someone else's plan means letting someone else decide which ones are weeds and which ones are flowers.

I haven't seen a real armadillo in a long time. It has become one of those Texas stereotypes, and is spotted far more often in logos and ads than in the wild. But when I saw that armadillo in my garden, gray and a little pink, almost raw looking in the early morning light, it reminded me of how I used to feel living here. Sauntering into my garden, she proceeded to eat one of my accidental cantaloupes, no doubt savoring the juicy sweetness of the flesh after the blistering drought of the summer. She ate the whole melon, the one I watched grow for a month, from a tiny ball of green fuzz to a hard shelled verandah for sun-drunk lizards. I didn't even mind. Instead, I admired her boldness and determination as undeterred by fences and walls, she strode into my yard and made herself at home.

My Texas born mother, when confronted by unexpected guests for dinner, would put on her apron and say the same. "There's always room for one more. Make yourself at home." The warmth in her Texas accent, soft and sweet as the Texas sheet cake she was baking, made it feel forever true. She'd look over at the rest of us, a firmness in her eyes that brooked no disagreement, and urge us to "scooch on over" to make room at the table. I want to feel like that again. And the boldness of that armadillo, coming over uninvited to enjoy a feast in my garden, reminds me that my mother's words can still be true.

I did some research, and it turns out that the nine-banded armadillo, the kind who visited my garden, was selected as the official state small animal. Apparently, the legislature believed it has attributes that distinguish a genuine Texan. I didn't have much chance to get to know my armadillo—she left after the melon was gone—but from

what I saw of her, I think it's true. With a fierce belief in freedom, she ignored the fence and made her way to my garden, respecting what grew on the land and enjoying it for her breakfast. Thinking about it, I understand more about what it means to call Texas home. My mother knew it, and so did that armadillo. It's the sense of freedom I grew up with, changing and adapting with the times, but always knowing, deep down, that there is room at the table for all of us.

The armadillo hasn't been back. I check the garden each morning, but the melons are gone and all that remains is the kale, which I guess isn't nearly as delicious. I'll try again next season when I plant those seed packets, but my hope lies in the unexpected. I look forward to what appears from the seeds from the compost, the ones that offer the most interesting possibilities, wild and untamed like my armadillo. I'll let it all grow, hoping that she'll come again to share in the sweet juiciness of a melon on another hot summer day. I want her to feel at home here. And besides, she is the only one who enjoys my garden as much as I do.

Imagine

POEM

Juanita Cox

Imagine an older woman with thick dark hair
a sea of plaits running down her back,
you encourage her to put beads in her hair.
At first she finds it charming, it's only a few
the beads are wooden, hand crafted,
they make her feel lighter, younger
she can't help but flip her hair and
admire herself when she catches a glimpse.

Now imagine you change those beads to plastic
instead just a few cute ones at the end of each braid you overfill,
each braid has
hundreds of beads
thousands of beads
they are hurting her,
instead of feeling light and young

they weigh her down,
almost breaking her neck
with the strain upon her head,
she feels ugly.
You tell her it is needed for her beauty,
for the happiness of everyone else
this is how they want to see her
she has no choice in the matter.

Now imagine this is mother Earth,
we are the plastic
weighing her down, strangling
we have literally tied up her oceans,
her life-giving waters with trash,
that chokes the fish and sea creatures

that make home within her waves
she is begging for her freedom, she wants
to be free of what hurts her most: us.

Understand she is like that story of
the tree who sacrificed everything
she will let us take and take until she is nothing
but a stump, till all her hair is torn to shreds
bald as the day she was born, no fight left,
she cannot stop her rivers from flowing
or the sun from shining. She only knows:
how to love even if we cannot love her in return.

Let's envision what could happen,
it would take time
slowly but surely
we could detangle the earth's
fine locs, release the beads until her hair is
free to flow again, catching in the wind.
Press her forehead with a cool washcloth
so she can fully rest and rejuvenate,
exfoliate out all the debris and overconsumption
clogging her pores, aging her too quickly.

Can you see the children always having a safe place
to place their heads at night? Fresh water
in easy access flowing into their mouths.
Do you see the animals in their forests,
jungles, mountains and oceans
flourishing, living, wild and free?
Do you hear the warm breeze blowing instead of
The wild angry winds of a devastating storm?

If we can work together anything we can dream
can become our reality, our best level of humanity
we can dream beyond capitalism, we can
strip down all the false promises and empty hope.
Mother Earth is there for us, always moving ahead,
but she moves with the sway of our choices

we can make the world we dream of.
Will we braid the earth's hair
with beauty and flowers?
Or will we tear the braids out one by one
watching the tears fall from her eyes,
whispering, we do this because we love you,
we do this because this is the only way
to have more than we could ever use.

Imagine if we stopped and really saw
what is slowly breaking apart earth
what she gives us power to do,
because she loves us,
her only crime was trusting implicitly
we could uphold our responsibility to her.
Instead what if we imagined
how we could take care of earth
so that she, and I, and you, all of us
would finally flourish.

Heavy Hearts

ESSAY

Jenna Lang

On November 16, 2020, a pilot whale and I met on a beach.

My roommate came home from Stop & Shop and found me on the dining room floor, sorting this week's photos. "I was walking on a different beach today and there was a whale," he told me, "a beached whale. I thought you'd want to know."

I grabbed my bike and headed out to find it. The leaves on the trees were still hanging on, but the next windy day would take them down. One by one, our neighbors had covered their outdoor furniture with tarps for the winter. I turned left. I didn't pass anyone as I rode. Not that we knew very many people here, but we had our regulars who waved from their porches. They seemed amused by our pod of six Harvard kids Zooming into class from Cape Cod. They listened to our daily struggles of too little WiFi bandwidth and too many cooks in the kitchen, and they reminded us to stay warm as we spent our evenings wrapped in blankets at the beach. The Cape in November is a dark and muddy place, and our nightly treks to shiver together brought some levity to this first COVID winter. I turned right, then straight onto the dirt road. My muscles warmed up and the dirt became sand.

Google told me the whale beached in March. He was alive when the International Fund for Animal Welfare arrived on the scene. They gave him IV fluids and kept his skin wet, hoping he would survive until the next high tide could carry him back out to sea. But within hours, his organs failed. The lungs and heart that propelled his 4,000 pounds through the water were too heavy on land. He was euthanized and necropsied. From what they could tell, he was a healthy adult whale. He was 20 years old, halfway through his life and a year younger than me.

I reached the end of the path and got off my bike. I continued on foot, crunching through the fall seagrass. The sun was strong for November, and I tied my jacket around my waist.

I thought about all the whale had missed. As he lay on the beach and began to decompose, the world fell apart. He beached on March 11, 2020, so the last news he heard was the World Health Organization declaring a pandemic. A lot happened after that. Colleges shuttered, and my junior year dorm suddenly became my childhood bedroom. My dreams at night transformed from showing up to a party in the wrong dress to fighting for the last package of chicken in a hazy-orange, dystopian version of Stop & Shop. My college roommates and I moved to an off-season Cape beach rental for our senior fall. The COVID death toll hit 1.3 million, and a Thanksgiving surge loomed a week away.

Maybe the whale died at the right time.

I took a deep breath of salty air, and an invigorating chill dove into my lungs. I had only seen a whale from a whale-watch boat or TV screen, but now I was about to stand right next to and behold one. My camera strap dug into my shoulder as I walked. Photography was a hobby and a part-time job. It gave me reason to focus on the striking and the beautiful in my world. That week I photographed a mudflat where two boys caught crabs. A small wooden house with windows boarded up. A backhoe and a tree twisted together on a pile of dirt in what will become someone's new backyard. Young grass growing in perfect rows on sand dunes. A cranberry bog harvested by men in waders. Today I would photograph a dead whale.

The pilot whale was one of many that beached in 2020. The National Oceanic and Atmospheric Administration had declared three "Unusual Mortality Events" for whales in New England waters since 2016. First were the Humpbacks, then Minkes, then North Atlantic Right Whales. There was no active UME for pilot whales, but they still beached on Cape Cod. During that fall of 2020, 100 pilot whales also beached in Sri Lanka and 470 in Tasmania. Scientists don't know why.

I felt like my mom reading the Obituary section of the newspaper, or what she calls the Irish Sports Pages. If there's anything that side of my family knows, it's death. My Nana's funeral afterparty was one of the biggest events I've ever attended. But Irish wakes freak me out. The casket is left open for friends and family to sit close by and pray, sometimes laying their hands on the deceased. You couldn't pay me enough to touch the body of a loved one that has been embalmed, lying in cold wood. Instead, I avert my gaze so I can avoid my last memory of their face being what they have become. It is disturbing to see a human look so unhumanlike, especially in contrast with a nearby photograph of them at their best.

But I was not afraid to see this whale, dead and decomposing. I never knew him alive.

My feet shifted and slid in the sand. I trudged my way along the edge of the beach as birds flew above me and plunged into the waves lapping onto this narrow strip of land. It was a beautiful place, but it was not a place for a whale. The water was too shallow; I could just barely see the tops of marsh grasses under the water.

A biohazard sign stuck out of the sand. It was printed on regular 8.5 x 11" paper, laminated and taped to a wooden post. The sign warned not to proceed further, but it was small enough not to notice.

The sand got firmer as I stepped past the sign and across the high-tide line. It held my weight. A few steps further, and a pile of seaweed took the shape of a pilot whale.

His skin was dark and leathery. He had been sliced open during the necropsy in perfectly straight, parallel lines, segmenting his body into about a dozen pieces. His bones were thick and sturdy, covered with more sinews than I expected to see after 8 months of decomposition and scavenging. His teeth were small, sitting in such a large head. But his chest cavity was massive. Even though most of his ribs and intercostal muscles were gone, I could still see the outline of where his chest and abdomen rested on the sand as he took his last breaths.

His proportions were so unlike mine. They were unlike any person or animal I had ever seen. He was not built for this world out of water, just as I was not built for his saltwater universe.

I imagined him in the water. Not the shallows of the Nantucket Sound he left, but the water where he might have spent his happiest days. As a Long-Finned Pilot Whale, he was probably very social. He lived in a tight pod of about a dozen individuals that joined other pods to form a school of hundreds of whales. His favorite food was squid. He was a traveler of the North Atlantic and the Arctic Oceans. He swam beneath the Northern Lights. He died right in the middle of his life. His pod mourned his loss.

I photographed his body with the ocean behind him, the silhouette of the Leviathan following the curved horizon of sandbars across the harbor. I wanted to touch him with my hand, partially to feel what his body was like and partially to not leave him alone in death. I prodded him gently with a stick, careful not to jostle anything. His skin held firm against the touch. I left the stick propped against him. My contribution to his casket of seaweed.

His body rested only 10 feet from the water. Someday not far in the future, a storm surge will bring him home.

I took a long look at the whale, imprinting the image of his body into mine. I looked for the living whale he once was reflected in his current form, but I couldn't see it. I tried to connect the pieces, the past and the present. I imagined him on the day of his death, but I didn't know why it happened. I couldn't know. Climate change? Stress from boats getting too close over the years? Pollution in his food? All could have played a part. Or maybe he just died. His eyes held my gaze, but he didn't say anything.

I walked back to my bike. The sun was still golden, and the birds were still flying. I took another breath of the salty sea air humans come to for healing. In some way or other, the world is always dying. This year I lived during a pandemic. For my whole life, our world has been losing its battle against climate change. The sun that warmed my face that November day will someday engulf the Earth. But the world hasn't died yet.

Every day I wake up and photograph life. Sunlight shimmers on my skin and in my friends' eyes. Sunset dances through the maritime forest in full color on its way to reach me. Moonlight falls out of the sky until the ocean sparkles. It bathes a whale as it lies on the beach, turning his skin into obsidian and his bones into pearl. Then the sun rises once again, piercing the horizon with streaks of gold.

Abundance of Bluebells

POEM

Jennifer S. Smith

With respect and appreciation for the Shirley Miller Wildflower Trail, located in Crockford-Pigeon Mountain Wildlife Management Area of Walker County, Georgia.

Spring beckoned early in Georgia last March,
her calling cards edged in assurance and light,
scattered by winds to painted porches,
with promises of Virginia bluebells on wildflower path.

Row of eastern redbuds preceded trail,
their heart-shaped leaves displayed in lavish rose shades,
confident preamble to majesty ahead,
reminders of fragility expressed by wilderness.

Across boardwalk and beyond stream's reflection,
abundance of bluebells embellished Earth's floor.
conversation gently whispered between human and nature,
blooms sealed pledges that preservation prevails.

Promenade of flora caught sunlight's gleam,
phacelia, wild blue phlox, and wild geraniums in pale lavender.
Georgia's native celandine poppies shared yellow cheer,
purity captured in white trillium and rue anemone.

Slender trees towered upward, approaching sky blue heights,
rocks and roots wound beside cascading waters,
waterfall's invitation to breathe rhythmic with flow,
cautious courage urged when seeking panoramic views.

As trail looped back to redbuds at entrance,
tiger swallowtail butterfly lingered amid purple and pink,
landing on Virginia bluebells against dried leaves,
spring's fulfillment of promise, commemorating hope.

The Solace of Solitude

ESSAY

Delia Kostner, Ph.D.

I hoist my unwieldy sea kayak by the gunnels and slide it onto the roof of my car. It's been an arduous season and I am eager for one last solitary kayaking trip, one last night sleeping close to the earth before winter takes hold. And so I have packed camping gear, book, journal, and enough food for a day or so, and head for Lake Nubanusit near where I live and work. At the boat launch I arrange my belongings in dry sacks, pack them into the cargo hold of my bright yellow kayak and push off from the shore. It is mid-October, a time of cooling temperatures in southern New Hampshire. But the weather has been eerily warm, and the sun blazes strong as summer, the sky is the lazy blue of August. I paddle slowly across the glassy water. The trees are changing into their fall finery. Shades of crimson and gold glimmer along the shore. I am almost alone on the still, black water. I turn carefully and observe the wake rippling out behind me like a message for others to follow. The splash of water beneath my paddle, wind rustling the pines, I start to hear my thoughts again.

As I paddle I think of the words of the early environmentalist, Aldo Leopold, "One of the penalties of an ecological education is that one lives alone in a world of wounds. Much of the damage inflicted on land is quite invisible to laymen." I have spent much of the past decade trying to grasp the reality of what is happening to our fragile, warming planet. I am writing about what I see. But unlike Leopold writing in the 1940's, I am not alone. In my daily life as a psychologist I sit in the presence of young people struggling to come to terms with the damage we humans are inflicting on the world. Their sense of a future foreshortened has permeated my psyche and left me wrapped in their angst. I have come to understand that one cannot work with activists and environmentalists as I do and emerge unscathed. While seeking to make sense of other's experience, my inner voice risks being muted, distanced, confused. Living in relationship to the world of nature at this moment in history gives rise to a complex amalgam

of emotions, all of which must be faced and dealt with if I am to be of use to anyone. And so, periodically I recharge by retreating into brief periods of meditation, silence, and solitude.

A short portage brings me to isolated Spoonwood Pond. As I glide over granite boulders barely visible beneath the surface of the dark water, I note that there is not a single thing a human hand has erected along these shores. I pass through a portal; the outer world recedes.

I have long felt protected by landscape and find solace in wild places near my home. My home territory is too far inland to receive the full force of the superstorms hurricanes have become, or to be flooded by rising seas, and too far north to experience the stultifying heat that now regularly grips the South. Earthquakes, tornadoes, wildfires: all are equally rare. This is not yet a degraded landscape. The shifts have been subtle. But they are visible in the ash trees that have been decimated by the invasive emerald ash borer, and hemlock that are under attack by the woolly adelgid that thrive in this warming climate. The damage pierces my psyche with sadness.

I steer my boat toward a heavily wooded peninsula jutting into the pond. There are only a few camping spots on this bit of conservation land. But tonight it will be just me and trees on the pond. No cell phone, no other voice but my own.

I lift my small vessel onto the beach and notice that the water lapping around my ankles is surprisingly warm. Without thought I turn and take a step, then another, and then, with feckless abandon, dive fully clothed into the water. Submerged, I lose the boundary between inner and outer, air and water. With long even strokes I swim across the small bay and back again. I float on my back and watch geese flying overhead, crying their warning that autumn is here even if the weather remains stuck in place.

To be truly alone in a fruitful manner requires practice. It is a skill I learn repeatedly from meditation retreats I have undertaken. These have shown me how to access the peaceful places in my heart and mind. They have also shown me the ease with which I distract myself and get lost in a story or an emotion. True meditative stillness, like good psychotherapy, asks one to turn inward and explore the territory of

the minds and heart, and no matter how confusing and distressing, to befriend all that is found there. This is where resiliency is born. It is the place where healing happens, it's also where the demons lurk.

I throw my wet things over a branch and don dry clothes. After pitching my tent, I settle into my camp chair. Closing my eyes, I listen. I try to make space to truly see my mind in all its meandering glory, while also gaining access to the distortions that typically cloud my thinking and feeling life. I spend the afternoon in alternating periods of sitting and walking meditation and grow quiet. My attention becomes nuanced and subtle.

The sunlight slants across the surrounding hills, autumn orange and red deepen then fade as the sun descends, the light disappearing down the hills in front of me. The moon, waxing crescent, rises early. A slender sliver of light hangs in the sky like a jewel. The joy of being alone in nature suffuses me and fills me with wonder. I sit quietly until the cool air of darkness surrounds me and I retreat to my tent.

Awakening in the night, I hear what I think is rain echoing through the thin tent fabric with a resonant, "tick- tick- tick." The wind has picked up, unsettled and lively. I stare through the mesh of my tent door out into the inky sky until my eyes acclimate and I discern the spectral tree branches waving in the strong gusts of wind. There is no rain; the sound comes from the maple leaves and pine needles falling in droves, covering the ground. Everything is in motion. I am disoriented. I hear something else hidden beneath the wind. Footsteps? I try to recall what animals roam these woods. Bear, deer, fox? My pulse rate increases. My mind is playing tricks on me, I am not often afraid. I have, I realize, the choice of whether to be scared or to use this moment to access a deeper, more fundamental part of this experience. Listening, I rest my hands on my abdomen and follow my breath in sync with the turbulent air outside, then in rhythm with my slowing heartbeat. Then, breathing slower still, opening to the wind, I access my quiet creaturely self, concerned with and in love with this warming, shifting world.

When I emerge from my tent in the morning there are indeed dark storm clouds on the horizon. But I delay leaving, wishing to spend

a few more hours on my own thinking, writing, meditating. Before I depart, before I mindfully gather my gear and pack it into the kayak, I lay on the soft ground and recall the words of poet Wendell Berry. "True solitude is found in the wild places, where one is without human obligation." he muses, "One's inner voices become audible… In consequence, one responds more clearly to other lives. The more coherent one becomes within oneself as a creature, the more fully one enters into the communion of all creatures."

Under glowing hills of burnt orange, brown, and red, I paddle straight down the middle of the pond into a blustery headwind. Two loons float and bob just off my bow, watching me with their penetrating crimson eyes. I slow and stare back, the waves striking my hull threatens to upset my tiny boat. Suddenly, in perfect synchrony, they dive beneath the surface. No sound. Barely a ripple. Gone.

To transform crisis into crucible I know I must cultivate stability. Time alone in silence is the corrective for the reactivity I experience when I come up against the reality of our faltering planet. But this is no Romantic ideal of a retreat. I go out now not just to support my journey inward, but to bear witness and strengthen myself in the face of the damage that I cannot unsee. Charting the inner landscape is not for myself alone. As Berry notes, the fruit of such time is the ability to respond to others clearly as well. I have been away for just over 24 hours, immersed in a spit of land only thirty miles from home. And yet I feel as settled as if I have been on retreat for a week.

Complicity & Capri Suns

ESSAY

Shannon Falkson

People say climate change is complicated. I disagree. My eleven-year-old son understands it perfectly—we emit more greenhouse gasses than the Earth can absorb, and it has a warming effect on our atmosphere. When he asks me why we can't solve the climate crisis, I find myself struggling to explain why the so-called adults aren't doing more to stop the warming.

My initial attempt to answer the why of our warming world wasn't much of an intellectual endeavor; it was a rambling list of all those who should be blamed for the crisis—the energy companies, the politicians, the Amazons and WalMarts of the world, our consumer culture. The lawyer in me knew I was applying faulty logic; I was answering the what, not the why. Then it hit me. I consume oil and gas. I shop at Amazon and WalMart. I consume more than my most basic needs require. The why is me. I'm the problem.

I am complicit.

This realization wakes me at 3:00 a.m. and I read an online report with the ominous title "The Mortality Cost of Carbon" warning that 83 million people will die due to climate change by 2100 if we don't change our ways. I'll be dead by then, but because I'm complicit, the blood of those deaths will forever stain the composted remains of my hands. I contemplate moving my family off the grid. We'll grow our own vegetables, brew our own kombucha, generate our own electricity. But the few thousand pounds of carbon we'd save wouldn't be enough to save my guilty conscience, let alone our planet. And, to be perfectly honest with you, I'm not interested in off-grid living. I don't even like kombucha.

For too long I've thought of myself as someone committed to living "green." I recycle and compost. I eat lower on the food chain and drive an electric car. I purchase pre-owned items whenever I can.

Yet, my carbon footprint remains well above that which the Earth can absorb. I realize the irony of consuming my way to a smaller footprint. That's the easy stuff. Driving an electric car is hardly a sacrifice. It gets harder when I go to the grocery store. Should I buy the Capri Suns that my son loves in his lunch? They're so convenient, but then each one gets tossed into the trash on its way to a landfill where the non-recyclable, plastic-lined aluminum pouch will fail to decompose alongside the methane-producing banana peels and apple cores. It's that debate times one thousand—just from a single trip to the grocery store.

I try to unpack what happens on those days when my resolve weakens and I purchase the pouches. Maybe I'm sleep deprived (thanks, eco-anxiety). Maybe I'm rushed for time (when am I not?). Maybe it's because I cannot connect juice pouches with starving polar bears clinging to melting icebergs. In my mind, the debate goes something like this: *Do a few Capri Suns even matter? I can't de-Capri my family—let alone the whole planet—into sustainability. Plus, my son gets hangry when he doesn't eat what's in his lunch, so isn't it important to get some calories in him?* And that's just one choice. What about all the other choices? Corn in a can? Bread in a bag? Juice in a jug? It sounds Seussical, but these questions taunt me. Can I purchase an occasional Capri Sun and still claim to care about the environment? No? Maybe? Honestly, I have no idea.

It seems that convenience and carbon neutrality exist in an antagonistic relationship, forcing us to choose one or the other. Over and over. It's exhausting. It's enough to make me throw up my hands, say *fuck it*, and break out the Capri Suns. Mixed with vodka. (Organic, of course.)

I call my 22-year-old daughter and confess my complicity. She reminds me of her personal motto: "I'm not to blame for the problem, but I am responsible for it."

She's battled a chronic illness for more than half her life. Does it suck to suffer from debilitating pain, frequent nausea, and constant fatigue? Absolutely. Does it help her to feel sorry for herself, blame others, hate the world? Nope. (Believe me, she's tried.) What works for her is accepting her illness and focusing on what she can do.

Acknowledging my complicity is only the first step, a form of acceptance, and is meant to be empowering, not soul crushing. When I combine complicity with taking personal responsibility for myself, I can convert my apathy into action, and figure out how to become part of the solution instead of the problem. For me, quantitative analysis has a calming, clarifying effect, and I start there.

I begin by piercing the pouch with the plastic straw to get to the juice of the matter. Capri Sun was purchased by Philip Morris (yes, the tobacco company) in 1991 when they were banned from marketing tobacco products to children; they pivoted to leverage their expertise peddling poison to children by selling them sugary drinks. Capri Sun sells 6 billion juices each year—that's over 34 million pounds of pouches left to languish in landfills every year. Their website states their scientists are working on a fully recyclable pouch and they're "locking them inside our lab until they do." Unless their packaging becomes sustainable (and the scientists are freed), I make the choice to no longer purchase Capri Suns. I break the news to my son gently, aware that the pouches are valuable trading commodities on the school lunch market. He shrugs and returns to his video game.

When I look at the ways industry has avoided both acknowledging complicity and taking personal responsibility, I see the brilliance in the technique they've perfected which I've named Claim & Blame. First, they *claim* a commitment to sustainability, to the health of their consumers. Then they *blame* us for our consumption of their products. We are told to look away from the dead elephant in the room and instructed to focus on the plastic water bottle we tossed into the trash instead of the recycling bin. We are told the problem is one of demand, not supply. Sure, it's the poachers who kill elephants for their ivory, but the poachers are business people, following the "laws" of supply and demand.

Let's look at a few fun examples of Claim & Blame in action. The American Beverage Association advises consumers to "balance what you eat, drink, & do," while imploring us to recycle all those single use bottles with their "Every Bottle Back" campaign. Eversource, my electric provider, is committed to having carbon neutral operations by 2030 and offers energy-saving tips such as unplugging electronics

when not in use and opening curtains during the day instead of using lights. The tobacco industry, offended by the allegations that their cotton candy flavored e-cigarettes (as advertised on the Cartoon Network) were an attempt to cultivate a new generation of nicotine-addicted children, and clarified that they invented e-cigs out of an altruistic desire to help smokers quit smoking. They argue that since it's illegal for children under 21 to purchase tobacco products and, given the warning labels on the packaging, they have only themselves to blame for illegally purchasing their products and becoming addicted.

Claim & Blame works by making us feel guilty and responsible, regardless of the hypocrisy or absurdity of industry's claims. We're simultaneously told climate change is an inevitable, existential threat we are powerless to stop and we're also told to consume less and do our part to fight climate change. We are to blame for a problem we are powerless to fix. It's learned helplessness sprinkled with guilt.

I am a purchaser in this prequel to the dystopian nightmare I'm helping to construct for my great, great grandchildren, one Capri Sun at a time. As a consumer of carbon and single-use plastics, I'm condoning the poisoning of our planet just like the ivory buyers condone the killing of an 8,000 pound animal for its 150 pounds of tusk. I'm complicit, but I'm not a victim.

So what can I do? I'm going to follow industry's advice and take personal responsibility for my actions. The politicians and industry (with a few exceptions) have consistently failed to prioritize the health of our planet over the health of their bottom lines. Waiting on industry or politicians or yet-to-be-invented technologies to save our planet fits Einstein's definition of insanity: doing the same thing over and over and expecting different results.

I need to demand differently. I have purchasing power, voting power, a voice. I'm reminded of Lao Tzu's wisdom from the *Tao Te Ching*: *the journey of a thousand miles begins with a single Capri Sun*. When I combine forces with others to make change happen, I supercharge my personal power. If enough of us stopped buying Capri Suns, they'd become extinct like the Wooly Mammoth—a creature which couldn't adapt quickly enough to a warming planet to save itself.

Clear the Air

POEM

Love Marie

Follow the North Star
under the cover of night
to lead you to freedom
beyond what's in sight.

But what if the North Star
is obscured by the smog?
By the clouds of war
and industrial slog?

We have to clear the air.
We have to clear the air.
We have to clear the air
to get more free.

Fluorescent noise flooding streets
overflowed with bright distraction
from ancient maps, now hard to see,
deluged to muddy course of action.

We have to clear the air.
We have to clear the air.
We have to clear the air
to get more free.

Planes of death and destruction
scorch living memory down
to plains burnt by corruption.
The ghosts exhale. Dust abounds.

The living choke on colonial haze,
cough out, "I can't breathe" with intact souls,
as those who dance in smoke show us new ways
to inhale, to breathe, to see the North Star whole.

We have to clear the air.
We have to clear the air.
We have to clear the air.

May we breathe and be free.
May we breathe and be free.
May we breathe and be.
Free.

Remember the Wind

POEM

Love Marie

Wild child, return to your roots.
What does it mean to be fearless?

You were once a tornado,
ripping through paper thin walls
as you let loose the revolution
pulsing beneath your skin,
tearing out wires ablaze,
papers shredded in flames
and you ain't give a damn
about it cavin' in.
Don't you remember?

Please remember.

I know you remember
when they called you a wild woman
with their venomous tongues
and frowns of disgust
all 'cause your winds
blew strong enough
to raise daughters of dust
and tear up white walls
of paper thin propaganda,
you'd rip right through it so quick—
ooh, they couldn't stand ya.

So what happened?

Why would you stifle your storm
and silence melodic winds
that carry freedom songs?
All to conform? Just to fit in?

To get along?

Stop compressing yourself
into a wispy summer breeze
when you were born in the form
of a hurricane. Cause *baby*,
they can't stand you either way.
They never wanted to hear
what our freedom songs had to say.
But the real remember you,
dear wild woman,
you and all your wild ways.

Liminal Earth Contrapuntal

POEM

Love Marie

fuck concrete.
look around the so-called jungles | cracking loose as wild flowers
take root
to make the world an oxymoron, a spinning contradiction.

look further.

This New Earth breathes in, feeling
sandpaper-scratched lungs, and craves | soothing vapors, balms &
medicines,
a return to pleasure.

a call to go back and get it.

This New Earth,
unwell with fever, fighting the flesh | now met with love flowing
from the hands of dreamers
suffers and yet still | continues to heal,
commits to aliveness.

Graveyard Waters wash in New Death each day.

sand & sea & sunrise fleeting past | beaches displaced, stolen &
trafficked for concrete & plastic,
a return to wholeness requires softening | cemented violence
committed
to become no more.

Beyond what we know now.

Changing perspective,
as metal beasts swallow people | daydreaming freedom,
whole and delivered, a sacrifice
unto the altar of capitalism | beyond what we've imagined
until we return to the root of Holy Earth, soften and we
free us in this lifetime, | crumble concrete empires

and see that eutopia is possible
and unrealistic
and Possible.

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