Reading for EDUC 460:
A Mother's Work
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Braiding Sweetgrass

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Preface

Hold out your hands and let me lay upon them a sheaf of freshly picked sweetgrass, loose and flowing, like newly washed hair. Golden green and glossy above, the stems are banded with purple and white where they meet the ground. Hold the bundle up to your nose. Find the fragrance of honeyed vanilla over the scent of river water and black earth and you understand its scientific name: *Hierochloe odorata,* meaning the fragrant, holy grass. In our language it is called *wiingaashk,* the sweet-smelling hair of Mother Earth. Breathe it in and you start to remember things you didn't know you'd forgotten.

A sheaf of sweetgrass, bound at the end and divided into thirds, is ready to braid. In braiding sweetgrass—so that it is smooth, glossy, and worthy of the gift—a certain amount of tension is needed. As any little girl with tight braids will tell you, you have to pull a bit. Of course you can do it yourself—by tying one end to a chair, or by holding it in your teeth and braiding backward away from yourself—but the sweetest way is to have someone else hold the end so that you pull gently against each other, all the while leaning in, head to head, chatting and laughing, watching each other's hands, one holding steady while the other shifts the slim bundles over one another, each in its turn. Linked by sweetgrass, there is reciprocity between you, linked by sweetgrass, the holder as vital as the braider. The braid becomes finer and thinner as you near the end, until you're braiding individual blades of grass, and then you tie it off.

Will you hold the end of the bundle while I braid? Hands joined

by grass, can we bend our heads together and make a braid to honor the earth? And then I'll hold it for you, while you braid, too.

I could hand you a braid of sweetgrass, as thick and shining as the plait that hung down my grandmother's back. But it is not mine to give, nor yours to take. *Wiingaashk* belongs to herself. So I offer, in its place, a braid of stories meant to heal our relationship with the world. This braid is woven from three strands: indigenous ways of knowing, scientific knowledge, and the story of an Anishinabekwe scientist trying to bring them together in service to what matters most. It is an intertwining of science, spirit, and story—old stories and new ones that can be medicine for our broken relationship with earth, a pharmacopoeia of healing stories that allow us to imagine a different relationship, in which people and land are good medicine for each other.

A Mother's Work

I wanted to be a good mother, that's all—like Skywoman maybe. Somehow this led me into hip waders filled with brown water. The rubber boots that were intended to keep the pond at bay now contain it. And me. And one tadpole. I feel a flutter at the back of my other knee. Make that two tadpoles.

When I left Kentucky to go house hunting in upstate New York, my two small daughters gave me an explicit wish list for our new home: trees big enough for tree forts, one apiece; a stone walk lined with pansies like the one in Larkin's favorite book; a red barn; a pond to swim in; a purple bedroom. The last request gave me some comfort. Their dad had just pulled up stakes, left the country—and us. He said that he no longer wanted a life with so much responsibility, so the responsibility was all mine. I was grateful that, if nothing else, I could at least paint a bedroom purple.

All winter long I looked at house after house, none of which made sense for either my budget or my hopes. Real estate listings—"3BR, 2B, raised ranch, landscaping"—are pretty thin on vital information like trees suitable for tree houses. I confess that I was thinking more about mortgages and school districts and whether I was going to end up in a trailer park at the end of the road. But the girls' wish list surfaced in my mind when the agent drove me to an old farmhouse surrounded by immense sugar maples, two with low, spreading branches perfect for tree houses. This was a possibility. But there was the matter of sagging shutters and a porch that hadn't seen level in half a century. On the

plus side, it sat on seven acres, including what was described as a trout pond, which was only a smooth expanse of ice surrounded by trees at the time. The house was empty, cold, and unloved, but as I opened doors to the musty rooms, wonder of wonders: the corner bedroom was the color of spring violets. It was a sign. This is where we would fall to earth.

We moved in that spring. Not long after, the girls and I cobbled together tree forts in the maples, one apiece. Imagine our surprise when the snow melted to reveal a flagstone walk overgrown with weeds leading to the front door. We met the neighbors, explored the hilltops with picnic lunches, planted pansies, and started to put down the roots of happiness. Being the good mother, good enough for two parents, seemed within my grasp. All that remained to complete the wish list for home was a swimmable pond.

The deed described a deep spring-fed pond, and a hundred years ago it might have been exactly that. One of my neighbors whose family has been here for generations told me that it was the favorite pond in the valley. In summer, after haying, the boys would park their wagons and hike up to the pond for a swim. "We'd throw off our clothes and jump in," he said. "The way it sits, no girls would be able to see us, buck naked as we were. And cold! That spring kept the water icy cold and it felt so good after working hay. We'd lie in the grass afterward, just to warm up." Our pond nestles in the hill up behind the house. The slopes rise around it on three sides and a copse of apple trees on the other side entirely shield it from view. At its back is a limestone cliff where rock was quarried to build my house more than two hundred years ago. It was hard to believe that anyone would dip even a toe in that pond today. My daughters certainly would not. It was so choked with green that you could not tell where weeds left off and water began.

The ducks didn't help. If anything, they were what you might politely call a major source of nutrient input. They were so cute in the feed store—just downy yellow fluff connecting outsize beaks and enormous orange feet, waddling around in a crate of wood chips. It was spring,

almost Easter, and all the good reasons not to take them home evaporated with the girls' delight. Wouldn't a good mother adopt ducklings? Isn't that what a pond is for?

We kept them in a cardboard box in the garage with a heat lamp, closely watched so neither box nor ducklings would ignite. The girls accepted full responsibility for their care and dutifully fed and cleaned them. I came home from work one afternoon to see them floating in the kitchen sink, quacking and dabbling, shaking water off their backs while the girls just beamed. The condition of the sink should have given me a clue of what was to come. For the next few weeks they ate and defecated with equal enthusiasm. But within a month we carried the box of six glossy white ducks up to the pond and released them.

They preened and splashed. All was well for the first few days, but apparently, in the absence of their own good mother to protect and teach them, they didn't have the essential survival skills for life outside the box. Every day there was one less duck; five remained, then four, and then finally three who had the right stuff to fend off foxes and snapping turtles and the marsh hawk who had taken to cruising the shore. These three flourished. They looked so placid, so pastoral gliding over the pond. But the pond itself began to get even greener than before.

They were perfect pets until winter came and their delinquent tendencies emerged. Despite the little hut we made for them—a floating A-frame lodge with a wraparound porch—despite the corn we showered around them like confetti, they were discontent. They developed a fondness for dog food and the warmth of my back porch. I would come out on a January morning to find the dog bowl empty and the dog cowering outside while three snowy-white ducks sat in a row on the bench, wiggling their tails in contentment.

It gets cold where I live. Really cold. Duck turds were frozen into coiled mounds like half-finished clay pots solidly affixed to my porch floor. It took an ice pick to chip them away. I would shoo them, close the porch door, and lay a trail of corn kernels back up to the pond, and they would follow in a gabbling line. But the next morning they'd be back.

Winter and a daily dose of duck splats must freeze up the part of the brain devoted to compassion for animals, for I began to hope for their demise. Unfortunately, I didn't have the heart to dispatch them, and who among our rural friends would welcome the dubious gift of ducks in the dead of winter? Even with plum sauce. I secretly contemplated spraying them with fox lure. Or tying slices of roast beef to their legs in hopes of interesting the coyotes that howled at the ridgetop. But instead I was a good mother; I fed them, rasped my shovel over the crust on the porch floor, and waited for spring. One balmy day they trundled back up to the pond and within a month they were gone, leaving piles of feathers like a drift of late snow on the shore.

The ducks were gone but their legacy lived on. By May the pond was a thick soup of green algae. A pair of Canada geese had settled in to take their place and raised a brood under the willows. One afternoon I walked up to see if the goose babies had sprouted pinfeathers yet, only to hear a distressed quacking. A fuzzy brown gosling out for a swim had gotten snared in the floating masses of algae. It was squawking and flapping its wings trying to get free. While I tried to think of how to rescue it, it gave a mighty kick and popped up to the surface, where it began to walk on the algal mat.

That was a moment of resolve for me. You should not be able to walk on a pond. It should be an invitation to wildlife, not a snare. The likelihood of making the pond swimmable, even for geese, seemed remote at best. But I am an ecologist, so I was confident that I could at least improve the situation. The word *ecology* is derived from the Greek *oikos,* the word for home. I could use ecology to make a good home for goslings and girls.

Like many an old farm pond, mine was the victim of eutrophication, the natural process of nutrient enrichment that comes with age. Generations of algae and lily pads and fallen leaves and autumn's apples falling into the pond built up the sediments, layering the once clean gravel at the bottom in a sheet of muck. All those nutrients fueled the growth of new plants, which fueled the growth of more new plants, in an accelerating cycle. This is the way for many ponds—the bottom

gradually fills in until the pond becomes a marsh and maybe someday a meadow and then a forest. Ponds grow old, and though I will too, I like the ecological idea of aging as progressive enrichment, rather than progressive loss.

Sometimes the process of eutrophication is accelerated by human activities: nutrient-rich runoff from fertilized fields or septic tanks ends up in the water, where it supports exponential growth of algae. My pond was buffered from such influences—its source was a cold spring coming out of the hill, and a swath of trees on the uphill side formed a nitrogen-grabbing filter for runoff from the surrounding pastures. My battle was not with pollution, but with time. Making my pond swimmable would be an exercise in turning back time. That's just what I wanted, to turn back time. My daughters were growing up too fast, my time as a mother slipping away, and my promise of a swimming pond yet to be fulfilled.

Being a good mother meant fixing the pond for my kids. A highly productive food chain might be good for frogs and herons, but not for swimming. The best swimming lakes are not eutrophic, but cold, clear, and oligotrophic, or poor in nutrients.

I carried my small solo canoe up to the pond to serve as a floating platform for algae removal. I envisioned scooping up the algae with a long-handled rake, filling the canoe as if it was a garbage scow, emptying it on the shore, and then going for a nice swim. But only the swimming part worked out—and it wasn't nice. As I tried to skim the algae, I discovered that they hung like sheer green curtains through the water. If you reach far out of a light canoe and try to lift a heavy mat of algae at the end of a rake, physics dictates that swimming will occur.

My attempts at skimming were useless. I was addressing only the symptoms of scum and not the cause. I read as much as I could about pond rehabilitation and weighed my options. To undo what time and ducks had accomplished I needed to remove nutrients from the pond, not just skim the foam. When I waded in the shallow end of the pond, the muck squished between my toes, but beneath it I could feel the clean gravel that was the pond's original basin. Maybe I could

dredge up the muck and cart it away in buckets. But when I brought my broadest snow shovel to scoop up the mud, by the time it reached the surface there was a brown cloud all around me and a mere handful of soil in the shovel. I stood in the water laughing out loud. Shoveling muck was like trying to catch wind in a butterfly net.

Next I used old window screens to make a sieve that we could lift up through the sediments. But the muck was far too fine and my improvised net came up empty. This was not ordinary mud. The organic matter in the sediments occurs as tiny particles, dissolved nutrients that flocculate in specks small enough to be bite-size snacks for zooplankton. Clearly, I was powerless to haul the nutrients out of the water. Fortunately, the plants were not.

A mat of algae is really nothing more than dissolved phosphorous and nitrogen made solid through the alchemy of photosynthesis. I couldn't remove nutrients by shoveling, but once they are fixed into the bodies of plants they can be forked out of the water with the application of biceps and bent back and carted away by the wheelbarrowful.

The average phosphate molecule in a farm pond has a cycling time of less than two weeks from the time it is absorbed out of the water, made into living tissue, is eaten or dies, decomposes, and is recycled back to feed yet another algal strand. My plan was to interrupt this endless recycling by capturing nutrients in plants and hauling them away before they could once again be turned into algae. I could slowly, steadily deplete the stores of nutrients circulating in the pond.

I'm a botanist by trade, and so of course I needed to know who these algae were. There are probably as many kinds of algae as there are species of tree, and I would do a disservice to their lives and to my task if I didn't know who they were. You wouldn't try to restore a forest without knowing what kind of trees you were working with, so I scooped up a jarful of green slime and took it to my microscope with the top screwed tightly to contain the smell.

I teased apart the slippery green wads into tiny wisps that would fit beneath my microscope. In this single tuft were long threads of *Cladophora,* shining like satin ribbons. Wound around them were

translucent strands of *Spirogyra,* in which the chloroplasts spiral like a green staircase. The whole green field was in motion, with iridescent tumbleweeds of *Volvox* and pulsing euglenoids stretching their way among the strands. So much life in a single drop of water, water that previously looked like scum in a jar. Here were my partners in restoration.

Progress was slow with pond restoration hours squeezed between years' worth of Girl Scout meetings, bake sales, camping trips, and a more-than-full-time job. All moms have treasured ways to spend the few precious hours they have to themselves, curling up with a book or sewing, but I mostly went to the water, the birds and the wind and the quiet were what I needed. This was one place where I somehow felt as if I could make things right. At school I taught ecology, but on a Saturday afternoon when the kids were off at a friend's, I got to *do* ecology.

After the canoe debacle, I decided it was wiser to stand on the shore with a rake and stretch out as far as I could reach. The rake brought sticks draped in *Cladophora* like a comb matted with long green hair. Every stroke of the rake combed up another sheet from the bottom and added to a quickly growing mound, which I had to get out of the watershed by moving it downhill from the pond. If I left it to rot on the shore, the nutrients released in decay would return to the pond in short order. I flung the wads of algae onto a sled—my kids' little red plastic toboggan—and dragged it up the steep bank to empty it into the waiting wheelbarrow.

I really didn't want to stand in the mucky ooze, so I worked cautiously from the edges in old sneakers. I could reach out and dredge up heaps of algae, but there was so much more just beyond my reach. Sneakers evolved to Wellingtons, extending my sphere of influence just enough for me to know that it was ineffective, and thus Wellingtons came to waders. But waders give you a false sense of security, and before long I reached just a little too far and felt the icy pond rush in over their tops. Waders are darn heavy when they fill up, and I found myself anchored in the muck. A good mother does not drown. The next time I just wore shorts.

I simply gave myself up to the task. I remember the liberation of just walking right in to my waist the first time, the lightness of my T-shirt floating around me, the swirl of the water against my bare skin. I finally felt at home. The tickles at my legs were just wisps of *Spirogyra,* the nudges just curious perch. Now I could see the algael curtains stretched out before me, much more beautiful than dangling at the end of my rake. I could see the way *Cladophora* bloomed from old sticks and watch diving beetles swim among them.

I developed a new relationship with mud. Instead of trying to protect myself from it, I became oblivious to it, noticing its presence only when I would go back to the house and see strands of algae caught in my hair or the water in the shower turning decidedly brown. I came to know the feel of the gravelly bottom below the muck, the sucking mud by the cattails and the cold stillness where the bottom dropped away from the shallows. Transformation is not accomplished by tentative wading at the edge.

One spring day my rake came up draped with a mass of algae so heavy it bent the bamboo handle. I let it drip to lighten the load and then flipped it onto the shore. I was about to go for another load when I heard a wet smacking from the pile, the slap of a watery tail. A lump was wiggling in a frenzy below the surface of the heaped algae. I picked the threads apart, opening the weave to see what was struggling within. A plump brown body; a bullfrog tadpole as big as my thumb was caught there. Tadpoles can swim easily through a net that is suspended in the water, but when the net is drawn up by the rake it collapses around them like a purse seine. I picked him up, squishy and cold, between thumb and forefinger and tossed him back into the pond, where he rested, suspended for a moment in the water, and then swam off. The next rake came up in a smooth dripping sheet studded with so many tadpoles that they looked like nuts caught in a tray of peanut brittle. I bent and untangled them, every one.

This was a problem. There was so much to rake. I could dredge the algae out, slap it into piles, and be done with it. I could work so much faster if I didn't have to stop and pick tadpoles from the tangle of

every moral dilemma. I told myself that my intention was not to hurt them; I was just trying to improve the habitat and they were the collateral damage. But my good intentions meant nothing to tadpoles if they struggled and died in a compost pile. I sighed, but I knew what I had to do. I was driven to this chore by a mothering urge, to make a swimmable pond. In the process, I could hardly sacrifice another mother's children, who, after all, already have a pond to swim in.

Now I was not only a pond raker, but also a tadpole plucker. It was amazing what I found in the mesh of algae: predaceous diving beetles with sharp black mandibles; small fish; dragonfly larvae. I stuck my fingers in to free a wiggle and felt a sharp pain like a bee sting. My hand flinched back with a big crayfish attached to my fingertip. A whole food web was dangling from my rake, and those were just the critters I could see, just the tip of the iceberg, the top of the food chain. Under my microscope, I had seen the web of algae teeming with invertebrates—copepods, daphnia, whirling rotifers, and creatures so much smaller: threadlike worms, globes of green algae, protozoans with cilia beating in unison. I knew they were there, but I couldn't possibly pick them out. So I bargained with myself over the chain of responsibility and tried to convince myself that their demise served a greater good.

Raking a pond provides you with a lot of mental free space for philosophizing. As I raked and plucked, it challenged my conviction that all lives are valuable, protozoan or not. As a theoretical matter, I hold this to be true, but on a practical level it gets murky, the spiritual and the pragmatic bumping heads. With every rake I knew that I was prioritizing. Short, single-cell lives were ended because I wanted a clear pond. I'm bigger, I have a rake, so I win. That's not a worldview I readily endorse. But it didn't keep me awake at night, or halt my efforts; I simply acknowledged the choices I was making. The best I could do was to be respectful and not let the small lives go to waste. I plucked out whatever wee beasties I could and the rest went into the compost pile, to start the cycle again as soil.

At first I hauled carts of freshly raked algae, but I soon realized that trundling hundreds of pounds of water was hard work. I learned

to heap the algae on the shore and watch it dribble moisture back to the pond. In the following days the algae bleached in the sun into light papery sheets, easily lifted into the wheelbarrow. Filamentous algae like *Spirogyra* and *Cladophora* have a nutrient content equivalent to that of high-quality forage grasses. I was hauling away the equivalent nutrient load of bales of good dairy hay. Load after load of algae domed up in the compost pile, on its way to making good black humus. The pond was literally feeding the garden, *Cladophora* reborn as carrots. I began to see a difference in the pond. A span of days would go by when the surface was clear, but the fuzzy green mats always returned.

I began to notice other sponges for my pond's excess nutrients in addition to the algae. All along the shore, the willows reached their feathery red roots into the shallow water to troll for nitrogen and phosphorous to pull into their root systems to become leaves and willow withes. I came along the shore with my loppers and cut the willows, stem by swaying stem. Dragging the piles of willow branches away, I was removing storehouses of nutrients they had sucked from the pond bottom. The brush pile in the field grew taller, soon to be browsed by cottontails and redistributed far and wide as rabbit droppings. Willow responds vigorously to cutting and sends up long straight shoots that can tower over my head in a single growing season. I left the thickets away from the water for rabbits and songbirds, but those right at the shore I cut and bundled for making baskets. The larger stems became the foundation for garden trellises for pole beans and morning glories. I also gathered mint and other herbs along the banks. As with the willows, the more I picked, the more it seemed to grow back. Everything I took moved the pond a step closer to clear. Every cup of mint tea struck a blow for nutrient removal.

Cleaning the pond by cutting willows really seemed to help. I cut with renewed enthusiasm, moving in a mindless rhythm with my loppers—*snick, snick, snick*—clearing whole swaths of shoreline as willow stems fell at my feet. Then something, perhaps a movement glimpsed out of the corner of my eye, perhaps a silent plea, made me stop. In the last stem left standing was a beautiful little nest, a cup

woven sweetly of *Juncus* rushes and threadlike roots around a fork in the tree, a marvel of homemaking. I peered inside and there were three eggs the size of lima beans lying in a circlet of pine needles. What a treasure I had nearly destroyed in my zeal to "improve" the habitat. Nearby, the mother, a yellow warbler, flitted in the bushes, calling in alarm. I was so quick and single-minded about what I was doing that I forgot to look. I forgot to acknowledge that creating the home that I wanted for my children jeopardized the homemaking of other mothers whose intents were no different from mine.

It came to me once again that restoring a habitat, no matter how well intentioned, produces casualties. We set ourselves up as arbiters of what is good when often our standards of goodness are driven by narrow interests, by what we want. I piled the cut brush back up near the nest in some semblance of the protective cover I had destroyed and sat on a rock, concealed on the other side of the pond, to see if she would come back. What did she think as she watched me come closer and closer, laying waste to the home she had carefully chosen, threatening her family? There are powerful forces of destruction loose in the world, advancing inexorably toward her children and mine. The onslaught of progress, well-intentioned to improve human habitat, threatens the nest I've chosen for my children as surely as I threatened hers. What does a good mother do?

I continued to clear out the algae, let the silt settle, and it looked better. But I went back a week later to a foamy green mass. It's kind of like cleaning the kitchen: you get everything put away, wipe off the countertops, and before you know it there are drips of peanut butter and jelly everywhere and you have to do it all over again. Life adds up. It's eutrophic. But I could see ahead to a time when my kitchen would stay too clean. I would have an oligotrophic kitchen. Without the girls to mess it up, I would be longing for leftover cereal bowls, for a eutrophic kitchen. For signs of life.

I pull my red toboggan to the other end of the pond and start to work in the shallows. Immediately, my rake gets stalled with a heavy

load of weeds that I drag slowly to the surface. This mat has a different weight and texture than the slippery sheets of *Cladophora* that I've been dredging. I lay it down on the grass for a closer look and spread the film with my fingers until it stretches into what looks like a green fishnet stocking—a fine mesh network like a drift net suspended in the water. This is *Hydrodictyon.*

I stretch it between my fingers and it glistens, almost weightless after the water has drained away. As orderly as a honeycomb, *Hydrodictyon* is a geometric surprise in the seemingly random stew of a murky pond. It hangs in the water, a colony of tiny nets all fused together.

Under the microscope, the fabric of *Hydrodictyon* is made up of tiny six-sided polygons, a mesh of linked green cells that surround the holes of the net. It multiplies quickly because of a unique means of clonal reproduction. Inside each of the net cells, daughter cells are born. They arrange themselves into hexagons, neat replicas of the mother net. In order to disperse her young, the mother cell must disintegrate, freeing the daughter cells into the water. The floating newborn hexagons fuse with others, forging new connections and weaving a new net.

I look out at the expanse of *Hydrodictyon* visible just below the surface. I imagine the liberation of new cells, the daughters spinning off on their own. What does a good mother do when mothering time is done? As I stand in the water, my eyes brim and drop salt tears into the freshwater at my feet. Fortunately, my daughters are not clones of their mother, nor must I disintegrate to set them free, but I wonder how the fabric is changed when the release of daughters tears a hole. Does it heal over quickly, or does the empty space remain? And how do the daughter cells make new connections? How is the fabric rewoven?

Hydrodictyon is a safe place, a nursery for fish and insects, a shelter from predators, a safety net for the small beings of the pond. *Hydrodictyon*—Latin for "the water net." What a curious thing. A fishnet catches fish, a bug net catches bugs. But a water net catches nothing, save what cannot be held. Mothering is like that, a net of living threads to lovingly encircle what it cannot possibly hold, what will eventually move through it. But

right then my job was reversing succession, turning back time to make these waters swimmable for my daughters. So I wiped my eyes and with all due respect for the lessons of *Hydrodictyon,* I raked it up onto the shore.

When my sister came to visit, her kids, raised in the dry California hills, were smitten with water. They waded after frogs and splashed with abandon while I worked at the algae. My brother-in-law called out from the shade, "Hey, who is the biggest kid here?" I can't deny it—I've never outgrown my desire to play in the mud. But isn't play the way we get limbered up for the work of the world? My sister defended my pond-raking with the reminder that it was sacred play.

Among our Potawatomi people, women are the Keepers of Water. We carry the sacred water to ceremonies and act on its behalf. "Women have a natural bond with water, because we are both life bearers," my sister said. "We carry our babies in internal ponds and they come forth into the world on a wave of water. It is our responsibility to safeguard the water for all our relations." Being a good mother includes the care-taking of water.

On Saturday mornings, Sunday afternoons, year after year, I would go to the solitude of the pond and get to work. I tried grass carp and barley straw, and every new change provoked a new reaction. The job is never over; it simply changes from one task to the next. What I'm looking for, I suppose, is balance, and that is a moving target. Balance is not a passive resting place—it takes work, balancing the giving and the taking, the raking out and the putting in.

Skating in winter, peepers in the spring, summer sunbathing, autumn bonfires; swimmable or not, the pond became like another room in our house. I planted sweetgrass around the edge. The girls and their friends had campfires on the flat meadow of the shore, slumber parties in the tent, summer suppers on the picnic table, and long sun-washed afternoons sunbathing, rising on one elbow when the gust of a heron's wings stirred the air.

I cannot count the hours that I've spent here. Almost without notice

the hours stretched out to years. My dog used to bound up the hill after me and race back and forth along the shore as I worked. As the pond grew clearer, he grew more feeble but would always go with me, to sleep in the sun and drink at the edge. We buried him nearby. The pond built my muscles, wove my baskets, mulched my garden, made my tea, and trellised my morning glories. Our lives became entwined in ways both material and spiritual. It's been a balanced exchange: I worked on the pond and the pond worked on me, and together we made a good home.

One spring Saturday, while I was raking algae, there was a rally downtown in support of the cleanup of Onondaga Lake, on whose shore our city stands. The lake is held sacred by the Onondaga Nation, the people who have fished and gathered on its shore for millennia. It was here that the great Haudenosaunee (Iroquois) Confederacy was formed.

Today, Onondaga Lake has the dubious reputation of being one of the most polluted lakes in the country. The problem at Onondaga Lake is not too much life, but too little. As I dredge up another heavy rakeful of slime, I feel also the weight of responsibility. In one short life where does responsibility lie? I spend countless hours improving the water quality of my half-acre pond. I stand here raking algae so that my kids can swim in clear water, while standing silent on the cleanup of Onondaga, where no one can swim.

Being a good mother means teaching your children to care for the world, and so I've shown the girls how to grow a garden, how to prune an apple tree. The apple tree leans out over the water and makes for a shadowy arbor. In spring a drift of pink and white blossoms send plumes of fragrance wafting down the hill and a rain of petals on the water. For years now I've watched her seasons, from frothy pink blossoms, to gently swelling ovaries as the petals fall away, to sour green marbles of adolescent fruit, to the ripe golden apples of September. That tree has been a good mother. Most years she nurtures a full crop of apples, gathering the energy of the world into herself and passing it on. She sends her young out into the world well provisioned for the journey, packaged in sweetness to share with the world.

My girls, too, have grown up strong and beautiful here, rooted like the willows and flying off like their windblown seeds. And now, after twelve years, the pond is nearly swimmable, if you don't mind the weeds that tickle your legs. My older daughter left for college long before the pond was clean. I recruited my younger daughter to help me carry buckets of pea gravel to pour ourselves a beach. Having become so intimate with muck and tadpoles, I don't mind the occasional green strand that wraps around my arm, but the beach makes a small ramp that lets me wade in and plunge into the deep clear pool at the center without raising a cloud. On a hot day it feels wonderful to submerge in the icy spring water and watch the pollywogs flee. Emerging with a shiver, I have to pluck bits of algae from my wet skin. The girls will take a quick dip to please me, but, in truth, I've not succeeded in turning back time.

It is Labor Day now, the last day of summer vacation. A day to savor the mellow sunshine. This summer is my last with a child at home. Yellow apples plop into the water from an overhanging tree. I am mesmerized by the yellow apples on the dark surface of the pond, globes of light dancing and turning. The breeze off the hill sets the water in motion. In a circular current from west to east and back again, the wind is stirring the pond, so gently you wouldn't see it but for the fruit. The apples ride the current, a procession of yellow rafts following each other along the shoreline. They move quickly from under the apple tree and follow the curve beneath the elms. As the wind carries them away, more fall from the tree so that the whole pond surface is stenciled with moving arcs of yellow, like a procession of yellow candles against a dark night. They spiral around and around in an ever widening gyre.

Paula Gunn Allen, in her book *Grandmothers of the Light,* writes of the changing roles of women as they spiral through the phases of life, like the changing face of the moon. We begin our lives, she says, walking the Way of the Daughter. This is the time for learning, for gathering experiences in the shelter of our parents. We move next to

self-reliance, when the necessary task of the age is to learn who you are in the world. The path brings us next to the Way of the Mother. This, Gunn relates, is a time when "her spiritual knowledge and values are all called into service of her children." Life unfolds in a growing spiral, as children begin their own paths and mothers, rich with knowledge and experience, have a new task set before them. Allen tells us that our strengths turn now to a circle wider than our own children, to the well-being of the community. The net stretches larger and larger. The circle bends round again and grandmothers walk the Way of the Teacher, becoming models for younger women to follow. And in the fullness of age, Allen reminds us, our work is not yet done. The spiral widens farther and farther, so that the sphere of a wise woman is beyond herself, beyond her family, beyond the human community, embracing the planet, mothering the earth.

So it is my grandchildren who will swim in this pond, and others whom the years will bring. The circle of care grows larger and caregiving for my little pond spills over to caregiving for other waters. The outlet from my pond runs downhill to my good neighbor's pond. What I do here matters. Everybody lives downstream. My pond drains to the brook, to the creek, to a great and needful lake. The water net connects us all. I have shed tears into that flow when I thought that motherhood would end. But the pond has shown me that being a good mother doesn't end with creating a home where just my children can flourish. A good mother grows into a richly eutrophic old woman, knowing that her work doesn't end until she creates a home where all of life's beings can flourish. There are grandchildren to nurture, and frog children, nestlings, goslings, seedlings, and spores, and I still want to be a good mother.

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