

Northern Michigan University

**NMU Commons**

---

All NMU Master's Theses

Student Works

---

2012

## The Lakeland Fires

Andrea E. Wuorenmaa

*Northern Michigan University*

Follow this and additional works at: <https://commons.nmu.edu/theses>

---

### Recommended Citation

Wuorenmaa, Andrea E., "The Lakeland Fires" (2012). *All NMU Master's Theses*. 525.

<https://commons.nmu.edu/theses/525>

This Open Access is brought to you for free and open access by the Student Works at NMU Commons. It has been accepted for inclusion in All NMU Master's Theses by an authorized administrator of NMU Commons. For more information, please contact [kmcdonou@nmu.edu](mailto:kmcdonou@nmu.edu), [bsarjean@nmu.edu](mailto:bsarjean@nmu.edu).

THE LAKELAND FIRES

By

Andrea E. Wuorenmaa

THESIS

Submitted to  
Northern Michigan University  
In partial fulfillment of the requirements  
For the degree of

MASTER OF ARTS

Office of Graduate Education and Research

2012

## SIGNATURE APPROVAL FORM

This thesis by Andrea E. Wuorenmaa is recommended for approval by the student's thesis committee in the Department of English and by the Assistant Provost of Graduate Education and Research.

---

Committee Chair: Matthew G. Frank

Date

---

First Reader: John Smolens

Date

---

Second Reader (if required):

Date

---

Department Head: Dr. Raymond J. Ventre

Date

---

Assistant Provost of Graduate Education and Research:  
Dr. Brian D. Cherry

Date

**OLSON LIBRARY  
NORTHERN MICHIGAN UNIVERSITY**

**THESIS DATA FORM**

In order to catalog your thesis properly and enter a record in the OCLC international bibliographic data base, Olson Library must have the following requested information to distinguish you from others with the same or similar names and to provide appropriate subject access for other researchers.

**NAME:** Wuorenmaa, Andrea E.

**DATE OF BIRTH:** May 28, 1986

## ABSTRACT

### THE LAKELAND FIRES

By

Andrea E. Wuorenmaa

“The Lakeland Fires” is a collection of nine essays about the author’s father, David Martin Wuorenmaa, who passed away in February, 1997. Each of the nine essays begins with an account of a natural disaster somewhere in the world, leading into a braided memoir concerning the author’s father, Finnish heritage, and the weather. Much of the collection is set in Michigan’s Upper Peninsula—its lakes, its forests, and the heart of its winters—but the essays often deviate in time and space to examine catastrophe, destruction, transformation and renewal.

Copyright by  
Andrea E. Wuorenmaa  
2012

## DEDICATION

For my father: that the people who never saw you, waders pulled high and fishing pole in hand, emerge from the pines of Wildcat Canyon; or heard you, sitting by a campfire, singing “Sixteen Tons” in a deep baritone; or felt the cold snow fall from your sleeves as you reached out for a handshake or an embrace; may yet know who you were, and who you still are, to me.

## ACKNOWLEDGMENTS

I would like to thank my thesis director, Matthew Frank, for his ideas, support, and advisement, and for encouraging me to focus on the weather. I am grateful to him for not cursing my name when I sent him long essays to read mere hours before our meetings, for reading many of these pages back to me and breathing a life into them that allowed me to appreciate my own words in new ways, and for ensuring that I always left his office feeling inspired about my work.

I would also like to thank John Smolens, my thesis reader, for offering me the eye of a fiction writer, for having read and commended my writing throughout my time at Northern Michigan University, for guiding me through rearranging sentences and rethinking scenes to accomplish my visions in the best possible way, and for emboldening me to experiment in all sorts of writing and record my experiences from different perspectives.

To my mother: thank you for giving me the love and support of two parents; for sitting at the table with me to tell me things about Dad that I never would have known; for remembering the first time he held me and the moment he chose my name; and for never letting me forget how much his children meant to him.

To my brother: thank you for sharing these memories with me; for sitting beside me in the Ford F-150 for hundreds of miles and always letting me hit the buttons on the tape deck; for being the only other person who knows the experience of having David M. Wuorenmaa as a dad; and for your independent spirit, which has, in my adult years, taught me about survival.

To my peers in writing workshops: thank you for your critiques, your comments and criticisms—not only have you assisted me in improving my writing, but you have helped me to understand and appreciate what I transmit to the page and the effect it has on my readers.

To all other family and friends: thank you for listening to these stories about my father before I ever put them on paper. When the blizzards hit, you were the kindling, the firewood, the matches, the coals, the crackles, the flickers, the red and orange flames that brought me warmth.

This thesis follows the format prescribed by the *MLA Style Manual* and the Department of English.

## TABLE OF CONTENTS

Introduction.....	1
Vessels.....	4
Lakeland.....	11
Eggs.....	17
Ashes.....	22
Splitter.....	31
Slideshow.....	37
Gunshot.....	45
Embers.....	52
Survival.....	63
References.....	68

## Introduction

As a child, I had an evening ritual set for the nights my father worked the midnight shift at the Empire Mine. Tucked beneath my blanket, the gold-tipped, white posts of my bed and the cedar chest inherited from my grandmother Elaine glowing under spans of moonlight, I waited for the sound of Dad's brown Ford firing up on the street outside from its parking spot right below my window.

I lay still. There were thwacks, thuds on the glass windowpane. Dad threw snowballs up to me. I pulled back the curtain, looked down at him as he collected snow with his bare hands, packed it solid, and sent it up into the chilled, dark air. He wore a flannel shirt and jeans, a baseball cap. His socks were pulled up high over his steel-toed boots. He waved at me.

I watched him get into the truck and arrange his ore-dusted lunchbox beside him. I imagined its contents—bologna, bread, Cheez Whiz, cans of Spam, an apple or a banana. I saw the glint of his watch, which he would later hang over his ear, alarm set, as he took a nap during a break in the production truck. These were the things I would remember when he was gone. Dad ducked down into the view of the passenger side window and waved at me again. Lifting his arm, he shut off the truck's interior lamp, shifted into gear, and drove down the hill leading from Empire Street to Third. I never shut the curtain or tucked myself back in until I couldn't see him anymore, the outline of his head and shoulders visible through the truck's rear window in the flickers of streetlights as he drove.

The moments that felt emptiest when he had died—I was ten years old at the time, and he was fifty—were the moments that had once been filled simply by watching him live and feeling the warmth of knowing he was there, so that I could fall asleep.

I remember a night when I was a teenager, in that same bedroom, though a different bed; the cedar chest now in my closet filled with books and papers, *Goodnight Moon* and drawings of giant-antlered moose beneath pines. I heard a thump on my window, and then another. I pulled back the curtains—they were the same as before—and saw a friend from three houses down, my brother’s best friend, who had been like a second son to my father, reaching down into the snow and lifting chunks to form spheres and throw them at the pane. He motioned for me to come outside.

In my pajamas, I flew down the steps—stairs my dad had painted red year after year, kneeling at their foundation with a brush in his hand—put on my winter boots and went out the door. My friend waited for me in the backyard. Without a word, he pointed up above.

The night sky was on fire. A green, magnetic blaze undulated, finding its base on the northern horizon before us and flaring up across the whole expanse of midnight. The stars, the Milky Way, the Great Bear and the Little Dipper wavered beneath the flames. It was a cold fire, washing over them. I felt a chill and drew my arms around my frame. Never had I seen anything out in the world move in such a way. Within moments, it disappeared.

“The Lakeland Fires” is a collection of essays in memory of my father: of our experiences together here in the north, during the ten years I watched him drive the Upper Peninsula’s dirt roads, hike through its snow, fish in its streams, light campfires in its

forest clearings. This collection is about my view of him sitting at our kitchen table, in the same spot every time, reading the *Mining Journal* or cutting into the crust of a pastry smothered with ketchup. It is also a testament to the years I have spent without him: to our Finnish heritage that remains with me, to the places I have gone that are hundreds of miles away and yet revived my memories of him, and to this peninsula on the Great Lakes, a land which shaped both of us.

The essays are written through the filter of weather. They examine natural disasters across time and space, the unavoidable calamity and chaos of the events in nature that to us seem so unnatural and unfair. These things happen everywhere, all of the time—tornadoes, earthquakes, blizzards, floods, fires—and we weather them. I have always thought of my father as “winter born.” On skis, on his snowmobile, on his booted feet, he thrived in the snow. He overcame the elements. “The Lakeland Fires” examines life as it meets catastrophe; transcendence and regeneration after the storm.

## Vessels

*During the last two weeks of the month of February, 1960, strange, small earthquakes rumbled beneath the city of Agadir, Morocco. On the third night of Ramadan, February 29, just before midnight, the earth turned sideways beneath the feet of Berbers as they folded tapestries for tomorrow's souqs. Nomadic women sewing sequins into kilims pushed needles through their thumbs. Couscous, honey and wafers, left still after three days of fasting, fell through a gaping hole in the earth's crust, buried by the tables and walls of entire homes. In under fifteen seconds buildings that had stood for hundreds of years became rubble. A Spanish ship in Agadir harbor radioed to Europe that Morocco was collapsing into the sea. The United States, Germany, France, the West, rushed to remove debris. But Kasbah and Yachech were gone. Ninety-five percent of their population, every building. Men from North Carolina and Magdeburg operated bulldozers to open streets and find what remained. They found little. At some point, someone remembered: in 1731, the city of Santa Cruz de Aguer, once settled on this very spot, had been destroyed in an equally devastating earthquake—an earthquake that struck in the middle of the night while the city slept, so that its citizens awoke to hope it had been only a dream, and began to rebuild, stabilize, reinforce, protect, convince themselves that they were not still asleep.*

I arrive at Riga International Airport, Latvia, with my boyfriend, Colm. At six o'clock in the morning, Eastern European Time, our plane sinks into a dark landscape lit across its floor by a glow of white snow. The ground is so cold it pops beneath the plane tires. We step onto the jetside stairs and our breath crystallizes in the Baltic air.

And so we seek shelter in the airport for our layover on the way to Helsinki, Finland—the land from which my ancestors came. Colm falls asleep across a bench and I sit between groups of Finnish men in flannel shirts who sip coffee from Styrofoam cups. “*Joo,*” they say to one another. “*Miättä syntyjä syviä.*” They eat pastries out of a box, their low laughter filling the room. They might be coming home from a weekend vacation. A trip to Germany. They might have ordered schnitzel while seated at oak tables in Berlin; in the dim light of a Bavarian bierhaus, they may have clinked mugs of *Weihenstephaner*. Or perhaps they were in the United States: Minnesota. In the cold upper reaches of Duluth, they rented a car to drive the Skyline Parkway and look down on the ship canal and Lake Superior, before touring the Iron Range. On a cold morning, the men may have traveled to Michigan’s Upper Peninsula, to sit at a diner counter and push forks into scrambled eggs and read hunting magazines on flimsy paper and ask their waitress where to rent a cabin for a week with a fireplace and a view of a lake within the confines of a northern forest to see where their descendents now live.

“You follow this road,” she might have said, pointing at a map of Keweenaw County. “And you just pretty much keep going until you can’t go anymore.” Eventually the men would reach High Rock Bay, look out at Manitou Island and think of home.

Near these men, at the gate, I see a girl—the Finnish version of me. She has long, wheaten hair and wears Sorels over her tights. She reads *Eismond* by Jan Costin Wagner. *Ice Moon*. She is alone there, and the first in line to get on the plane. On the floor beside her boot sits a cup of Nordqvist tea, steaming from its mouth. Warmth.

I hear Colm snoring. I cast my eyes above him to what lies outside of the airport window, a stiff stretch of ivory snow covering the land and lifting up and over tall

buildings. An illuminated Lukoil sign is topped with more snow, lit an eerie red. It is still dark out and airport buses pulse along icy roads, slow blood, headlights brief rays cutting into winter. The Finnish girl has set her book down and rests her pale hands on the edge of the airport window, eyes closed. An Air Baltic jet pulls up to the gate in silence and soon we will be on our way.

Finland: black pines and white roads. My dad used to drive me along roads like this in the Upper Peninsula: U. S. 41 to Republic and the land Dad had inherited from his own father; County Road 550 to Big Bay; County Road 581 in Ishpeming, where deer leapt fast as rain over the pavement. Always we sped through a tunnel of conifers, looming low with snow heavy on their branches. Frost spread fast over the windows; I put my hand to one to see if I could feel the cold from inside of the Ford. When I grew older, I drove the same roads in blizzards. I took M-95 to Iron Mountain, and then to Green Bay, to retrieve Colm from the airport two weeks before Christmas. Snow built up in front of my tires and concealed the asphalt. I kept driving through the giant white pines, my life lines. My car felt unsteady on the road, but it stayed.

A bus takes us to the steps of Helsinki Central. We pause in the *Rautatientori*—the Railway Square—and consult a map stiffened by the cold. *Mannerheimintie*, *Runeberginkatu*, *Postikatu*: the streets form a strange meshwork, and we brace our bodies in layers of sweaters and coats and search for our apartment rental. The wind is bitter. It fills the avenues like cold butter juts into the surface of rye, knifed in. Here, the Arctic swords itself into the back of your nose and throat. Colm struggles to breathe; his cheeks turn very pink. I, too, can no longer feel the soles of my feet in my tightly laced boots.

We stop at a street side mall and burst in its doors, into a flood of warm air, a corridor of fast food and vending machines. I sit on a step, surrounded by crowds of Finnish youths holding cups of gooseberry juice and fountain soda, cinnamon “slapped-ear” pastries and Karelian pies, who look at me as if I am a giraffe. In a flurry I unlace my boots and free my socked feet and think about frostbite, black-violet fingers emerging from gloves, the wood-burning stove that once heated my parents’ garage and how it would allow Dad to be out there for hours in the cold.

I move my toes in their thick red ski socks. Colm stands in front of me and reaches for my ankle. “Don’t touch them,” I say.

It comes to me that there are tears in my eyes. Once, I was a Yooper: a girl born in the Upper Peninsula, where the average snowfall is over 200 inches per year. I was winter-born, like my dad, with an automatic resistance to the cold. I used to bound out of the side door of our house in Ishpeming and into drifts waist-deep. Dad and I made bricks out of ice and built snow forts. He pushed me along in his Yooper Scooper shovel as he cleared the yard of last night’s storm. Flakes clung to my hat and froze in my hair. We sat on the tailgate of the pickup and drank hot chocolate, even as darkness fell and the temperature dropped. My frigid hands were heated by the mug. I wore a neck warmer and spoke to my father through its knit.

“It’s too hot with this on,” I said.

“You can take it off for a second,” he said. “That’s okay. But you keep your hat on, or all of the heat will escape your body through your head. Gotta keep your head and toes warm and you’ll be okay.”

In Helsinki, I curl my feet over the steps I sit on and run my hands over them. Blood circulates. I lift my palm to my cheeks and nose and feel them defrosting. Like a heat lamp cast over a frosted apple tree. Or the moment the puffed-breath of a cattle dog dissolves in thin air when dusk melts into dawn.

“I think we’re actually very close to the rental,” Colm says. “Not much further.”

“I don’t even know which way to go, and neither do you,” I say.

“We’re this close to figuring it out.”

I put my thumb and middle finger to my temples for a moment before pulling my boots back on and standing up. “I feel dizzy,” I say. “Is it from the cold?”

“You’re fine.”

We walk up *Kanavakatu*, past the tiny lit entrances of pubs, the fluorescence of grocery stores, the ghastly lavender traces of moon on snow. Somehow it has become early evening. Coming to Uspenski Cathedral, its steeples creamy jade torches in the sky, I say, “Our place is just on the other side of this.”

“I don’t understand why you’re so upset when we’re finally here,” he says.

I watch the cathedral, there against the dark. Its lights are ashy halos, the passage of their radiance faltering in the shimmer of the frigid air. It sits on a hilltop above all else. They must never shut its lights off. Its heat is a constant pulse against the cold.

My family went to Chicago once to visit my father’s sister, who was childless and lived in a pristine house in Elk Grove Village with her husband. Dad spilled coffee on the pale carpeted steps and tried to clean it up with a hand towel from the bathroom. All that became of it were stains on both. Then, one evening, my family sat in the kitchen playing

poker when another aunt called to tell us that our church in Ishpeming, Bethel Lutheran, was burning to the ground. Lightning had struck its steeple. Someone filmed the whole thing and when we returned home, we watched it on VHS: red licks of flame against a dark sky, people talking in soft voices. "I can't believe this is happening," someone said. Shadowed figures stood and stared at the fiery beacon.

There were over 1.6 million dollars in damages. The church was rebuilt by 1996. I found out that in 1909, the giant church bell had cracked because someone poured hot water on it on a bitter cold day. These were the histories of the church's disasters, the tales of the heat on its back, the strikes against it. It was a Finnish Lutheran church, built in 1887. It gave immigrant workers something to do, somewhere to go. They sat in its basement on Sunday mornings and ate oven pancakes and drank coffee and kept their heads below the surface of the ground where snow banks climbed up against houses in wintry ivy. The church burned, but it was rebuilt. I went to Sunday school in its new basement; I attended luncheons after funerals there, and ate blackberry pie off of delicate white plates.

Colm walks first toward the rental, and I follow. We can see Helsinki Harbor from the isle of *Katajanokka*. But I have a feeling I can see more than he can see. I seem to have the peripheral vision to see in the dark, to detect contrasts; the clear arctic eyes that prevent snow blindness. There are ferries out on the ice. Some of them are frozen against the shore, pushed sideways by ice floes, hulking shadows. Others show as dim lights far out over the sea. I remember my dad lifting me up on an iron ore ship in Duluth. He pointed out everywhere that the pellets fell, told me what the beams of steel were for and

where the workers slept. And then on the night drive home, I could see the lights of those iron ore ships far out on the water of Lake Superior. Motionless. The people on them must have been sleeping—they must be warm, tucked in a berth in rooms beneath furnaces, floating like hot pinpoints of stars in the sky, dreaming right through the risk of their sinking.

## Lakeland

*On December 14, 1287, under lashings of heavy rain, a dike broke in the Netherlands along the North Sea. The contents of an ocean dumped across the land—St. Lucia's Flood. Once an inland lake but now gushing with floodwaters, the Zuiderzee—the Southern Sea—was born. A lonely ten houses were left standing in the city of Griend, later to become an uninhabited island. The flood opened up water access to Amsterdam, allowing it to prosper. Ocean water, its rough texture, its salinity, its powerful and incomprehensible surge, kept changing things—lakeshores eroded, villages drowned. Over fifty thousand lives were lost. In 1421, the land of Grote Waard, once lifted over the sea, was reclaimed by it in St. Elizabeth's Flood. Wooden farmhouses and peat fireplaces disappeared under water and never returned. For hundreds of years, the Zuiderzee flooded again and again. Not until the twentieth century was it brought under control and reverted into a freshwater lake called IJsselmeer alongside the reclaimed Flevoland, population 400 thousand. On Griend, there is a cabin used only by biologists and birdwatchers, who observe, through binoculars, Shelducks, Redshanks, and Short-Eared Owls. Their boots stand firm on ground that once supported a monastery, where monks brewed beer while they cooked gull eggs over the hot coals of a fire.*

Finland is home to over 180 thousand lakes. They are notched into its evergreen landscape, purple-lit by the moon, surfaces rippling, rising and falling in Nordic breeze. They pool in the crevices of glacial mountains, in the fresh water beside the Baltic Sea. The lakes are what the people of Espoo and Tampere retreat to in times of bad weather: in *Järvi-Suomi*, Finnish Lakeland, north of the Salpausselkä Ridges, the terminal moraine

which holds Finland's thousands of bodies of water above the Equator and up toward the Arctic Circle, men, women and children light fires in their saunas, hole up in cabins painted a pastoral red, heat *Juusto* cheese on the stove before cutting into it and drinking coffee, step out into a lashing storm with their Karelian bear dogs, who are constantly searching the wet forest ferns with their snouts for the scent of danger—a moose, a wild boar. Father and son walk slowly to the end of a dock as the rain dissipates. Their faces lit by a cool grey sky, they look down at the stray leaves that float in the water. The father stretches out his hand and points into the lake:

“Look at this fish,” he says. “Look at that fish. *Taimen*.” Brown trout.

Mother and daughter, inside, read Arto Paasilinna novels by candlelight. They are ready for the polar night, and for winter. At dusk the family sits two on a wooden swing, two on the lawn and watches the lake's night movement. Far from the city, they burn birch logs in a pit, sip hot cider and can see the stars, the Northern Hemisphere's autumn constellations.

As for Michigan—Finland's sister across the Atlantic—it has over eleven thousand lakes. Michigan's Upper Peninsula is tucked below Lake Superior, the largest lake of them all, pearl-lit by the lights of iron ore ships. The land is marked by the mundanities of green and water. Low mountains—Sugarloaf, Hogsback—lift up not far from Superior's shores, toward the sky. Streams trickle, rivers rush, people haul their boats—everything goes to the lake. As a young girl, I circle Presque Isle with my dad: we look for deer. The lake's waves crash up against the breakwall and Dad holds me back from the water with

his palm. We watch ships fill up with iron ore pellets in a cloud of dust, and then night falls, and single, buttery lights here and there—the stars of the ore dock—illuminate.

“There are men up there,” Dad says. “And in the boat. You can wave to them.”

I do.

At home, our job is to find bait for fishing in the Upper Peninsula’s streams and lakes. The brook trout of the Fence River, swimming in deep pools under low branches, seek out nightcrawlers on hooks—earthworms pulled from the damp soil of fishermen’s backyards. And so, when night wraps its fingers over the eaves and edges of our house in Ishpeming, Michigan, at the end of a day of rain, Dad hands me a flashlight. The backyard is blackened by sky, stars, the shapes of the shed and the Mountain Ash climbing into power lines. I walk across the grass, the ground slick with moisture lifted into the sky and then dropped again. Water has puddled and formed rivulets all over the lawn. I step as in a careful game.

“There, Annie,” Dad says. “Gentle, now.” We are tugging worms up from beneath blades of grass. My pale hands become frosted with a thick black mud, textured by tiny lawn-stones. I rub them on my jeans. The juices of the earthworms string across my wrists and fingers, jewelry. I drop the worms into a pail of dirt. A rising moon lights up the odd purple of their invertebrate bodies as they curl around in the pail.

We keep the nightcrawlers in an old Country Crock container, in the refrigerator, between the seasoned pork chops and the red potatoes. In the fridge, they stay alive.

On evenings after earthworm picking, we sit at the picnic table in our backyard with my mother and talk. Dad drinks a beer and leans back with the can in his hand,

supporting himself with strong elbows. The sleeves on his red flannel are rolled up. He looks up at the night sky, that vast and sprinkled bed of stars.

“Dave,” my mother says. “You’ll fall right asleep out here.” And it’s true that the May darkness is dipping us all into sleep.

On weekends we go on fishing trips. Dad tucks worms into his fishing creel; my brother and I sit alongside him in the Ford F-150. My knees bump against an old cassette deck hanging below its dash. Dad stops the truck at Koski Korner and buys us dill pickle chips, cream soda and Airheads. We pass the Pickle Patch, and Mount Shasta, where Dad will sell blueberries when he is laid off from the Empire Mine. We pass a huge sign that says South Republic. At Perch Lake, we fish from an aluminum boat—we troll over water smooth as a window pane. At Silver Lake we navigate stumps and driftwood, misshapen and ghastly in the twilight. At Lake Independence we swim first at Big Bay’s beach, then pull leeches off of our legs and lay them across upturned boats to crackle in the sun. We feed ducks that paddle near the shore. We rest our fishing poles against saplings, pluck raspberries from branches along paths, skip flat stones over the water, talk about pigs and snowmobiles and Jimmy Stewart, take the hooks off of our fishing rods, stop at a gas station for rock candy, drive home.

In Finland, they serve the fish caught from their lakes in pies and soups at rustic tables.

At *Lasipalatsi* in Helsinki—the Glass Palace Restaurant—the menu reads *perch rolls with vendace roe sauce, pan fried pike perch with horseradish, whitefish tartar, salmon soup with rye alongside*. Fisherman whip long lines and lures from the water of their lakes and bring their catches to the kitchen and then to the plate. At Lake *Näsijärvi*, 312

feet above sea level, men with brimmed hats and rolled up sleeves lunge barbed hooks into the tiny-teethed mouths of perch and landlocked salmon, to sell them at the market in Tampere. In homes, grandmothers—mine, maybe—fold the corners of butter-dough over these perch and salmon to bake *Kalakukko*, just as grandmothers in Hancock, Michigan, tuck perch into loaves and then loaves into stoves. Families flock to Friday Fish Fry. Or, they go to sleep full of homemade whitefish parmesan, Lake Superior whitefish slathered in mayonnaise and lemon. In the mornings they unlock their backyard sheds to retrieve their fishing poles, walk back into the kitchen to take their containers of nightcrawlers out of the fridge, climb into their pickups and are off again. This is the Upper Peninsula, this is Finland.

One September Dad brings us to the Fence River to fish, and we get caught in a terrible storm. On a small AM/FM radio, dirt caked between its buttons, Dad listens to severe weather watches and tornado warnings, then packs us up into the truck. Night falls. A strange luminescence forms in the sky, a violet storm-light in spite of the darkness; sudden cuts of lightning brighten the high points of Jack pines around us. Potholes emerge under a downpour. In my fear, I think of my grandmother, Elaine—my dad's mother. She died right before I was born; in moments of terror, I think of her watching me. At her home in National Mine, she had a summer kitchen in the yard where she could bake blueberry pies in open daylight. In pictures of her behind the summer kitchen's low walls, she seems warm and safe. Nothing like me. I think of her during the storm—and of how I know that my father misses her, the touch of her hands on his hair when he was young, the potatoes she boiled and served by yellow lamplight.

“Like hell am I going to get stuck,” Dad says as the water on the road rises.

As the wipers thump on the windshield, my brother grips the truck door and the seat and looks to the floor. I watch trees bend sideways in the wind outside. Everything lashes behind a shield of rain. I appeal to my grandmother as her son’s hands, gripped tight on the steering wheel, turn wildly left and right. His arms guide us out of the woods. We burst onto the highway, almost hydroplaning on pavement that has now become a long lake that we must follow home. But we make it. The kitchen light, steady, yellow, is visible through streams of rain obscuring the front windows.

“Didn’t catch anything,” Dad says to my mom in the kitchen. We return to Silver Lake the next day, and our tent is in a spruce tree.

In Finland, in the summer, the sun never sets above the Arctic Circle. This is the midnight sun. And in the winter—twenty-four hours of darkness. The polar night. In Sodankylä, Lapland, the dark and the night and the snow last for days on end. People stay indoors by their fireplaces and do not move. Lake waters continue to churn beneath thick layers of ice; far above, bitter cold permeates, blizzard snow slicing the landscape. There are fish below, sluggish. Perch, salmon, brown trout. They swim through the warm channels that remain deep below the ice. Gliding past logs and boulders at the bottom of the lake, they cannot be seen—no light reaches their reflective scales, the shiny tips of their fins which in seasons warmer will land on porcelain plates somewhere in the world. Because the water always comes back up to the surface, and the fish along with it.

## Eggs

*On June 24, 2003, Manchester, South Dakota—once a burgeoning stop along the Chicago and Northwestern Railway, with one school, two gas stations, two churches, the juts and pillars of grain elevators, and a post office opened by Chester H. Manchester—was wiped out by an F4 tornado. By the spring of 2003, Manchester had already been reduced to dust, a victim of the changing modes of transportation in the United States and the waning of the Black Hills gold rush. Pasque flowers bloomed purple among peeling houses and a population of less than one hundred people. Summer's tornado cleared them away. Half a mile wide, with winds upwards of 250 miles per hour, it annihilated the remaining barns and sheds, the boarded-up livery stable and the diner that had been closed since the 1952 when cooks poured cans of baked beans into black pots on stoves and stirred over low heat, to serve alongside both eggs and grilled cheese sandwiches.*

*Manchester's three families evacuated before the air pressure dropped one hundred millibars in eighty-five seconds, before the tip of the tornado began its twenty-five mile path. They packed their trucks with sweatshirts, photos in brown envelopes, bracelets and watches, took 427<sup>th</sup> Avenue to Highway 14 and sped east for De Smet. The only thing that never left Manchester and yet survived the tornado was the town pump, constructed in the nineteenth century: hit full force, it was left standing. Reports make no mention as to the agitated condition of the water beneath it. Were a former Manchester, South Dakota, resident to lift and push the pump today, he might draw up something as clear, as refreshing, as mysterious as what lies in the middle of an F4.*

By the time I emerge from my rental in Helsinki it is early evening. Buildings are lit with the buttery glow of electric lights, turning corners, reaching into dark alleys. I walk toward Uspenski Cathedral. *Uspenskin Katedraali*. It is Eastern Orthodox, with a complicated face of brick arches and gold and mint turrets that spear the winter sky.

The cold here feels like that of the shore of Lake Superior, the lake that fronts my home in Marquette, Michigan—but the cold is sharper here. It cuts like a blade against elk bone, jams like iron through breath and into blood. Helsinki Harbor is frozen over with thick ice floes; icebreakers will clear a path through them in the morning for giant Baltic ferries coming into port. Tonight, a fierce wind drags across the grayish floes and whips into the city. This is why I walk with my shoulders up, with my hands tight in the pockets of my down coat. This is why I wear tall boots and cover my head with a wool hat.

On frigid limbs I pass the South Harbor, the Presidential Palace and the Market Square. The Havis Amanda statue stands braced at the end of the *Esplanadi*, two long thoroughfares flecked with sapphire lights and snow crystals. In the distance, surrounding the city, I see the arachnid shadows of Scots pines loom against a further darkening sky. I think of the walls of tall pines along the Fence River in Upper Michigan, off of M-95, where my father used to take my brother and I camping in a tent, where we would light a fire whose most ambitious flames could not illuminate the pointed tops of the trees around us.

It is not long before I reach my destination: Konstan Möljä, a restaurant on the city's western side. Its low ceiling bullies down the warmth of its hearth. In the back of the restaurant a Finnish family celebrates a graduation or an engagement or a reunion; a

man in flannel lifts his glass of Olvi. *Kippis*. With fingers lost to frostbite and scarred faces, they drink. Their grey eyes water behind shields of beer; their laughter fills the spaces between the room's scents of meat and cedar.

Across a lanky, crude-cut table lie dishes of marinated herring and Karelian pies, small bowls of pickles and lingonberries. "This is a Swiss stew," a man in a white tunic behind the table tells me. He has a narrow rope belt around his waist. "It is made with fish."

I sit beside a window with a view of *Hietalahdenkatu*, a dark street lined with steel-blue snow paths. Inside, everything glows, toasted. The décor is simple: lanterns hanging here and there, sepia pictures of people and places that are probably long dead. In one, an aproned woman pours milk from a jug into a wooden barrel. In another, hay cutters take a lunch break beside a log sauna, lining a bench and unwrapping their *karjalanpiirakat*, rye folded over barley and potatoes. I cut into a fish dumpling. It could be herring or pike. At the table next to me, a group of Spanish students drink pear cider and talk over their menus. It begins to snow again, and I see it reflected in the cider glasses, flickering on both sides of me as I eat.

When I was so small I could barely reach the top of our kitchen table from my chair, my dad stood at our oven and fried brook trout. He caught them himself in the streams of the Peshekee Grade. He cast a lot of lines, with the flinted gold of a Mepps spinner flicking over water. He put butter in a pan. He put in the brook trout, down on its split-open belly, smoldering like a spent fire while kicking up licks of grease from its sides. And then he cracked open the egg. In the *Kalevala*, the Finnish national epic, I learned that this is how

the days of the world began: with an egg. *“The upper half that was yolk became the sun for shining, the upper half that was white became the moon for gleaming; what in an egg was mottled became the stars in the sky, what in an egg was blackish became the clouds of the air.”* I imagine a world made of eggs being wiped out by weather. I can see it freezing under the snow—the white, the yellow, the blackish.

On the days that my father cooked, I waited for the fish cheeks. Tiny, smaller than the size of a dime, my father saved them for me. I remember the intensity of flavor in such a small thing—like chewing on a spark, like a grain of salt alone on your tongue. All you had to do was pull back one thin layer of the trout’s silvery skin, and there it was. Sometimes, Dad shot a partridge and cut open the crop in its neck, where its meals were stored—we found little berries and seeds inside. These things were secrets, spilling open.

Snow dusts over Helsinki. The waiter at Konstan Möljä, rope belt still draped around his waist, walks outside. I wonder what he sees. He leaves the door cracked open and in seeps the cold, and a sound—the sound of a horn, like a far away curfew. The waiter moves his knees up and down against the bite of the ground beneath him—his shoes are impractical for the weather, he must live above the restaurant and pad down in soft soles to stoke the fire and light the tabletop candles and turn on the stove.

I am thinking of my mother, now. She worked in a restaurant in Ishpeming where the kitchen heated up the entire room, from the bodies of rainbow trout tacked to plaques on the wall to the black-and-white reprints of men with shovels and drills and hardhats at the Cliffs Shaft Mine. She poured coffee from a pot into lined up white mugs; she placed

forks onto napkins, counted change at the till. From there, she stood behind the window, watched thick Upper Peninsula snow falling.

My waiter in Helsinki looks over the Gulf of Finland, where the ice channels and cracks out into the open sea; he looks at his city, with its specks of windows, its cathedrals, its coal power plant churning black smoke into the sky. The Presidential Palace, the Town Hall, the Senate Building—*Valtioneuvoston Linna*. The Sibelius Monument and the statue of Alexander II. A world made of eggs. I wonder, if the Baltic lifted up over its shores—if its ice floes flooded the Market Square, the *Esplanadi* park, the floors of Kappeli Restaurant and the counters of coffee and ice cream kiosks, mottled, gleaming—what one thing will be the one thing left standing.

## Ashes

*By 1936, the Dust Bowl—a series of dust storms strung over a period of severe drought in the Great Plains of the United States—had devastated most of Cimarron County, Oklahoma. Farmlands eroded; wheat and grain crops lifted into the air and became dust. Soils drawn up by the wind became dark clouds over the Atlantic Ocean: “black blizzards.”*

*A farmer with his hat held tight to his head ran through grainy lashes of wind alongside his two sons, headed for a sand-buried shed, for shelter. The two boys held wet cloths over their faces, dark spots forming where lips met fabric from exhalations and inhalations of dirt. Ahead of them, behind them, rolling nebulas of dust descended. It could be hours until the storm was over—until the light from an oil lamp thrust through the wooden door of the shed would reveal more than just an umber wall built from the seeds the men had planted, built from the shredded crops from which the man and sons had hoped to bake loaves of bread. Perhaps the father had prepared for this. Perhaps, since 1934, he had been stowing away tinned pears and peaches, longhorn cheese, things that could be eaten without needing the heat of a flame. Maybe he had an old bottle of moonshine, and would give his two boys just a sip, so they might forget for a moment that they were on the cusp of the world’s end. This might not be their first time in the shed—it had been two years since the Dust Bowl began, and no one could see the end. There was no looking through to the other side of the black cloud. The best the farmer and his sons could do was make use of whatever laid behind the clapboard shed walls, to survive until the storm lifted from Cimarron County—the least populated county in Oklahoma, the last*

*place the government would lend a hand, the dot on the map where a farmer and his sons had only their six lungs to help them breathe through the dust.*

At the end of August—after the “Dog Days of Summer,” as Dad says—I get into the front seat of the Ford for the drive to Grandpa Martin’s house in National Mine, Michigan. We wind up a dirt road to the top of a hill, to a tiny house overlooking cliffs of iron, little brown streams and Mountain Ashes, cars and trucks testing their suspensions on County Road 476 in a cloud of iron ore dust. The ground shakes: miners blast through the earth with dynamite. Grandpa’s house seems to lift and fall again, transportable.

Dad takes me into Grandpa’s kitchen, low-ceilinged and cluttered with coffee cups, matches, tiles pulled up at their corners, a Coleman propane lantern with its mantles burning painfully white. I stare at the coffee cups, russet-stained. They have moose on them, and bears on them. They say names of restaurants I will never eat at, and *Cleveland-Cliffs Iron Company*, and *The Mather Inn*. They have chips in their ceramic; one sits on the floor, near the sink, coffee stagnant and cold within.

“Dad?” my father calls. “Dad.” He lifts the lantern from its hook beside a cupboard, sets it on the table. “Why do you have the Coleman on?”

“I like the smell,” he says, appearing in the doorway. Grandpa wears a blue and grey flannel, brown pants. He has a Carlton Saw Chains cap on his head. His face is narrow; his eyes are the same grey and blue as his shirt.

“I didn’t think anyone liked that smell,” Dad says.

I feel Grandpa’s light touch on the top of my head. “Look at her squinting against that light,” he says. “And crinkling her nose like that.”

Dad shuts the lantern off and the room is lost in a now dull and yellow light. The electricity in this house is ramshackle. Plates, knives—*puuko* knives, crafted in Kauhava, Finland, where Grandpa’s Dad emigrated from—flicker oddly between shadows. Grandpa sits across from me at the table, his right knee knocking one of its legs so that a glass bowl of cinnamon candies shakes on its surface. “Here,” Grandpa says. “Have one of those, Annie.” I hate them. They don’t taste sweet—they only burn my lips and tongue. But I don’t tell him this. I take two.

“We came here to get the potatoes,” Dad says.

“Shovel’s in the shed.”

Dad unlocks the shed with a gold key and finds a big shovel, a small shovel, and a pail. Grandpa gets up to where his steelworkers’ union coat hangs on a hook and pulls a package of Panda licorice from its pocket. “This was your Grandma’s favorite,” he says.

“Annie,” my dad calls from outside. “Let’s see what we can dig up out here.”

“Well, go on,” Grandpa says. “The licorice won’t run away on you.”

In the backyard, I push all of my weight into the handle of a shovel, searching a mound of soil for lumpy roots. I place dirt-encrusted potatoes into a bucket. Dad brings the bucket into the kitchen to set it tilted on the upturned tiles. Grandpa is asleep on the sofa in his living room. Beneath him peek the amber and russet patches of an afghan, one that my grandmother Elaine must have knitted for him under dim lamplight while he was away for three years during World War II.

\*

In Helsinki, Colm and I go to the Finnish National Museum. It is on the *Mannerheimintie*—a castle with a single red steeple, lights glowing as through organza, all against a cloud-lit sky. The woman at the desk thinks I am Finnish.

“*Mitä haluaisit?*” she asks.

Colm hangs back, next to an entryway portrait of Gustavus Vasa.

“I’m sorry,” I say. “*Anteeksi*. We speak English.”

She frowns.

We walk through the museum. Frescoes of the *Kalevala* span overhead. A bearded man in a tunic points a sword at a leather-faced woman with wings. This painting is *The Defense of the Sampo* by Akseli Gallen-Kallela. It depicts one of the few times that Väinämöinen, Finland’s greatest folk hero, fought with a weapon other than his words. With both, he won.

I stop at an exhibit of a chimneyless cabin, its wooden walls black from smoke. An iron kettle hangs in front of its fireplace. There have been no attempts at recreating the man and woman that lived inside; there are no statues, no figures to accompany the earthy darkness of the cabin walls. But I can imagine the farmer and his wife; they sit at the rustic table near the fire. The woman peels potatoes with a large knife. The man hand-carves a distaff with a small one.

“*Punainen?*” the man says to her. “*Sininen?*”—“Shall I paint this red or blue?”

“*Oranssi,*” she replies. Orange. The color of the coals.

Colm comes up beside me. “Where did all of the smoke go?” he asks.

“Into their lungs,” I say.

The man and woman would have searched through the gauzy filter of smoke with their eyes, to find the work in their hands. To find each other. They would have felt how to carve things without cutting their fingers. And there are two tiny windows, which would have let some of the smoke loose into the Nordic air, to swirl around the antlers of reindeer, to darken the hair-tips of Arctic foxes.

On summer mornings, I sit at the kitchen table of our house in Ishpeming as my mom turns over a black stock pot in soapy water at the sink. The single window before which she stands reveals the blue of the sky, the corner of a bulbous cloud, the old numbered thermometer hanging on the side of the garage, a mourning dove perched on a power line. I hear a truck rumble up. Grandpa is here. He enters our house with the open and slam of the screen door and greets my mom heartily, pulling me onto his lap. We eat cake, baked by my great aunt Esther, for breakfast. Yellow, fluffy, frosted, it slicks all over my hands.

Mom walks to the next room and I hear her say to my dad, “Honey, your father is driving again.”

Dad appears in the doorway. “Hey,” he says. “I can come pick you up whenever you want me to, you know.”

“I get up at four in the morning. And I was at Esther’s first.” Grandpa moves me from his lap to the floor. “She made you a blueberry pie. It’s out in the truck.”

“Ah, yeah,” my dad says. “Annie, why don’t you go find that pie?”

“Front seat,” Grandpa says to me.

I go out the side door of our house and lie down on the grass. The thermometer reads seventy-nine. A brown rabbit stuffs its mouth with grass near me, like clumps of hair. They disappear down its throat. I feel the weight of August coming down on me: heavy air, heat. The pie must be melting in the front seat—rebaking, hot as if it has just come out of the oven.

Colm and I walk from the museum to the *Kolmen Sepän Patsas*—the Three Smiths Statue. It is on *Aleksanterinkatu*. The men are nude. They swing hammers down onto an anvil, their bronze torsos greening from the passage of time. Each man has been holding his hammer in the same position since 1932. The statue shows shrapnel damage from Soviet bombings in 1944. Cuts, gashes, bomb-etchings, right in the bronze, right in the thighs of the smiths themselves. Still, they lift their hammers. Snow falls, and when I look up, I see a tall crane removing it from a rooftop. I remember my dad climbing to the top of our garage, red socks showing over his black boots, holding a shovel and pushing snow into the alley below so the roof wouldn't collapse. In the summer, he would patch that roof. Kneeling down with nails held between his teeth, he'd hammer into the shingles, making the sound of work, which all of our neighbors on Empire Street would wake up to.

Near the Three Smiths is Zetor—the “tractor restaurant.” Colm and I go inside. Rustic wooden beams jut from floor to ceiling; pots, pans and milk jugs cling to the walls. Tables line up beneath reindeer hides and false traveler's ivy or silver spurflowers. A woman in a white t-shirt and a checkered apron brings me a bowl of rainbow trout

soup, then fried vendace and beetroot on a tin plate. Colm eats sausages and mash out of a sauna pail.

This place reminds me of a trip I made to Askel, Michigan, in the Keweenaw Peninsula, to a preserved Finnish farmstead that sat clap-boarded and dark in the woods. Hanka Homestead: a hand built sauna and smokehouse, a two-story building with iron-framed beds on its low-ceilinged second floor, a barn with a floor still covered in old hay, a small shed where grandparents churned butter. One building was full of farming implements. The tour guide showed me a rutabaga seed planter crafted from a carved oak handle and wheel and a tin can.

“They made things any way they could,” he explained. Then he showed me how Herman Hanka would go about planting the seeds, pushing the wheel along the grass of the farm.

“And Herman was disabled by a mine blast,” the guide said. “So he had a limp.”

I sit in Zetor, opposite of Colm, and remember that farm. All of its old, skeletal equipment lined up ghostlike on the drive in. Its blacksmith shop, windows dark with soot. The loom upon which Anna Hanka wove rugs for the wooden floors. A root cellar, whose frost-encrusted door Herman jarred open during Januaries and Februaries to lift salted whitefish out of crates or retrieve butter produced by his Jersey cows. The farm is still there, in the middle of the Keweenaw woods, at the end of a long, dirt road. All of the tools, all of the coffee-stained cups and saucers, the frayed sheets on the bed—still there, lit at night by moonlight with no one around to see.

“Cooperation was the key to this farm,” the tour guide told us. “They all worked together. And, if nothing else, they needed each other to keep warm, because the nights got very cold here, still do.”

I watch Colm struggle to lift a sausage over the sauna pail’s lip. Transfixed by the oddity of his meal, his eyes are miles away and his image is lost among the harnesses hammered to the wall behind him, the antlers of a reindeer chained to the ceiling over his head.

On summer nights, Dad drives Grandpa home from wherever he has driven that he was not supposed to. It is a slow, bumpy ride, alongside and under a giant pipe that leads to the Tilden and Empire mines. Ishpeming, to Palmer, to National Mine. “Tears of a Clown” plays on the radio, and then it is quiet. Eerie moonlight falls on the pavement and saps the last green from the darkening pines tunneling us down the road. The lights are still on at Grandpa Martin’s when we return.

“You know, Paul had a brain tumor the size of an orange, and he still drives,” Grandpa says as he steps out of the truck.

“He’s not supposed to,” Dad says.

“Well, he manages just fine, and so do I. So you remember that.” He walks up to his door and lets himself in with the turn of a key.

Dad sits for a minute and lets the engine of the Ford idle in a low rumble that echoes off of the wall of spruces shielding the house. Then, he backs up, and the truck’s headlights swing away toward the direction home.

“Why can’t he drive?” I ask.

“He just can’t see like he used to,” Dad says.

Two weeks later, Grandpa comes to stay with us because he starts a fire while cooking and damages the kitchen, the walls with their already-peeling paint, the floor with its already-upturned tiles. I don’t know what he was cooking—maybe a deer heart boiling in a pot over a purple flame, maybe macaroni, maybe a partridge he shot in his backyard then sliced to fry in a pan. He fought in World War II, Grandpa. He watched over my shoulder as I picked blueberries in the woods. When my dad was young, Grandpa pulled him around in a wagon in their yard in National Mine; when my dad was older, Grandpa taught him how to fish, and for forty winters they cut into the ice by the Marquette ore dock and tore thrashing pikes from the frigid waters of Superior. Grandpa called my name from his bed in Marquette General in 1991, the first time I knew what a hospital was: the smell, the sheets, the pumping sound of an intravenous drip.

He stayed with my family for weeks after he started that fire: walking to his sister Esther’s for hot-from-the-oven blueberry pie, bringing me to Partridge Creek to see where train tracks used to lead from Ishpeming to Marquette, helping Dad patch up our aluminum rowboat as it glared up at them under harsh sunlight. He woke up on the sofa, sat at the kitchen table and drank coffee with my mother in the morning before my dad came home from work. When snow began to fall, he shoveled a path from our door to the street, and I followed him, the glints of ice crystals on his coat, the corrugated prints he left behind him. He did so many things, but he couldn’t harness the foreignness of heat as properly as he did the familiar—almost familial—cold.

## Splitter

*On March 4, 2010, a crew of sixty-three men toiled in the cold dark to remove avalanche snow from a section of Rogers Pass, British Columbia. This was the Canadian Pacific Railway's sole track through the Selkirk Mountains—Canada's only rail access to its west coast. The men used a locomotive with a plow to clear the thick snow that had rushed down from Cheops Mountain onto the timber and steel. Lunging through drifts in tall boots, they shoveled, the sinews in their shoulders tightening beneath their Carhartt coats. They removed their gloves to wipe the frost from their mustaches—they worked fast. An engine headed for Vancouver was on its way, and there may be no stopping it on the ice.*

*A roar sounded. It swept through the white puffs of breath floating before the men's faces, around the rough-hewn oak handles and aluminum blades of the men's shovels, and beneath the points of the picks they used to break through crusts of ice. It was the sound of snow releasing from Avalanche Crest on the opposite side of the canyon. Spruces, boulders, pale and frantic hares, frozen pine needles and cones, and a brown mitten left behind in 1897, rushed down the hill upon the backs of ice-glaciers and into Rogers Pass, burying all but one of the plowers, Billy Lachance. Billy sat on a mound of snow nearby, having taken a break to relieve a pain in his chest. From the side of Cheops Mountain, he could see the blue-green of the winter night sky and an odd glow of clouds on the horizon. He removed his gloves to put his cold hands to his mouth and fill them with warm breath. He heard the avalanche coming, sat still and watched.*

*Frozen in place alongside the pass, he watched his fellow workers disappear under the*

*launch of snow. His breath paused long enough for the cold to spread back through his hands. And then he stood and made the race for town.*

*Six hundred rail workers, doctors, nurses, and townspeople booted and sled their way through the snow to Rogers Pass to dig the men out. Many of their bodies were frozen in upright positions; the locomotive and its plow, weighing over ninety tons, were tossed fifty feet, discovered upside-down. There was nothing left to do but dig. Dig through the thick drifts of snow that now lay still, as if they had always been there. Dig until their shovels clamored against the cold rails. Dig, though eventually the snow would melt and other snow would replace it.*

Colm and I take a ferry to the island of Suomenlinna. The morning is cold and still but for the sloshing of lobs of ice in the harbor. A coffee vending machine whirs and steams as it fills paper cups. I sit by a window to watch ducks floating on sheets of ice around the *Suomenlinna II* ferry. It is January: the ice has made new islands, a winter archipelago in the Gulf of Finland upon which the ducks can land.

Suomenlinna is covered in snow, textured by naval guns and stone fortresses and the *Vesikko*, a Finnish submarine from the 1930s. We circle the island, which has been shoveled only here and there. A simple church marks the end of a long footpath—a functioning church within a retired military fortress. There is little else to see but white and grey, lit by a pale bulb of sun. A Viking Line ferry passes Suomenlinna onward to Helsinki, a distant scatter of lights on the horizon. The ship's passage is narrow: its steel sides send ice chunks and swirls of water fleeing to the shore of the island.

I tighten the laces on my boots, finding that I am crusted with ice from toe to ankle to thigh, to the tips of my scarf.

“You look cold,” Colm says. “Hot chocolate?”

We find a café near the ferry port. We order *kaakao* in plain white mugs, whipped cream on top. I feel the heat through the cup and it warms the blood rushing through my hands, moving through my limbs. I think of when I was a young: sometimes, I woke up in the morning and found my dad in our basement stoking the wood-burning stove. Having already been outside, just home from midnight shift, he smelled like the cold, a raw smell that had sunk into his shirt. It was the scent of the Empire Mine, of the rubber of his Sorels, of low atmospheric pressure, of snow melting into the fibers of a coat; of motor oil, of leather and of the friction of hands on a steering wheel, of the coffee he drank out of his thermos on his way home. Dad would open the door to the stove, and all of those scents would burn away. Inside, behind the stove’s iron door, orange flames ate logs—they crackled, shot, disintegrated. Flecks of purple fought incinerated bits of oak at the furnace’s floor. Dad stoked coals with a black iron stake. There was power in his arms—when he pushed into the flames, I saw muscles turning, tips of blonde arm hair blasting back against a shield of heat.

He shut the door to the stove, stood up. “Breakfast, Annie?” he said. He touched the top of my head with the same hand that had started the fire. We went upstairs for some Trenary cinnamon toast. Dad dipped it into his coffee—a tough, twice-baked Finnish recipe, the toast was meant to be tempered by use of a hot drink. Dad dipped my pieces into coffee, too. He would have to go to bed soon: he worked at the mine again at ten o’clock in the evening. Quiet, he sat at the kitchen table to wind down. The glow of a

February dawn filtered through the window. The thermometer on the side of our garage read below zero. Mom woke up and padded into the kitchen in her slippers, putting her hands on Dad's shoulders.

“Morning,” she said.

Oak-driven heat worked its way up into the house now. The coffee maker clicked and boiled. Dad brushed the crumbs from his flannel shirt and went to bed.

I hear the sound of the ferry returning to Suomenlinna before I see it. Ice sloshes and crunches into the harbor; ducks flap their wings; a horn calls over the barren surface of the island.

“Shall we?” Colm says. The skin on his cheeks pulses pink from the cold. Bits of ice cling to his beard; they have not melted under the rigor of the hot chocolate.

“Yes,” I say. “I suppose.”

It has darkened outside, though it is only early evening. Clouds turn charcoal on their undersides, begin to reflect the wintry lights of Helsinki. The *Suomenlinna II* chugs back to *Kauppatori*, the Market Square, and Colm and I stand there for a moment. Earlier, vendors sold *lihapiirakka* and Kauhava knives here. Huddled in tight bundles beneath their tents, men and women brushed snow from their wares as it flew up from below. We had missed all of that while wandering around Suomenlinna.

Mom and Dad used to take me to the Upper Peninsula State Fair every August, just before I returned to school for the year. Just inside of the fair's entrance stood a giant exhibition hall where we watched people in milk-white coats pull saltwater taffy: grape, pistachio, chocolate. Free samples wrapped in waxy paper sat in a basket, waiting to be

plucked. Saykly's Candies. Further into the building was a table full of maple sugar candy in the shape of leaves. The Culligan Man gave you free filtered water in paper cones. There were hot tubs you could dip your hand in, and places to buy shirts with any animal you could imagine on them—mine had a palomino horse, because it had blonde hair, like me.

In the exhibition hall, I watched the people making things and showing the things they had already made. When I go back now, I wander outside of the building, to the back dusty trails of the fair, to the Jilberts shed for a Mackinac Island Fudge ice cream cone. Dad always got butter pecan.

Colm and I stand between the Presidential Palace and the Baltic Sea, on a barren scrap of land, as if homeless. The vendors and booths here rise up in all their colors during the few hours of daylight and then disappear with only bootprints left in the packed snow. People go to their homes, put matches to candles and hearths and sit in big chairs to oil their Birch burl *kuksa* cups with rough hands. Colm and I do not have these things to take care of.

“Dinner?” he says. “A drink?”

“Home,” I say. Back to the rental, where I have already bought salami pizzas to heat in a tiny oven, and bottles of Kopparberg, and Runeberg cakes.

The rental apartment has a sauna on its first floor that we can heat to combat the cold. It is a private place in a world where people keep to themselves. It smells of cedar and pine, of steam on stones, of the requirement for people to build things and fire them up. Knotted boards spill earthiness into the sauna's dry heat. Colm walks out when we hit

one hundred and seventy-five degrees. I reach down into a handmade sauna bucket and ladle out some hot water to pour on my skin, my legs stretched onto the lower sauna bench. I imagine I will never be cold again: that I'm not buried under so many inches of snow, but insulated by them instead.

The U. P. State Fair had, and still has, a steam engine-powered log splitter. Dad used to take me there to watch it cut giant logs into boards for hours. The men wore thick gloves as they guided pine trunks along a blade bigger than my body. Sawdust hitched up my nose, clung to my hair. Dad sat on a rickety red bench, right beside the wooden pavilion the men stood under, beside its metal screen that prevented bystanders from getting too close. He watched them cut and cut.

“Look at them go,” he said.

## Slideshow

*In 1856, thick black clouds and a battalion of winds rolled over the Greek island of Rhodes. The storm approached the Palace of the Grand Masters, a former Byzantine fortress transformed into the Church of St. John and an ammunition storehouse. A priest in a robe and flowing cape swept up to the belfry to thrust a rope, ringing the church bells. He believed that this would deter a lightning strike. But the clouds shot spears of electricity into the stone buildings, deep into the thousands of explosives beneath. Sparks tumbled into barrels of charcoal and sulfur and potassium nitrate, black gunpowder that blasted a sphere of grey-orange smoke over the Mediterranean Sea. The brass and lead of casings and bullets ricocheted into the streets of Rhodes, rained from the sky in the storm's wind. The palace crumbled, incinerated under the tremendous heat of its goods burning. Four thousand people perished.*

*On the night of the explosion, a man in nearby Datça, Turkey, stood on his back porch smoking and looking out over the saltwater. "Canım," he called to his wife. "My Soul." She walked out and stood beside him. "It's like a star exploded," she said. They shared the cigar. He put his hand on her back. Moonlight tripped over the water. The waves heightened with each coming lunge. Though the storm was in Rhodes, it approached them slowly. "Come," the man's wife said. "Gelmek. Let's go inside." The scent of the Rhodes gunpowder washed over them—a scent so powerful, it alone may reignite were lightning to strike a second time. From forty-five miles away, it had crossed the water. Behind the adobe walls of their home, the man and his wife blew out every candle and fell asleep in the dark.*

The room is dark and my brother and I lean against the headboard of my parents' queen-sized bed. Its comforter is pale yellow, almost a shade of white; from behind me I can smell the trace of Mom and Dad's crumpled pillows and the scent of a winter wind draughting through the window. But the curtains are drawn. On either side of the bed, lamps sit on low mahogany nightstands. Dad has just clicked them off to plunge the room into darkness for his slideshow.

He sets a projector up to cast his pictures up onto the wall, next to the walnut-plaquet antlers from his last big buck. The photos he shows are from Vietnam. Dad was drafted when he was twenty—due to poor performance in college, according to family lore. He rarely speaks about Vietnam, but his words are in the pictures.

The square images on the wall are black and white, green and sulfur. Tents pitch up over mud and grass, scattered in empty spaces. Bags of sand stack high beside canvas walls. A hut with clumps of hay for a roof sits right at the mouth of a jungle. Dad whirs the gleaming, sepia film across the projector's lens. We see a helicopter with a dozen helmeted heads beside it; a black-clouded mountain looms in the distance.

The next photo is of my father shirtless with a towel around his neck. He still wears his watch. I can't see the hands, but the bright light in the picture indicates noon. Perhaps he was on his way to the mess tent for steak and potatoes, but he could have been searching for a patch of land to sit on, where he would use a tiny can opener to unseal the lids of his MCI Rations, or "Charlie Rats": crackers, beans, frankfurter chunks in tomato sauce. Sipping from his canteen, he might think of his own father during World War II: the stories he told of spooning potato hash out of a can, of biting into a military chocolate bar in the trenches, of the dextrose pills he swallowed to continue to fight. Beyond my

dad in the photograph are little one-man tents, stretching back to a far-off army truck and the brown-thatched canopies of a Vietnamese village beyond.

Dad stays silent as the pictures slide by, aside from the occasional joke about this or that man. His face flickers in the room's changing light. Mom had told us that Dad did not want to go to Vietnam: it was not what he was destined for. He hoped to stay in the Upper Peninsula. He wanted to join the DNR, count trout in streams by the flashes of their backsides under the water, hold the heads of deer and wolves in his hands as he tagged their ears, scour the reddish paths of the forest for the track of a cougar, which few in this part of the country had ever seen. He wanted to drive a truck at the mine. To wind down into the pit and lift heavy loads of rock from deep in the earth. To start a family. To buy a house in the U.P. where he could fire up the engine of a snowmobile predawn and tighten the laces of his boots as it puffed smoke into the dark. Instead, he was sent thousands of miles from home: in the valleys of clay cliffs with mossy backs, he tore through the jungle, swatting at the needly bites of mosquitoes on his arms and the brush of giant wet leaves against his face.

Yet, he saved things. After his death I find a King Edward cigar box filled with these things. A Northern Michigan University student ID card. A hunting and fishing license from 1990, bought at Wilderness Sports, on the corner of Main and Division. A cassette tape: *Cruisin' Classics, Volume I*, with "Do You Believe in Magic" and "I Heard It through the Grapevine." A red and brass pocket knife, sealed shut with rust. Photo negatives of soldiers. A military dog tag: Wuorenmaa, David M, 0856456964, O POS, Luth. Military payment certificates for ten and twenty-five cents, "for use only in United States military establishments." At the bottom of the box I find a scuffed pin: Vietnam

Veteran. One I never saw my dad wear. And coins: a Vietnamese one dong coin engraved with a fan of bamboo, and two Japanese yen coins, showing the Byōdō-in Phoenix Hall in Kyoto and a cluster of cherry blossoms. They smell of copper. One coin is so worn there is nothing left on its surface but fingerprints.

When the slideshow is over, Dad creates shadow puppets on the walls. There is one he does every time: the stretched-out body of a spider. He uses a flashlight propped behind him to illuminate the stage. The spider creeps along the tops of the yellow curtains, over the wardrobe and the gun cabinet. It could be real. Slinking over the bed in its wide, dark figure, it is fearsome, and I move closer to my father—to his hands, and the actual spider, away from its larger shadow.

Dad brings us downstairs, opens a can of Goebel beer—he pronounces it like it’s French—and sits in our living room recliner. I climb into his lap. He opens up the *Mining Journal* and we look at it together. It says that Hancock, Michigan is one of the snowiest cities in the United States. On January 18, 1996—the month before—26.5 inches fell in one day. Dad points to a photograph of the Keweenaw County roadside snowfall marker. Its meter reaches to the tops of the birches beside it.

“Imagine if that snow didn’t melt,” Dad says.

I pull open a tube of Ritz crackers, pop open a jar of Cheez-Wiz. This is our midnight snack. On the carpet, Sugar gnaws on a black pig-hoof, her teeth gleaming in the flash of the television. I turn my head to look out of the picture window behind me: it reveals a night as dark as a coast shadowed by cliffs, with hulks of snow banks rising up into the front yard. Cars and trucks pass by, dashes of snow marking the path of their headlights. Windshield wipers rise and fall. Streetlights point up into the clouds, their

frozen beams pushing through the Upper Michigan air that hovers over our roof as we hide below it.

Days come when I leave the house and see things that are foreign. Mom and Dad take me to Las Vegas, Nevada. I walk through Circus Circus, its red, blue and yellow lights flashing across my pale skin. I watch the games that adults play, watch them win and lose. I swim in a pool in Aunt Becky's backyard; I wander through her living room, peer at the steer skull on her mantel. It is hot, hotter than I've ever felt. The sun blasts onto the pavement; in a tank top and denim cut-off shorts, my dad sits at a patio table beneath an umbrella, running his hands through the tufts of white fur on the neck of his sister's Samoyed, a dog not born for this weather.

My parents take me to Chicago, to see Dad's other sister and her husband. They have no children; their days are spent on a big boat on Lake Michigan. They take us on the boat, and we float on air tubes, drinking pop out of cans in koozies. We anchor out in the middle of nowhere all day. In the city, at Shedd Aquarium, I learn what Beluga whales are: the white humps of their faces, the blackness of their eyes. The way they caper in the water.

We go "Out West." Wall Drug, the Badlands. The Black Hills. Mount Rushmore. All the way to Yellowstone. On a rocky cliff behind a one-story strip motel in Gardiner, Montana, Dad and I see my first big horn sheep. It stands there before us when we turn a corner. Maybe it is his first big horn, too—it is his favorite animal. On the Discovery Channel, he watches rams lunge into the air, lock horns, gouge deep cavities into one another's bone. In front of the big horn, we just stop and stare. It doesn't move.

Before he dies, Dad takes us to Savannah, Georgia. We drive all the way there. We go through West Virginia and see the Fenton Art Glass Factory. I watch melted colors blown out into shapes, becoming solid and beautiful things under the pressure of human breath. We walk beneath oak trees, Spanish moss dripping from branch to curb. I lie in a room in Aunt Becky's house, looking at a map with pushpins all over it: places she and her husband have been. Los Angeles, Denver, Paris. Kauhava, Finland. Rome. Coalmont, Tennessee. I wonder why my dad never bought a map to mark his path.

We go to Okefenokee Swamp. It is thick and humid: blackwater. We see egrets and ibises. I find out that there is a Florida black bear, just like what I have seen in the forest at Wildcat Canyon, lumbering over blueberry bushes and tree stumps. In a gift shop, Dad buys a shirt with an alligator on it. After he dies, I wear the shirt, though it is much too large and covers my whole body. I wear it all day; I sleep in it at night. I know the things that I dream those nights: pond-cypresses dipping their leaves down into deep water, herons lifting up and over swamp canals, snakes wrapped around mossy, gnarled branches.

When Dad has passed away, I go to Dublin. I meet a man there and fall in love with him—a man named Colm. For seven years, that love is real—and when it dissipates, I leave Dublin. I return later on my own. I awake at six o'clock in the morning. There's hardly anyone on Grafton and O'Connell Streets, fewer people on the Quays. A cold, damp breeze pours in off the Irish Sea. The sun is morning-bright; it has not yet begun to rain, but it will. Not a person says a word to me. I stand on Ha'penny Bridge, arched over the River Liffey, and witness Dublin open up into day.

At Butler's Café I buy a white hot chocolate with peaks of whipped cream melting fast on its surface. I drink it; nothing has ever tasted so richly of vanilla, sugar, cream. Finding myself an empty bench on St. Stephen's Green—there are few empty benches in Dublin, but there is always one here—I sit and hope to not see anything I don't want to see. I open a book, read about the Finnish hero Väinämöinen and how in dark Northland, in dreary Sariola, far from his familiar lands, he grieves: “only the wind do I know, and the sun have [I] seen before.” Perhaps when the artillery shells fell silent in Khe Sanh, Dad felt the same. But there are reasons that we go to these unfamiliar places, even if the reasons are not our own.

Dad used to take me to a Christmas village an hour from home. It was set in a large red barn; we arrived late, after others had gone. They had reindeer outside, just like the herds of Lapland. I ran my unmittened hand over their antlers, felt their hot breath on my skin. Incandescent bulbs in red, blue and green lined the eaves of the barn and the white pines around it. Candles burned in its windows. We stepped inside. Finnish straw ornaments decorated Christmas trees. Pine garland wrapped around rustic beams on the ceiling. A woman dressed as Mrs. Claus stood behind a folding table; a man in flannel and suspenders beside her handed me a steaming cup of hot cocoa. We ate oven-warmed brownies. Dad rubbed his hands together, blew heat into them. Only the four of us were in the room.

“Sit anywhere you'd like,” the man said. “You're our last visitors of the day.”

But Dad and I stayed in front of a window, watching the reindeer exhale and puff into the December nightfall. Christmas lights bounced off of their fur, their eyes.

“Both the males and females have antlers,” Dad said. “To protect themselves and to dig in the snow.” The reindeer brushed up against one another, shifted on their haunches and hooves. The bells on their harnesses jingled loud enough to hear inside.

“And they are the only animals in the world that can see ultraviolet light from the sun,” Dad said. “So that they can survive in the snow.”

“They can see more than us?” I asked.

“They can see in a different way.”

We got back into the truck, and Dad adjusted the rearview mirror. He started to pull away from the barn, but stopped. He put the Ford into park. “And,” he said, “they migrate farther than any other animal. Those ones you see, there. They weren’t born here. But don’t they look like they belong?”

In the truck’s side mirror, I saw the reindeer shuffling in a beam of moonlight. Their black noses pulled in the cold air, processed it, blew it back out into the night.

## Gunshot

*In Wellesbourne, England in 1141, peasants threshing grain to load into tithe barns and lords in manor houses dining on plates of veal and date tarts, goose in grape sauce, and bean-leek pottage, holding sloshing mugs of ale, heard the sound of a sudden collision. A thwack against stone. It was not the meeting of spear with shield; it was not the report of the first firearm arrived from China. It was not a meteorite exploding through space to land among oxen and ploughs—but it came from the sky. The sound was the beginning of the first documented hailstorm on the British Isles.*

*Pellets of ice hammered down from the sky, through the straw roofs of cruck houses and into the stone faces of cathedrals, pounding into the gates of motte-and-bailey forts, piling in ditches. The storm was minutes long. Peasants crouched, shielding their heads with the rough backs of their hands. Hailstones left purple bruises upon their skin. In the Great Halls of manor houses, men and women crowded together, watching icy shrapnel—the shattering bodies of the hail bulbs—spray through the open-air windows. The lord and lady of the manor hid in the solar, near an unlit fireplace, as thunderous hail blocked out all other noise so that the two could see only each others' lips moving while they prayed.*

*In the days following the storm, the people of the parish stood in the nave before a fervent priest who called the hailstorm an act of God. Cistercian monks entered the forest to lift beeswax and honey from hives—for candles to light the darkness, for wax tablets to record rites, for mead to drink as heaping storm clouds descended. High in the towers of stone-keep castles, soldiers looked down at villagers collecting buckets of water from the*

*River Dene. The castles were fortified on all four sides; the men looked to the sky. They waited for the apocalypse.*

*But the sun somehow spoked through the vertical wall of clouds; the hail did not return. The nobles and soldiers, the kings and queens, the serfs in their cruck houses sleeping on beds of straw beside their pigs and cows, realized that the only real warning for the storm would be its first sound, the shot of a frozen bullet. Church bells and fire cannons offered no protection—upon the sound, men and women could only flee for shelter, knowing the havoc that would follow: a downpour of ice which could cause unspeakable damage and minutes later, melt away.*

Dad takes me skiing on the trails of Al Quaal in Ishpeming. In the morning, when the sun is a suggestion of light through bare maple branches in our backyard, he lifts the garage door. I hear the grinding of door runners against overnight frost, the swish of Dad's coat sleeves against the sides of his body. I can feel the sting of the cold metal handle against his palm. He retrieves our skis, leans them against the tailgate of the Ford and runs a stick of Swix ski wax along their bottoms. In the bed of the truck, sitting on one of its rusted sides next to a corroded tie-down strap hole, I push my feet into my ski boots.

“The Finns have been wearing ski boots for over four thousand years,” Dad says. “And during the Winter War, they fought the Russians on skis.”

I see them rushing down hills, past foreign soldiers, gliding over ice, explosions of snow at their feet. I see them crouched behind frosty banks, aiming rifles, their skis stretched out beside them. The poles are like spears; at the bottoms of mountains, Finns drive them full-force into an opponent's heart. At the end of a battle, the Finns' toes feel

frozen and tight inside of hook-toed boots. They lift their skis, the wax rubbing into their shoulders, and step into warm lodges to be fed victory loaves of rye.

Dad takes the truck to the mouth of Baby Lake trail. We latch into our skis and glide past the toboggan run. Oak sleds whoosh through the woods to our right, slick as the bottom of our skis. On our left is a small frozen pond. Birch branches sift snow onto its surface. I see a deer far away—it watches us in a cold silence, its fur dulled by the season.

“Look,” Dad says.

At the end of the trail, there is a hill—Dad descends first. I feel nervous watching him disappear into the valley, though I know his pace is perfect, his lumbering legs ready to support a fall. I follow his red hat down the slope, steady myself by its trace against the landscape. We meet at the bottom. He stops and turns back to me, his breath a sheet of crystal in the air. He smiles and motions at me with a gloved hand tight in the wrist loop of a ski pole.

“In Finland, they hunt elk from their skis,” he says. “And chop lumber. The skis get them to the places deep in the woods where no one else can go.”

I remember Dad in our backyard hewing logs with an axe for firewood; I remember him cutting Christmas trees from private land, which he said should belong to no one. And I remember other things he pulled from the center of the forest—the carcass of a ten-point buck with dark eyes, hanging from a rafter in a meat-processing barn; the tiny lump of meat from a rabbit, still pink from the blood once quickened through its sinews. They smelled like iron and frost; like they had been shot, and cut, and frozen.

\*

The Al Quaal Lodge is built with earthy brown logs. It is always warm inside, a behemoth fireplace roaring at the center of its back wall. A lady with amethyst earrings hands me a Styrofoam cup of hot cocoa. Large marshmallows bob at its surface like blunt tusks, smears of cocoa powder at their edges. Dad and I sit on a rustic bench near the fire; I watch the sparks of snow melt from his mustache.

Men walk up and shake Dad's hand to say hello. One wears a Carhartt jacket, his wide figure blocking the yellow, fly-covered bulb of the lodge ceiling. "David," he booms. "Good to see you. Here with the little one?" He leans toward me, smelling of a Thermos. "Must have your Daddy's tolerance for the cold, hey? It's bitter out there."

"Bundle her up enough and she'll go anywhere," Dad says.

"Hope you take her ice fishing, then," the man says. "The Pikes'll never hear those little feet above them. She'll be pulling 'em out of Perch Lake, no problem."

"She's already mastered that," Dad says. "Next it's going to be deer hunting."

"Deer hunting, eh? Well, now." The man taps my pointer finger with his own. "Imagine a gun in those little hands. You just be careful out there. This is the U.P. woods." He turns back to Dad. "Let's hope she has better luck in the blind than you, eh?" He walks away, laughing.

"Big Louie," Dad says to me.

We watch women whisk around in the lodge's kitchen, boiling brats in big pans of water, cutting buns open, rushing out to the counter to bring hot food to the mothers and fathers and sons and daughters bursting in from sledding. I am reminded of my own mother, who is at work at Buck's Restaurant downtown. Earlier today, she probably

cooked breakfast for some of the people here—fried bacon in a pan, popped limpa bread down into the orange coils of a toaster. Dad might be thinking of her, too—remembering her waiting tables at the Venice all those years before, her ponytail a gentle swing back and forth, her leaning toward him with a tray in hand as she set down forks and knives and plates of pizza and played Tom Petty on the juke box.

“Your mother,” Dad once told me, “wasn’t like any other girl. I knew that when I took her fishing.” They would go into the deepest part of the woods, and she would take off with her fishing pole and creel and say she would meet him at nightfall. He’d watch her walk away, knowing that she would find her way back to their spot in the middle of nowhere, leaves in her hair, mud on her boots, worm guts on her hands and flecks of fish blood on her fingertips. He loved her.

When Dad was only five, a few of his friends came to his house in Ishpeming to collect him to play at Mud Lake. He wasn’t home—he was buying milk and butter for homemade bread, or he was at his Aunt Esther’s building a snow fort in the backyard, or he was sledding at Jasper Bluff with his father. Or, he was home, and his mother would not let him go out into the cold. The boys went to Mud Lake without him. They fell into a large ice hole made by a local ice dealer and drowned. They were found by an iron miner, part of a search party—leaning over the lip of the ice hole, he saw the bleared figures of their bodies floating just beneath the surface of the water.

There in the lodge, with the flick and flame of the fireplace in front of me and my father beside me in his snowsuit, drinking hot cocoa with me, men passing by and patting him on the back, I cannot seem to understand his effortless shirking of death. But he

knows how to shoot a gun. Once, he took me target practicing on our family's land in Republic. He showed me what a spent gun shell looked like—red, and gold, and busted open at the bottom. We gathered rotten apples off the ground for deer feed. We crossed over a half-frozen stream, a faint trickle of water passing over translucence. Pine saplings scattered across the open parts of the land; Dad snapped their branches in a rain of needles for fire kindling. When we reached the forest line, he pointed to the bark of a maple tree, sap freezing in amber clings against its rough trunk. “At the end of winter,” Dad said, “men drill holes in these trees, attach a pail to them and drain the sap for maple syrup.” The center of the tree, to be poured warm over pancakes. I inhaled the timberous scent of the xylem sap, could smell the pine needles stuck to the kindling in Dad's hand.

On the walk back to the truck, Dad saw a porcupine high up in a tree. He decided to shoot at it. He lifted his rifle and aimed at the limpid base of the porcupine's quills, their black points jutting in every direction over the branch of the white pine. The tree reached higher into the sky than I could see; I tilted my head back, peering under the edge of my hat. I imagined I could see the firing pin strike the cartridge within the rifle, the bullet peel from chamber to barrel and explode through the muzzle of the gun. But all I could see for certain was Dad's finger on the trigger. The porcupine collapsed from the tree, limp and broken.

Dad stepped up to its misshapen body, a spread of scattered quills. We could see its skin now—delicate and porcelain, a red bullet hole at its center, now spilling dark vermilion onto the white snow. Dad set down the bag of rotten apples, allowing some to lump back onto the land from which we'd lifted them. A strange, sweet scent purged from their cores.

“Well, shit,” Dad said. “I guess I hit it.”

He buried it in the snow. He picked up the bag, left the dropped apples behind. On the drive home, he was quiet. There were no stories like the ones he sometimes told—about the abominable snowman pounding on the door of our camper to ask to share our dinner of ravioli, or about what he saw while driving his truck in the pit at the mine, like a turkey with a pilgrim in its mouth, or Santa’s sleigh gliding across the stars, far above the tiers of iron ore. We drove back on the moonlit side road that had led us so far from the highway, past the figure of a barn, on whose roof someone had painted, “Where the Hell did it All Go?”

Later, my mom would tell me that it was common for hunters to shoot porcupines. They gnawed on and damaged trees and deer blinds. They chewed holes into the roofs of camps, leaving November sleepers exposed to the cold winter wind. They ate leather boots. Dad once had to pluck the quills of a porcupine from between the whiskers of our dog’s soft muzzle; kneeling beside her in the backyard, he gently pulled them from her skin. She whined. The quills had gone deep. Porcupines were rodents and pests, a threat to the homeostasis of the forest.

But Dad told me none of those things. Instead, as we turned back onto Empire Street, he said: “One day, I’ll show you how to really shoot a gun.”

## Embers

*In January 1938, Michigan's Upper Peninsula was hit by its worst blizzard in over forty years. Snow fell and fell, filling the spaces between white pines, potholes and county roads, the banks of Tahquamenon Falls, the valleys of the Huron Mountains, the gradient cliffs of Pictured Rocks. Dashes of snow moving sideways in a brutal wind shot past the taut cables of the Mackinac Bridge and into the chamber of the Soo Locks. Scenes observed through kitchen windows—of men and women removing their ice-encrusted coats, sprinkling parmesan onto whitefish fillets, and plating their remaining joulutorttu from Christmas Day—dimmed behind the veil of the storm.*

*The snow was mechanical. Horse-powered. Relentless. The gash of deer antler against antler in a forest battle. Ice chunks left wounds on pavement and on the sides of wooden houses in L'Anse and Lake Linden. Snowplows were stranded in Houghton and Escanaba, paralyzing traffic in a string of red tail lights. A blizzard-fanned fire in Marquette burned the Masonic Temple and the Opera House; water blasted by the firemen's hoses froze into a sheet of ice on Washington Street. Lake Superior's treacherous waves tore apart the Coast Guard dock. Irving Jaehning, of Calumet, was found frozen over his snowplow's steering wheel; at Calumet Hospital, crews were unable to resuscitate him. Miners across the Upper Peninsula spent the night in company buildings, eating pasties by candlelight, like they did when the mines first started—like they were still underground. They ate pasties by carbide lamps. They kept their hardhats on in case the ceiling collapsed. They laughed that for a Yooper, this was nothing. This was yesterday's news. The snow did not stop falling or blowing for days.*

*Finally, Gordon Toivonen of Calumet stepped out of his front door with his snowshoes strapped tight. Twenty feet of snow had fallen and drifted, blocking all roads to the Upper Peninsula. The wind chill had dipped to twenty-five degrees below zero. Gordon looked through the snow to the sky, up at the dull burn of the sun, pale as apple flesh. It's still there, he thought. All around him, things white: his wooden loft barn, his 1936 Model T, the potato mound where his yard met the woods, its soil spent of roots and now frozen solid. Gordon wondered if these things would look the same when the snow had melted. Sometimes, the things that had weathered the storms looked different: chipped, cracked, faded from the snowfall. But sometimes, they looked as if nothing had happened at all—or even as if their fresh coating of cold white snow had cleansed them of the iron ore dust on their backs and made them look new again.*

On February 21, 1997, I stay home sick from school. Dad comes in from an ice fishing trip and finds me lying on the living room couch beneath a blanket. He appears in the archway leading from the dining room, pauses between the china cabinet full of Fenton glass and the mahogany buffet behind which our family pictures hang. He wears a burgundy snowsuit, and his boots are still on—they track snow onto the carpet. Bits of ice fleck his mustache and melt on the tops of his red cheeks.

“Annie,” he says.

He sits beside me, smelling of the cold, the kind of cold that it hurts to breathe. But he is warm there with me. Color flows back into his face and his mustache dries. He pulls off his red winter hat and reveals a mat of dark blonde hair.

“I can't tell if you have a fever, or if my hand is still very cold,” he says.

“Your hand is cold.”

“Sorry, Pumpkin.”

Dad reheats last night’s crescent rolls and we eat them in the kitchen. I sit at the table, swinging the tips of my feet across the tiles of the floor, tracing the cornflower and gold of their Scandinavian patterns. The room is dim—Dad has not yet switched the light on, and the only illumination comes from the grey, filtered sunlight of winter.

Dad tells me that he is not feeling well, either. All day he hasn’t felt right. Something in the winter air. He caught no fish on his trip, so he came home early. Still, he fires up the engine of the truck to go to Phelps Middle School and collect my missed homework assignments. I insist on coming with him. The flakes and butter from the rolls are warm in my stomach, coursing through my veins, boosting my white blood cells, and now I need to get outside and breathe. Dad keeps his snowsuit on. We go to see Mr. Strongman, my science teacher with a handlebar mustache. He shakes Dad’s hand.

“She’s my star student—not a question I ask her she can’t get right,” Mr. Strongman says.

“Yeah,” Dad says. “She sure knows a lot, doesn’t she?”

I am handed sheets of paper. We are learning about matter. About its mass, volume and density: the gravity that it exerts or contends, the space it occupies in three dimensions. How it is made of atoms, which we cannot see inside of. We only know they exist because of their influence on the objects around them. In a year, scientists in Europe will begin to build a Hadron Collider to unlock atoms by disintegration. This might create microscopic black holes that will swallow the earth. It might destroy every atom that ever existed, along with the men trying to look into them. My homework asks me to define

protons and neutrons, to describe a chemical bond, to reach back to the fifth century BC, when Democritus philosophized that not everything in the world is divisible.

That evening, Dad and I recover during a dinner of pork chops and green beans. We convince my mom to let us go to the high school basketball game, the Hematites versus the Miners. My brother comes along, and he and I stand in the concession stand during half time, aside the glow of heat lamps over oiled popcorn, the cherry-red scent of licorice ropes slung over pegs. Dad stays in the bleachers, talks to friends and coworkers. I see him up there in green plaid, his socks pulled up over the tops of his Sorels. The basketball game program is rolled up in his hand and he motions with it as he speaks to a man seated behind him.

The Hematites win or lose. Dad drives us home. The night is freezing. Stars spread pierced and still across the sky. It is a night absent of wind—quiet and cold. An Upper Peninsula night in February. The wind chill drops below zero. The snow makes a hardened sound as we walk across it and into our house. Icicles hanging off the eaves gleam with sapphire moonlight. Mom has left the television on, though she has gone to bed; it is muted, but I can hear the hiss of its images as they flash across the screen and over the walls of the room.

I am the second one awake the next day. Dad will be taking Jerry and me to the Pine Mountain ski jumping competition; he has awoken early, though I never heard his alarm. I watch through the rectangle of an upstairs window as he prepares the Ford for the drive. He wipes its windows with a cloth, puts his gloves on its front seat. Quiet and still, he

plants his self in the snow, red flannel shirt and jeans, boots laced high. I walk downstairs to sit on the couch and wait for him.

The door slams and I hear an odd shuffle of feet. Like a deer startled in the forest. Like what happens in a pantry when you can't reach the top shelf and the cinnamon, the flour, the boxes of raisins and the cans of baked beans and beef stew tumble in numbers impossible to be caught. Like when neighbors argue in a kitchen and their voices travel from their window to yours, blending with the sound of their steps hitting tile in angry disapproval of one another. Like the sound of your dog chasing a rabbit into the garage, salivating, ignoring your calls, running into the snow blower or the vice stand; or the sound of a campsite, people awakening here and there, crawling out of their sleeping bags and their tents, emerging into the damp, cold morning and stretching their hands so that they touch the birch branches above them just as gravity holds their feet below. Sounds you would not recognize had you never heard them or seen them; sounds you probably would not recognize even if you heard them again.

“Honey,” my dad calls. “Honey.” He calls for my mother.

He appears in the archway, just like the day before; now, his broad hand is held against his chest.

“Andrea,” he says. “Get your mother.”

In a flurry I am upstairs, paced by the shock of the slam of the door, of that sudden stumble of Dad's boots over our kitchen tile, of the look on his face, a look of fear I have never before seen on my father, a man who would chase a moose into the woods, would raise a gun with his hand over the trigger aiming at a buck from his lone deer blind in a snowy November, would drive a 320 ton truck to the bottom of the pit at the Empire

Mine, would sleep next to his mother in a hospital bed as she died, as she said his name aloud in the quiet of the room, everything bare but for a black and white photograph on the wall of a homesteader hammering a horseshoe above the door of a wooden barn, a snapped open stretcher, a paper cup tipped sideways, and the two of them. A man who would guide my hand along the raspberry bushes by the Fence River so that a thorn never struck my fingers, would carry me to my room when I was young and had fallen asleep on the sofa as he watched Detroit Lions recaps on the TV6 News, would wake me in the morning by throwing snowballs at my window when he came home from midnight shift so that I would rush downstairs to butter toast with him, and would again throw snowballs at my window at nightfall before he went back to work, alerting me to the presence of the Big Dipper in the sky, the firing up of the Northern Lights over our neighborhood, the crystalline puffs of his breath on the canvas of midnight.

I rush downstairs. I grip the wooden banister—loose, though Dad has again and again nailed it to that wall. I see him paused in the hallway, his boot on the top step to its landing. We have a tapestry hanging there: two big horn sheep, one lying down and one standing on the crest of a mountain, with tiny wildflowers bursting around the tough tissues of their hooves. When you go out west, there are signs everywhere warning you of big horn sheep crossings: black and yellow signs that alert you of their danger, of the risk of them leaping out in front of your vehicle with the spiral of their horns eclipsing the open road before you. The big horns are what people want to see, and rarely do. Dad stands in front of that tapestry now. He must have been the one who bought it, at a rummage sale or a flea market, or the mall in Marquette.

“What happened?” I say. These are my last words to my father. Words he won’t respond to.

It is minutes, seconds until my mother and father disappear into their Caravan, headed for Bell Hospital. He gets into the van first as she gets the keys; I see his outline through our dining room window. I have to reach up and over a bookshelf and pull back a curtain to see. He is sitting there, looking through the windshield towards the maple tree and its swaying rope swing. The van backs out of the driveway.

Later, I found out that Dad began to black out on the way; he began to lose his memory. I wonder which memories went first, which last. I wonder how long he remembered our family attending my Aunt Debbie’s wedding, his grey suit, his Old Spice cologne, dancing at Wawonowin Country Club. How long did he remember teaching me to play pool at a hotel in Green Bay, Wisconsin, fixing his large hand over my small one as he showed me how to take aim at a cue ball so I would never miss? When did he forget the Christmas Eve candlelight services at Bethel Lutheran, the heat and light of so many tiny candles, the midnight drives around Ishpeming and Negaunee afterwards to look at illuminated bulbs and ornaments—or did he forget them?

At the hospital he was given a CT scan of his chest and he remembered that the tech was a man he had gone to school with—had learned how to operate a circular saw with, had crafted the oak nightstand beside my bed with, had read books about war and books about lovers with, had calculated mass and volume and the effects of gravity with. But he could not remember much else. Perhaps when our bodies are shutting down, our memories are the first things that are taken away from us, because they are the things that can make us suffer the most. Memory loss is a sign of heart failure. A restriction of blood

flow to the brain. The hippocampus, unfueled, severs. Long-term episodic memories can no longer be retrieved from the temporal lobe. They still exist in the brain, but cannot be accessed.

Dad's scan shows a ruptured aorta. It shows that he may have an enlarged heart. He is bleeding faster than a body should ever be allowed. He is getting weaker. The doctor says that he needs to go to Marquette General for emergency open heart surgery. On a rolling white bed, Dad is pushed into an ambulance. Its lights flash on and he is sped out of Ishpeming. He travels beneath the Lake Superior and Ishpeming Railroad track on Third Street, past the Ski Hall of Fame and Holiday Gas Station. The ambulance accelerates when it reaches the armory, slows down for Teal Lake hill. They fly by the State Police post, and the Marquette County Airport, where jets ignite their engines to fill a runway with hot blasts of burnt fuel. They reach the intersection by Wal-Mart, and in a confusion of red lights and slammed brakes, people staring in silence through the windshields of motionless cars, they make their way through. Dad is in Marquette, now. The ambulance carries him down U.S. 41, veers away from Lake Superior toward the hospital. The lake is cold and sloshing, remains unfrozen: it stretches higher on the horizon than any land around it. As power plants chug steam-clouds into the air over the water, the ambulance pulls into the parking lot at Marquette General. And that is when my father dies.

Mom is not with him, and she'll regret it forever. I am not with him—Jerry and I are at a friend of my mother's, playing Candy Land and Chutes and Ladders, eating macaroni and cheese in a soup of milk and butter, a way I have never seen it prepared before.

Mid-afternoon, an icy gray light pours in through the front windows of the house in which we play. I am sitting on the sofa, showing my babysitter's daughter how to floss her teeth: smiling, we wrap the mint floss around our fingers, weave it through the gaps between our incisors and canines. Hers are just baby teeth, and they will fall away. They loosen at the pull of the floss.

I hear steps on the front porch and see two figures—a woman, and a man. My mother and father. Mom opens the door; she is wearing a pink coat. She looks at us for a moment. The figure behind her materializes: it is not my father, but my mom's brother. He stands still in his dark jacket, hands in his pocket, eyes directed to the back of my mother's head. I look at my mom's face, and all at once I know that Dad is not coming back.

"He's gone," my mother says. Behind her, cars rush in both directions on Third Street, in lanes plowed through inches and inches of snow. It has piled up in hills on the side of the road—snow banks so high, drivers can't see what's coming when they turn. I watch them, hear them slushing by, red, black, silver and blue, fast on the ice. They don't stop moving: I will hear them when I go to sleep, proving that even in an Upper Peninsula winter, every street is passable.

There was a time, once, when I was very young, that my dad took me camping by the Fence River—just me. Not my brother. Not my mother. We were at our usual spot, with the river bumping up over dark stones in a shallow valley beside our campsite. I awoke to the sound of something moving outside of the tent; perceiving the shadow of a deer, I lay still. It rustled in the ferns, stepped here and there only feet away from me. Its shadow

shrank; I pulled myself out of my sleeping bag and peeked out of the tent. I could see nothing alive in the woods, and yet my heart raced.

“Dad,” I called.

He was gone. Last night’s campfire sat shushed in a ring of stones, soft wind brushing over its ashes, pale orange coals. “Dad?” I asked.

I walked to the dirt road that had led us into the forest. I began to follow it, the sand and gravel path lined with bushes singing with deer flies and noseems and wood ticks. Robins on the ground, crows in the Aspens. A rush of paws trailed down the path: Sugar’s soft steps on the dirt. “Sugar,” I said.

I waited a second as she ran at me with her tongue hanging out. And then I saw my father come around the bend with his fishing pole in hand, his tackle bag slung around his waist. I felt my heart slow. I said not a word about the shadow of the deer, the thump of its hooves in the dirt outside of the tent. I stood in a silent pause as Dad walked toward me, slow and steady, a gentle smile under his mustache, his cap lopsided. He stopped in front of me and ruffled my blonde hair with a hand rough and warm from casting. We walked back to the campsite; he showed me the brook trout he had caught. I saw their metallic reflections on his shirt as he turned them in the sun, heads of yellow and blue haunting his shoulders and sleeves, scales beaming onto the buttons down the center of his chest. I saw the life running through his hands as he held the fish, flecks of blood on his fingers where hooks had torn skin, the veins along the bones of his hands pushing new blood to the wounds to heal them. The endless warmth and color in his

hands as he held them, full of fish, over the paling coals of the campfire. I put another log into its embers to relight its flames. The fish were in his hands. As sparks scattered up into the needles of the pines around us, I realized that the fire had never stopped burning.

## Survival

*In 1988, small fires of human and natural causes, flourishing in individual lights under the National Park Service's "let it burn" policy, drew together over dry needles and leaves and ground into one giant, uncontrollable wildfire. Twenty-five thousand firefighters fought the blaze. 1.2 million acres continued to burn. Moose, red foxes, and grizzly bears wobbled out of the forest and collapsed, exhausted. Lodgepole pines and engelmann spruces incinerated in fire-cracking bursts of flame. Streams ran, emerging from the forest as boiling water. Families in Seattle and Miami and Allagash, Maine, paused with forks over bowls of beef pot roast to watch fires burn on TV. "Black Saturday" dawned: August 20. The burnt land doubled in one day. People worried that Yellowstone would disappear. But in November, it snowed—gentle drifts of flakes landed on purple flames, pushing them back into the lush Rocky Mountain soil. The fire melted down, its light went out, and the lodgepoles and engelmanns grew again.*

In the morning, there is a stream. I hear it when I wake: a great, hydraulic rhythm, a conflation of water versus earth. A bird speaks. A crow or a chickadee. A mourning dove. Or a loon on a lake, yipping out into the clear and empty dawn with its grey chick nestled into the black and white feathers of its back. Over low bushes and ferns comes the electric whir of a cicada. That sound takes over, and I open my eyes.

I am in a tent, condensation gathered on its canvas ceiling, deer flies and mosquitoes legging across the wet surface. Spiders. I am zipped into my sleeping bag, the cool, damp air of Wildcat Canyon clinging to my face. Shadows drift along the tent wall, things I can see only as a manipulation of the sun's light: they will become conifers and

boulders, the outline of Dad's Ford, when I step out of the tent and into this small clearing in the Upper Peninsula woods.

He is always already awake, and fishing—close enough to hear me call, if I need to. But I wait for him; rarely am I afraid. The forest is empty of other humans for miles. Moose and coyotes are near, but in a mysterious invisibility. I sit on the tailgate of the truck and swing my feet, my hiking boots, and look up into the oddly cut exposure of sky at the top of maples and evergreens.

When Dad arrives with his fishing rod over his shoulder and Sugar, our Australian Cattle dog, bounding over mangled roots in front of him, there will be breakfast. I'll eat Fruit Loops out of a box that tears open to create its own bowl. Milk, still cold after what feels like days in the forest, will rush onto the cereal to be lifted with a plastic spoon. Dad—primal, shifting from a household father to one of the northern woods—will slit into the scales of a brook trout and cook it over the fire. The sky rips open into the luminous blue of morning. My father sits on the stump of a pin-oak to shift logs with a fire iron. He turns the trout on a blackened grate, lifts his hand to salt it. Flames spear up toward his fingers and reflect on his face. I see them in the dark blonde hairs of his mustache. He lights the Coleman stove, boils water for coffee. Pulls a box of apple juice from the cooler and puts it into my hands. Returns to the fire, rolls up the sleeves of his flannel, and allows the brook trout to crisp and sizzle with oil on the grate.

While dad eats, I find tracks. A moose track lingers from days before—I can fit my own boot step into one of the wings of its branched shape. Around here, moose charge trucks. They lower their ears, look right into the eyes of the driver, push their antlers forward, run. Dad has me watch for them in roadside swamps, where they might

wade in water and mud. “They only come after you if you bother them first,” he says. So we stay on the road. The few that we see are silent and guarded. They could lift up their bodies and come crashing down on the roof of the Ford, if provoked. But they are in danger, too. On Isle Royale, packs of wolves expose raw teeth, hunt down moose to jagger their rough skin and tear out the muscle and bone beneath. Blood seeps out. If the moose is fast enough to escape, wood ticks latch beneath his fur, drain him, weaken him. He collapses onto the winter frost.

In Ishpeming, Michigan, the police department will one day decide to shoot a moose dead. It is a mother moose, wandering lost in town with her two calves. She is a danger to the people. As she dies, one of her calves is tranquilized, the other rushes into the forest. He is heard days later, somewhere in the shadows of trees in the woods behind the Armory, bawling. National Guardsmen hear him as they oil their rifles with rags. It is said that an orphaned moose is eight times less likely to survive than a calf with its mother. A bear might attack it. It might drown in a stream. Adult moose will kick it away from the twigs and bark it attempts to gnaw at with its new teeth. The snow through which it trudges in winter will be too deep for its short legs, and it will die from exhaustion.

I step into moose tracks, bear tracks. Dad lifts on the tent’s poles and its roof sinks to its floor. Together, we brush away pine needles, tighten and roll up the canvas. Dad drives us back. Humanity emerges here and there: another vehicle slumps up and over rocks on the road and we squeeze past each other; wooden bridges with yellow and black caution stripes marking their mouths materialize on our path to cross wider and wider streams.

Dirt becomes gravel, gravel becomes pavement, and then we are on U.S. 41, turning left towards home. The windows are down—air rushes at me fast and cold. I look up to a clear view of the night sky, the stars just now popping out. The Big Dipper, the Little Dipper, Orion’s Belt. The Great Bear.

“The Dragon,” Dad says, pointing through the windshield. “He circles the North Pole.”

Across The Dragon’s back, we find the green flames of the Northern Lights, faint flickers burning between the stars. We pull into our driveway. And Dad and I step into the backyard to continue watching the stars, which have now moved in the sky.

At twenty-three, I go to Helsinki, Finland. I don’t see the Northern Lights, but I hear about them: *Revontulet*, “fox fires.” According to Finnish folklore, the Northern Lights are fires lit by the swift and burning run of an Arctic fox on snow. His tail flares up sparks; these sparks scatter into the atmosphere. I learn that the *aurora borealis* make a sound: they clap at you. You can only hear them if you are quiet. They crackle and bang as they ignite the sky. Men have heard them while standing beneath them in the woods.

In tents in Lapland forests, tucked beneath pines, at the center of the night, lumberjacks and their children listen to these sounds. “Shh,” says the father, putting a rugged finger to his lips. “*Hiljaa.*”

“What’s outside?” his daughter asks.

“Nothing but the sky,” he says.

But around them are the wide branches of spruces, mountain avens dashing white and yellow over Lapland heaths. Rivers rushing with melting ice from the Arctic Circle.

Five hundred thousand reindeer. Eagles and owls wingspun over fjords. Bogs, from which ancient firkins of butter have been pulled, the scent of garlic still heavy in their knobs; from which four thousand year old, badger-skin lined skis have been lifted. None of these things can be heard, but for *Revontulet*. The lumberjack finds it first with his ears, and then with his eyes, as he takes his children's hands and steps out into the barrier between forest and tundra to show them the shifting reds and greens of an aurora.

When I was seven, I awoke in the forest, in a tent, to the sound of a stream filtering over rocks into Silver Lake Basin; to the sound of a fire crackling. It was early morning and it was still dark. I opened my eyes. Through the tent's wall I could see shadows: a predawn fire, its flames curling inside of a ring of stones; the outline of Sugar as she pawed at sparks; and my father's figure, setting line in his fishing pole under star- and fire-light. I stayed where I was, listening to the sounds and watching the shadows move.

## References

- “April 3, 1856: Palace of the Grand Masters Explosion, Rhodes.” *The Daily Disaster*. Wordpress, 3 April 2009. Web. 13 Nov. 2012.
- “Bethel Lutheran Marking 125 Years.” *The Mining Journal*. The Mining Journal, 23 Apr. 2012. Web. 13 Nov. 2012.
- Britannica Online Encyclopedia*. Encyclopedia Britannica, Inc, 2012. Web. 13 Nov. 2012.
- “The Deadly Avalanches of 1910.” *The Weather Doctor: Exploring the Science and Poetry of our Weather and Atmosphere*. Heidorn, Keith C., 2012. Web. 13 Nov. 2012.
- “Dust Bowl Photography.” *Wind Erosion Research*. United States Department of Agriculture and Kansas State U. Web. 13 Nov. 2012.
- “Hailstorms: Extremes.” *TORRO: The Tornado and Storm Research Organisation*. The Tornado and Storm Research Organisation, 2012. Web. 13 Nov. 2012.
- Hansen, Liane and Laura Krantz. “Remembering the 1988 Yellowstone Fires.” *NPR*. NPR, 31 Aug. 2008. Web. 13 Nov. 2012.
- “Historic Earthquakes: Agadir, Morocco.” *United States Geological Survey Website*. United States Geological Survey, 1 November 2012. Web. 13 Nov. 2012.
- Hunt, Donald E. *Hunts’ Guide to Michigan’s Upper Peninsula*. Hunts’ Guide to Michigan’s Upper Peninsula, 2011. Web. 13 Nov. 2012.
- Lönnrot, Elias. *The Kalevala*. Trans. Keith Bosley. Oxford: Oxford University Press, 2008. Print.
- “Manchester, South Dakota.” *The Loachapoka Wireless*. Blogspot, 15 March 2009. Web. 13 Nov. 2012.
- “Northern Lights Oddity: Strange Sounds of Auroras Explained.” *Space.com*. Space.com, 9 July 2012. Web. 13 Nov. 2012.
- Rajanen, Aini. *Of Finnish Ways*. Minneapolis: Dillon Press, 1981. Print.
- Trueman, Chris. *History Learning Site*. The History Learning Site, 2000. Web. 13 Nov. 2012.

United States Department of Agriculture, Weather Bureau. *Climatological Data*.  
Lansing: United States Weather Bureau, 1938. *Google Books*. Web. 13 Nov.  
2012.

*Waymarking*. Groundspeak, Inc, 2005. Web. 13 Nov. 2012.