

Contribution to *Towards an Artful Anthropology*, edited by Gretchen Bakke and Marina Peterson.

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**BECOMING SENSOR IN SENTIENT WORLDS
A MORE-THAN-NATURAL HISTORY OF A BLACK OAK SAVANNAH**

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Figure 1: High Park, Parkside Drive Gate. Photograph by Natasha Myers

I live just down the street from High Park, a 400-acre urban parkland I've wandered through since I was a child growing up in Toronto's West end. It's a place that has watched me grow, and a place whose deep time, daily rhythms and seasonal transformations I have come to feel in my bones.

If I could take you with me on a walk, we would start here on the park's Eastern edge. This stone and metal gate at Parkside Drive and High Park Boulevard marks one of three entrances to the roadways that wind through the park. Just past here is another gateway. It is a living architecture forged by trees that have been holding forth for quite some time. This gate marks the edge of an ancient remnant a black oak savannah.

Oak savannahs are remarkable *happenings* that ingather many kinds of beings, becomings, and comings undone. They are composed of widely spaced oak trees, tall prairie grasses, and wild flowers that love to take root in sandy soils. And yet the composition of these lands is not only dependent on "natural" forces. Oak savannahs depend on the disruptive force of fire to keep the grasslands thriving and to promote the regeneration of oaks. And for that reason, they depend on people with knowledge of fire and the skills to use this disruptive force to care for the lands. Oak savannahs are in this sense *naturalcultural* formations par excellence. The one extending North from here is at least 10,000 years in-the-making.

The "here" that we experience now was a different "here" when these trees were young. They've been moving slower and growing more imperceptibly than the city has around them. I am told that some of these oaks could be as old as 250 years, grown up from acorns activated in the smoldering flames of a huge fire that swept through the region in the 1750s. Back then this land belonged to the Mississauga First Nation. That was before the lands were stolen for a meagre sum in a land deal that founded Toronto's predecessor, the Town of York.

What do the trees know? If we learned how to listen, what stories could they tell?

Incredulous readers will insist: You can't be serious. Trees can't know things. They certainly don't speak, let alone tell stories. And if they did, how could we ever hope to understand them? Aren't you just anthropomorphizing?

This chapter attempts to interrupt this line of questioning, and invites readers to unlearn the self-evidence of these seemingly rational protests. It asks whether these questions aren't themselves too mired in colonial imaginations of nature and culture to do the serious work of addressing what matters to these oak savannah lands. Consider that these questions are themselves expressions of colonial logics that have for centuries constrained how we think about lands and bodies, and their relations. This essay offers a glimpse of the ways that the disavowal of nonhuman sentiences is intimately bound up in colonial projects that have taken shape under the guise of the ecological sciences. And it invites readers to consider that ongoing protests against the very conception of nonhuman sentiences risk re-colonizing the past, reviving a colonial present, and ensuring that colonial rule over settled lands and bodies endures well into the future.

This chapter seeks to unsettle assumptions about the innocence of the ecological sciences. Ecology is founded in settler colonial logics: ecologists invented and developed their tools and theories at the frontiers of colonial expansion and capitalism's violent incursions on Indigenous lands.¹ The stories ecologists *are schooled to tell* are those that monetize lands and bodies. Made over into natural resources, bits of nature in their stories come to circulate as commodities in tightly regulated energetic and moral economies bent on minimizing expenditures and maximizing efficiency. Ecological thinking has been shaped so thoroughly by functionalist, neo-Darwinian logics, that its stories naturalize militarism, mechanism, and heteronormativity. These foundations have produced an ecological science whose data forms and modes of inquiry tacitly and explicitly assume the only viable metrics of a life are an organism's capacity to survive and reproduce its genome.² There is no room for sentience in these accounts of bodies and lands.

And so, perhaps conventional ecology is not a great ally in efforts to tune in to what matters to this oak savannah. To become better allies here we might need to forget everything we thought we knew about nonhuman lives and worlds. This chapter invites us to forget what we thought "nature" was; to forget how we thought life "worked"; and to forget, too, the naturalizing tropes that made us believe that living beings "work" like machines, or that forests perform "ecosystems services," or that "reproduction" and "fitness" were the only valuable and recordable measures of a life.³

Perhaps, rather than picking up the ecologists' well-worn tools and theories, it is time that we find ways to reach toward the unknowable, the imperceptible, the ineffable and the numinous. Not with the desire to *capture* some truth, or attempt render the world legible to the constraints of our colonized imaginations, but rather to learn how to step into *not knowing* as an ethic and a practice⁴. *Not knowing* ahead of time that the trees have nothing to say. *Not knowing* what matters to a life or to this land. Not knowing is not about cultivating ignorance or indifference. Rather it is a capacious and humbling space that offers some refuge from the hubris of knowledge systems -- like ecology -- that are bound so tightly to colonial conquests, discursive regimes, cultural norms, and moral economies that have too long dictated what is good, valuable, and true. Asking "what do the trees know?", and "what matters to this land?" is thus to insist on pushing past assumptions about what counts as proper forms of knowing and the proper objects of knowledge in both anthropology and ecology.

¹ See for example Kingsland (2008).

² See Hustak and Myers (2012).

³ See Hustak and Myers (2012).

⁴ On not knowing see also de la Cadena (2015).

BECOMING SENSOR

So, forget your best training and consider that anthropomorphism is more and other than what we have long thought it was.⁵ Consider, perhaps, that the stories we tell ourselves about nonhumans do not always involve a one-way imposition of human characteristics on nonhuman others. Indeed, what I have found over and over again working as an anthropologist among life scientists is that practitioners become so intimately entrained to the beings and doings of the organisms they study that they find themselves expanding their all-too-human sensorium (often through technological prostheses) to tune their bodies and imaginations in to meet the richly sensory worlds of the nonhumans they study.⁶ The molecular biologists and plant scientists I've worked with give themselves over to their inquiry in such a way that they continually *become with and alongside* the living beings they study. Such "involutionary" encounters have a *metamorphic* effect, one that changes not only what practitioners come to feel and know, but also the very meanings of the concepts and metaphors they set in motion to story nonhuman worlds.⁷ What I have learned working with and alongside plant scientists, in particular, is that deep inquiry into their remarkable lives has the effect of *vegetalizing* the sensorium of anyone who gets caught in their *whorls*.⁸ Indeed, caught in the affective entanglements of inquiry, it becomes unclear who is animating what and what is animating whom.⁹ Are the plants getting

⁵ See Myers (2014, 2015a, 2015b). Here I diverge from Eduardo Kohn's (2013) *How Forests Think*, which remains too constrained in its commitments to functionalist, neo-Darwinian accounts of nonhuman beings and doings. His account emphasizes semiosis, rather than material-semiosis, and in so doing he overlooks of the richly sensory and sensual worlds of plants and other beings. Rather than attempting to include plants as "thinking" beings in already impoverished models of consciousness, my inquiry reaches towards a more radical conception of more-than-human sensing and sentience. Following Maurice Merleau Ponty (1968), my inquiry lingers in the realm of feeling, at that lively node where sensing and sentience fold in on one another. This is an approach to the world in which sensing is always already the promise of sentience, one in which lands, bodies, tissues, cells, and the very stuff of life are always already excitable. On excitable matter see Myers (2015b)

⁶ See Myers (2015b)

⁷ See Hustak and Myers (2012).

⁸ *Ibid.* Indeed, one of the most violent forms of anthropomorphism doesn't appear to be the imposition of human characteristics on nonhuman others. Consider ongoing attempts in the life sciences to rend the nonhuman world through mechanistic, deterministic, functionalist logics. The nearly complete naturalization of organisms as machines with mechanically interdigitating parts (right down to the molecular scale) produces deeply impoverished accounts of life in which the only nonhuman agencies worth noting involve the successful reproduction of an organisms' genome. This insistence on the "mechano-morphic" is so strong in the discursive fields shaping the life sciences, that it has produced the condemnation of efforts to understand life outside these terms. Remarkably, this mechano-morphism gains its traction in the very *taboo against anthropomorphism*: for some reason it's safer to liken nature to (human-made) machines than to human beings. Claims to nonhuman sentience are thus only ever understood as the spurious overlaying of human-like qualities on top of what are conceived as essentially mechanical processes. In a circuitous way, the taboo against anthropomorphism becomes the very means to uphold a form of human exceptionalism that would render all nonhuman others as mere machines, and simultaneously disavow other ways of getting to know nonhuman worlds. Perhaps then, anthropomorphism isn't the enemy, it is just a distraction from a more violent force that seeks to mechanize all of nonhuman life. And yet, as I argue elsewhere, mechanism is not hegemonic; it has continually failed to fully disenchant the life sciences, and the metamorphic work of storying nonhuman worlds has continually failed to stick to the script. Animisms continually interrupt even the most mechanistic of logics (See Myers, 2015b).

⁹ See Stacey and Suchman (2012) and Myers (2015b).

humanized or the humans *vegetalized*? What we have long called anthropomorphism doesn't appear to work in one direction. These near-shamanic, shape-shifting, and intimate dimensions of scientific practice can be hard to perceive, especially when broader publics expect scientists to deliver mechanized, disenchanting accounts of a living world.

What follows is an experiment in suspending our all-too-well cultivated *disbelief* in the sentience of other things and beings. For the past twenty years I've been working between the arts and the life sciences, and more recently in anthropology, to experiment with modes of attention that might allow plant sensitivities and sensibilities transform my own sensorium.¹⁰ I begin from the assumption that attunements to other sentiences require cultivating subtler sensitivities. I for one have learned that my sensorium is as expandable (and constraining) as my imagination.¹¹ I've been in training to tune my sensorium to the plants, to learn how to sense alongside them, with the aim of *becoming sensor*, sensitized to this sensing and already sentient world. I begin with the assumption that we are surrounded by forms of sentience that we have for the most part been trained to tune out and ignore; that we inhabit a more-than-human world that is always already sentient; that this world full of beings, becomings, and processes of coming undone, is pullulating with sensing and sensitive forms of life and death that are attending and attuning, caught up in dances with and athwart one another, composing and decomposing in responsive, repulsive, and propulsive relation.

To be sure, these sentiences may not be *for us* to know: there is a world of affectively-charged chatter in the loquacious ecologies all around us, taking shape among creatures we may never see, or know, and who have nothing whatsoever to say to us.¹² And at the same time, there are some sentiences among us who perhaps deserve a little more attention. I am thinking of the plants. Plants, after all, are the substance, substrate, scaffolding, symbol, sign and sustenance of political economies the world over.¹³ They hold the sky up and the earth down. What might happen if we reach toward them with methods better attuned to their remarkable beings and doings, and with the openness of an ethic of *not knowing*? Perhaps they could teach us how to ask better questions and invent better methods and modes of inquiry.

UNSETTLING THE COLONIAL ECOLOGICAL IMAGINATION

More than an attunement to plant sensing, *becoming sensor* on these lands in High Park demands sensitizing oneself to the power moves of a settler colonialism that has rendered more-than-human sentiences so illegible, and so impossible to perceive. *Becoming sensor* requires making strange the ways conventional ecology continues to be deployed not only to colonize land, but also to colonize our imaginations; how it continues to evacuate all other ways of

¹⁰ See for example Myers (2001, 2005, 2014, 2015a).

¹¹ See Myers (2014). See also Myers (2015b) for an account of the expansive kinesthetic imaginations alive in the practice of science.

¹² Ibid.

¹³ On *photosynthetic mattering* see Myers (2016).

knowing the living world, most especially those local and Indigenous knowledges that are attuned to the sentience of lands and bodies.

Decolonizing the ecological sensorium is especially pressing today as High Park, identified as a site of “scientific and natural interest,” becomes a site of intensive ecological restoration, where naturalists, ecologists, volunteers, and the city’s Urban Forestry team attempt to “bring back” the ancient oak savannahs that used to stretch out across these lands.¹⁴ These restoration efforts tend to build on conventional ecological ideas; they uphold the view that plants and trees perform ecosystem services; and they vilify invasive species in efforts to secure “proper” ecological relations. Conventional approaches like this tend to hail an imagined past that assumes there was a time when this land was in some state of *nature*; some *natural* state. And yet, this oak savannah is no site of pure nature. The very existence of oak savannahs here is evidence of enduring Indigenous land care practices over millenia. Indigenous peoples shaped these lands extensively before it was taken from them and later cordoned off as municipal parkland. Restoration efforts to save the oak savannah’s “nature,” with no attention to the rich cultural histories shaping this land, have the effect of erasing the very people that give this land its contours and significance. Here ecological restoration efforts participate in an ongoing colonial project that has enforced the dispossession of Indigenous peoples from their lands.

Is it possible to decolonize ecology?¹⁵ To *do ecology otherwise*? How might becoming sensor on these lands teach us how to do ecology as if it were allied to the *resurgence* of Indigenous peoples, not their continued oppression?¹⁶ It is becoming clear that the first step requires disrupting assumptions about the innocence of ecology, that science which is supposed to right the wrongs of capitalisms’ excess. It is time to wake up to the colonizing forces of the ecological sciences that are founded on the assumption of nature as exploitable resource; and to disrupt the conventional ecological sensorium in order to cultivate new modes embodiment, attention, imagination, and new ways of telling stories about lands and bodies. Decolonizing one’s ecological imagination takes serious work; de-tuning a well-trained ecological sensorium demands upending everything we thought we knew. Returning again and again to this work of re-tuning my sensorium has inspired the invention an *ungrid-able ecology* for a *more-than-natural history* up to the task of documenting this naturalcultural happening 10,000 years in-the-making.

¹⁴ See Varga (1989).

¹⁵ Thinking with Eve Tuck and K. Wayne Yang (2012), and exploring ways to work as a white-settler ally to Indigenous resurgence projects, I am not employing decolonization as a metaphor: decolonizing ecology in my view does require repatriation of lands to Indigenous peoples. See also Makoons Geniusz (2009) for an Indigenous scholar’s approach to decolonizing botanical knowledge. See Mastnak et al. (2014) for ways of decolonizing understandings of “native” and “invasive” species.

¹⁶ On resurgence see Simpson (2011) and Simpson (2013).

A MORE-THAN-NATURAL HISTORY OF HIGH PARK'S INHABITED LANDS

If you could come with me on a walk, we'd start here at the gate. Veering away from the road, just a few steps from here, there's an inviting pathway for recruit-able wanderers, those who are not compelled (willingly, unwittingly, or forced) to follow the paved road. This 400-acre park's circuitous roadways carry a steady stream of cars, racing bikes, and joggers, dog-walkers and stroller-pushers, and people with mobility devices seeking hard, flat, and sure surfaces. The woodland paths I stick to are accessible only to some.

The oaks that stand here at the entrance have sensed so much. Their heavy limbs reaching and curving above are characteristic of so many of the oaks that live here. The ones with long, vertical furrows in their bark are red oaks. Trees with chiseled and broken lines in their bark are black oaks. White oaks thrive here too, with their ragged, ghostly grey bark. Some oaks have limbs with smooth and steady arc lines; some have limbs that meander waywardly. Still others' limbs are cut short by chainsaw or broken off in shards from the force of high winds or falling branches. After over one hundred years of *mattering* – pulling matter out of thin air through the cosmically attuned alchemical processes of photosynthesis – this tree finally let go and began its long fall. Disintegrating, dematerializing, it will still be falling for another hundred years.

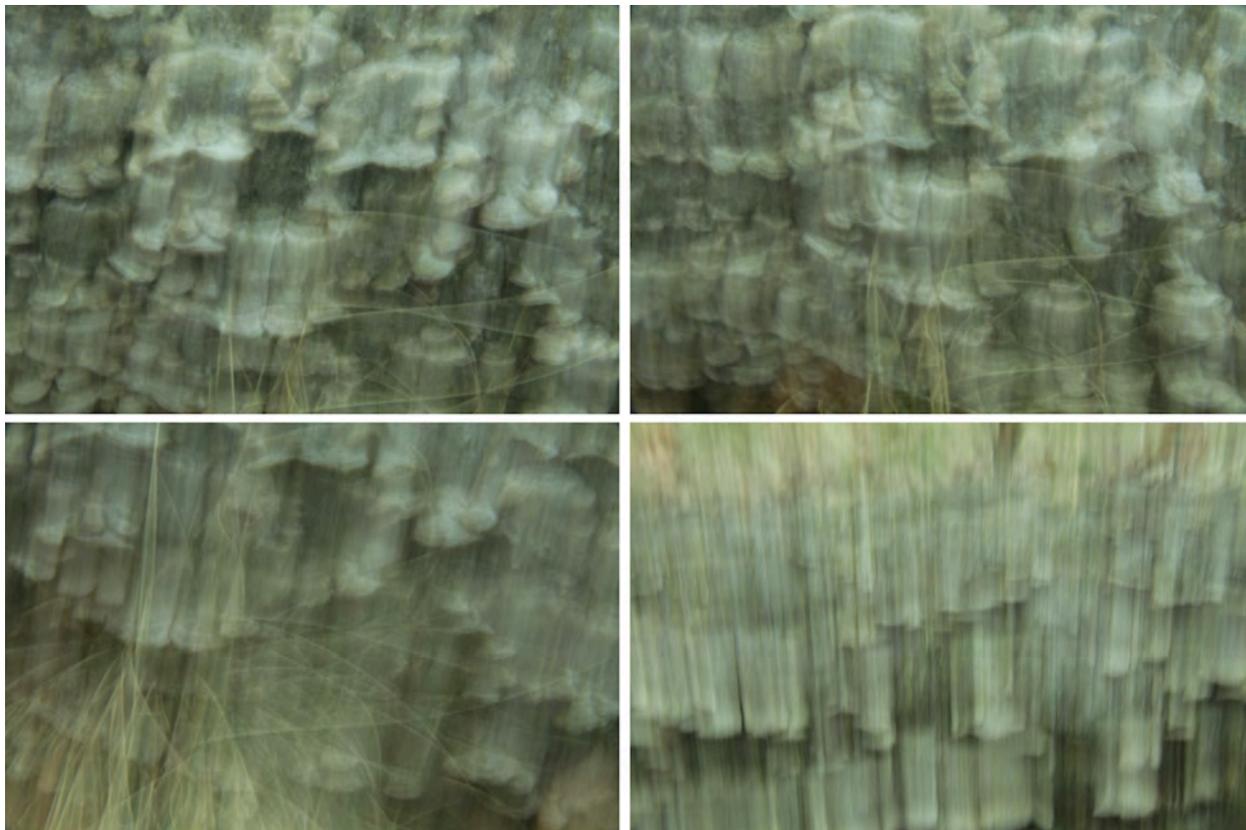


Figure 2 Compositions and Decompositions. Photographs by Ayelen Liberona and Natasha Myers

The trees in this park are not to be mistaken as mere vegetation: that mute and passive undergrowth that so readily serves as the aestheticized backdrop to human pursuits. The plants and trees here are active *participant-observers*: their growing limbs and fissured barks have

recorded each moment of the wider landscape's transformation over time. Each node of growth, each bud, meristem and root tip, is a *center of indetermination*, improvising, experimenting, and conducting moment to moment inquiry into the play of light, gravity, and vibration.¹⁷ Worldly conjurers, these photosynthesizers both make and are made by the surrounding airs and soils; and they both shape and respond to worldly rhythms and shifting climates.

Sticking it out, through thick and through thin, all these years, the trees here have been paying very close attention to this changing world. What matters to these trees? Lots matters to them. The abundance of water and light and heat and cold matter for sure. But they also care about the other plants and trees around them; they care about the squirrels and caterpillars and ants and fungi. It matters especially who is feeding from their widely distributed bodies, who is nourishing them, and who are the agents of their undoing. These trees care especially about the different people who have over the years been weaving their way in between them. These days the asphalt, the salt, heavy metals in the air, and the exhaust from cars matters significantly. But these phenomena haven't always been their immediate concerns.

One of my favourite spots in the park is just past this gate. Others love it too. In summer it fills in with leaves and green and becomes a secret grove, bounded on either side by mounds heaving with life and rot. It's a tangled bank of lurching and fallen trees covered in frilled fungi and neon green mosses, a thickening underbrush of European buckthorn, young oaks, ticktrefoil and milkweed, and the searching tips of growing grape vines. One young, spindly birch gave up and its leaves turned brown well before fall last year. A flattened cardboard box, was perhaps someone's bed one night. I think that's an old sweatshirt bundled up and decomposing under that log. A pair of men's shoes, one here, one there. Pungent wafts of marijuana smoke billow from here some sunny afternoons. Sometimes it's the neighbourhood kids. Sometimes I'm sure its their parents. In the winter, even snowless winters like this one, the thickened foliage dies back, stalks wither, blacken and collapse. Those seeking refuge lose their cover. You can see clear to the road and into the homes across the street.

This little section of the park spans no more than two acres. You have to pass this space if you are walking into the park from the Parkside Drive gate. I never used to come here. Maybe it never looked inviting. Maybe I could sense that it was already inhabited by others; wanderers, wayfarers, and galavanterers, their beer bottles, cigarette butts, tarps, used condoms, bongs, and trash scattered here and there.

This was a blank space on my internal map of the park, which I claimed to know like the back of my hand. From a safe distance it seemed crumbling, derelict, uncared for. Massive limbs of fallen trees lay scattered as if they were bodies left unburied in a graveyard. Or maybe it felt too exposed here, not only to the roadway with its groaning engines and that unending expanse of city to the East, but also to the sky. The trees are tall here and the spaces between them are wide. This stretch of land up here doesn't let you forget for a moment that you're in a city.

¹⁷ On "centers of indetermination" see Deleuze (1986) and Myers (2015a).



Figure 3 Still Falling. Photograph by Natasha Myers

And maybe that's why I'm so drawn to this place now. I still haven't gotten over the the fact that a space like this can and does exist, right here, even at the cusp of such intense urbanization; that a place like this is still unpaved, still churning life into death and death into life.¹⁸ Trees that fell a hundred years ago are *still falling*. And for thousands of years, this has been a place where people, animals and birds and insects have been weaving their way between the worlds made by these trees and grasses and wildflowers.

High Park has the feel of other major metropolitan parks, like Central Park in New York City. But there is at least one important difference: Central Park was built on land that Frederick Law Olmstead razed and terraformed to sculpt into aestheticized woodland formations.¹⁹ As much as High Park grounds have been sculpted by roads, athletics infrastructure, commercial enterprise, lawn mowers and ornamental gardens, a good proportion of these lands retain their ancient forms. Oak savannahs are old lands.²⁰

These days, when I'm leading multisensory tours through the savannah for friends, artists, and other plant lovers, I take them to places where you can sense the deep time of this landscape. There are glimmers of its ancient formation throughout the park, but here's one very special place just North of the gate here, right on the edge of the park overlooking Parkside Drive. This mound has a magnetic draw that pulls me right up its steep slopes every time. From the top of

¹⁸ See Myers (n.d.).

¹⁹ See Gandy (2003) and Smithson (1973).

²⁰ See Riley (2013) and Remiz (2012).

this mound you can see the undulating topography of the land rolling out to the South, West, and North, and you can look over the city streets and homes that line the park to the East.

Here you can feel the lift and lilt of the tall, arcing black and red oaks dancing with one another in winds that catch the upper canopy. They are not just played by the wind; you can see the trees playing it, throwing the wind, tossing it back and forth between branches high up in the canopy. The towering white pines and younger red pines dance differently in the winds. Over the course of the summer, waves of tall grasses, low-lying sedges, and brilliantly coloured wildflowers bloom across these sloping hillsides: yellow goldenrods, black-eyed Susans, and woodland sunflowers; purple ticktrefoils, harebells, hoary vervain, wild bergamot, and late-blooming asters; the wispy white of wild carrot; the paper white of pearly everlasting; and the flaming orange of butterfly weed. European buckthorn, raspberry, and wild grape thicken the under-brush here and there. Some plants thin themselves out over the slopes and in the gullies; others nestle close together in the swerves and turns of the land, tucking into its troughs and groves.

When I kick my boot into the dirt here it becomes clear that this mound is made of very fine sand and silt. The rolling hills that contour this site are sand dunes. When you start looking closer, everywhere you look, there is sand. These lands used to be the bed of an ancient lake. Ten thousand years ago this was all underwater. Lake Ontario, Lake Erie, Lake Huron, Lake Superior, Lake Michigan, the St. Lawrence River: The lakes and rivers that we know today used to have different contours. They used to be much bigger. And at times, they were much smaller. This was a landscape of “shifting, drowned, and emerging shores, worked and reworked by water and wind.”²¹ Lakes rose and fell while lands rebounded, released from the weight of retreating glaciers. And still, some of what is submerged today in Lake Ontario used to be above water.

Water, in its myriad liquid, frozen, and gaseous states, is just one of the elements that has sculpted this landscape. Another significant elemental force shaping these lands over millennia has been fire. Oak savannahs thrive in the sandy dunes of ancient lakebeds. But the widely spaced trees, open canopies and prairie grasses that make up savannah ecosystems are ephemeral. They are transitional ecologies, always on their way to becoming forest. Oak savannahs need fire to keep the shade-loving forest from encroaching, to stimulate the germination of oak seedlings, nourish the soils, and to keep the seeds of prairie wildflowers and grasses awake and active in the seedbed. The rhythms of composition and decomposition in these landscapes are bound to the combustive and disruptive rhythms of fire.²²

²¹ Riley (2013): 6.

²² On disruptive ecologies see Tsing (2015). On soils and decomposition see Puig de la Bellacasa (2015).



Figure 4: Coming Undone. Photograph by Natasha Myers

But fire is not just a natural force; fire is integral to culture and practice. People around the world use fire to sculpt their lands.²³ Where plaques and monuments throughout the park celebrate colonial histories, it becomes clear that the stories that don't get told about High Park are precisely the stories of the deep cultural history of this land. According to the archeologists, there were people living in this region before the ice arrived, as early as fourteen thousand years ago. The stories told by the descendants of these peoples attest that they have been here since the beginning of creation.²⁴ One of the many devastating legacies of settler colonialism in this region was the suppression of fire. It wasn't just that settlers suppressed the natural rhythm of fires set by lightning strikes, they also suppressed the fires set by Indigenous peoples who had long used fires to care for this landscape. Eventually they suppressed the very knowledge of these practices.

²³ On fire in disturbed landscapes see for example Dey and Guyette (2000), Pyne (2011), Verran (2002), and Sandilands (2014, 2016).

²⁴ See L. Simpson (2011).

The oak savannahs in High Park have endured for millennia only because they were cared for by Indigenous people who deliberately and consistently used fire to keep them open and thriving. Fire allowed the many groups who lived in this region to cultivate acorns, walnuts, butternuts, chestnuts, beechnuts, hickory and hazel nuts.²⁵ These nourishing trees and the open canopies of the savannah lands attracted white-tailed deer, turkey, raccoon, squirrels, and passenger pigeons, and bears, making these spaces good sites for hunting. The fires also opened up spaces for people to build homes and villages, and to grow corn, beans and squash, sunflower for oil and tobacco for ceremony.²⁶

The Wendat, Haudenosaunee and Anishnaabe Nations lived here. Many other Indigenous peoples moved through this region, which was an active centre of trade. High Park is close to the Humber River, whose winding route forged a path for the Toronto Carrying Place Trail, a major travelling and trade route that tracked along the Humber River Valley watershed between Lake Ontario and what is now known as Lake Simcoe to the North.²⁷

The removal of Indigenous peoples from their lands and the obliteration of their cultures through residential school systems and forced assimilation has had and continues to have devastating effects on individuals and their communities across Canada.²⁸ High Park's oak savannah provokes another line of inquiry into this history: can we also ask about how this violence impacts the wellbeing of the land? What does a land lose when it is dispossessed of its people?

You can't take people out of an oak savannah: it will cease to be an oak savannah. The canopy will thicken, blocking out the sunlight that these prairie grasses and wildflowers have come to thrive on. Maples will move in. The pines will encroach changing the soils with their pungent chemistries.²⁹ The widely spaced oaks with their far-reaching limbs will be starved for light. Nourishing acorns and nut trees will become scarce. Hunting will be harder. In the deadly wake of first contact with Europeans there were regions where "hardly an acre" was "broken for corn or cleared for farming for a century and a half."³⁰ Many of the ancient savannahs that lost their people filled in so thickly that when European settlers returned in the late 1700s they encountered woods that looked like their fantasies of primeval forest: they appeared to be untouched by human inhabitation. It is this de-peopled landscape that has become the conservation ideal for forest restoration.

By the early 1800s the lands that now make up High Park were fully colonized. Farmers put sheep out on the grassy meadows, which appeared to be so perfectly prepared for them. The

²⁵ Riley (2013): 14. See also Kimmerer (2015) for stories of pecans among more southern Nations.

²⁶ Riley (2013): 14-7.

²⁷ See Johnson (2015).

²⁸ See for example, Simpson (2008), Simpson and Ladner (2010), Simpson (2011), Maracle (2015), and Coultard (2014).

²⁹ See Tsing (2015) on pine forests.

³⁰ Riley (2013): xvii.

sheep seemed at first to do just as a good job as the fire for keeping the canopy open. But then again, they ate everything, including the young oak seedlings. The old oaks kept growing, but no new oaks grew alongside them. This was not a problem for the farmers. But it dramatically altered the land. Over time, grazing sheep transformed the composition of grasses. This suppressed the wildflowers who cleverly secreted their seeds deep in the seedbed, waiting and waiting for the fires to come. There are seeds still in the soil that remember a different world. The 250-year-old trees that are still thriving and dying here today remember remember the fires. Do they remember their people?

DOING ECOLOGY OTHERWISE: PROTOCOLS FOR AN UNGRID-ABLE ECOLOGY

Toronto's Urban Forestry team has put up signs throughout the park to mark "Monitoring Plots" where they have done ecological restoration work. These are sites parks workers return once every few years to take photographs and record changes, storing the images in an archive at city hall. I take these designated plots as a provocation. What is it to monitor an environment? What would it take to really pay attention to what is happening here? And what modes of attention might be required for a decolonized account of this land?

For the past two years I've been visiting the park almost daily and working alongside Ayelen Liberona, a dancer, filmmaker, and long-time friend, as we cultivate modes of attention that might help us tune in to the deep time of these lands and the naturalcultural happenings shaping its present. We've been experimenting with techniques drawn from the arts, anthropology, and ecology. In addition to working with images, sounds, and movement, Ayelen and I have been leading multisensory tours through this stretch of savannah each season. Since our first Spring Walk in April 2016, we have brought over 50 people to the land, in small small, intimate groups. We take them on silent walks, lead them through guided visualizations and mediations, and offer them a range of sensory techniques for deep listening and close observation. Our aim is to give them the space and time to tune into the compositions and decompositions of these remarkable lands. Our participants to date have mostly been artists, educators, and practitioners in a range of healing arts. Their accounts – taking shape in stories, songs, drawings, poems, and dances – are forming an archive for an "ungrid-dable ecology" of this oak savannah. *Interested and involved*, we are collectively learning to expand and extend our all-too-human sensoria so that we might find ways to pay attention to what matters here.³¹

KINESTHETIC ATTUNEMENTS

We take seriously the idea that these monitoring plots are sites where we need to pay very close attention. And so, what, we ask, would we have to do with our bodies, imaginations, and sensoria, to really tune in? *Becoming sensor* in this already sentient world, we are experimenting with modes of attention to learn how to pay attention to this land that has been paying very

³¹ See Liberona and Myers (2016) "Becoming Sensor in a Black Oak Savannah: Cultivating the Arts of Attention in a 10,000 year-old Happening" <http://becomingsensor.com>; on "interest" see Latour (2004); on "involvement" see Hustak and Myers (2012).

close attention to all the transformations taking shape around it for so many years.³² Plants and trees are themselves remarkable sensors. How can our sensing practices do justice to documenting the beings and doings of an oak tree, let alone the vast numbers of trees taking root together across this wide swath of ancient land? Becoming sensor in the savannah demands subtle attunements of our always already *synesthetic* sensoria. As long-time dancers our attunements to these lands are always already kinaesthetically attuned and profoundly attentive to rhythm, temporality, momentum, and more-than-human movements of all kind. Two years in, our first attunements are just beginning to sensitize us to what this land is *matter*ing, and what *matters* to this land. I see our work as part of efforts to invent protocols for an “ungrid-able ecology” up to the task of documenting the beings and doings of these bodies and lands.

It is important to note that these protocols are not intended to re-colonize these lands with yet more settler colonial stories. Rather, these techniques offer an example of some ways to break the consensus of a colonial ecology that is indebted to mechanistic, neo-Darwinian logics. These protocols demonstrate how one might begin to refuse the colonial norms and logics of conventional ecology and open up to sensing plant sentience. These protocols explicitly push up against the forces of a scientific rationalism that disavows nonhuman sentience and commodifies nature as resource. In so doing, they aim to expand the discursive field in which stories about bodies and lands can be told. Consider these attunements as one way that settlers can ally themselves with the remarkable and work of Indigenous activists and scholars in the name of decolonization.³³

You too can *do ecology otherwise*. Try your hand at inventing techniques that disrupt the colonial ecological sensorium. Remember though, that an *ungrid-able ecology* is not bound to the moral economies of mechanism or energetic efficiency. And as you experiment with techniques, modes of attention, and inquiry, and get interested and involved in the *naturalcultural* happenings around you, be sure to remember to resist the compulsion for legibility, quantification, and grid-like mappings.

Kinesthetic Imaging

Technique: Hack into your camera to slow down the shutter speed so you can record the energetics of your encounters with the moving bodies of the creatures you are drawing into view. This will allow you to tune in the affectively charged relations taking shape among lands and bodies.

³² Note that I am deliberately blurring the distinctions here between human and nonhuman modes of attention. There are crucial differences and incommensurabilities among human and nonhuman sensoria, to be sure. But perhaps there are also sites of possible resonances that we have not yet fully grasped.

³³ See for example Todd (2016), L. Simpsom (2014), A. Simpson (2007), Tallbear (2013), Liboiron (2016).



Figure 5. Dances with Light. Photographs by Ayelen Liberona and Natasha Myers.

Considerations: If traditional nature photography captures living bodies and turns them into objects of aesthetic and scientific interest, these kinesthetic images gesture to a different kind of account of the living world. These images are attunements. They are generated in the act of *moving with and being moved by* the beings and doings around you. As relational images they document the push and pull between bodies. Rather than a means to capture events or objects, these images make it clear that it is the photographer who is caught: captivated, they are the ones who hitch a ride on what is *becoming* and *coming undone*. The rotting logs, frilled mushrooms, crumbling leaves, ancient sands, and greening grasses are not discrete things, they

are *happenings* taking shape through deep time and in the ephemeral moments of now, and now, and now. It is the photographer who must learn how to keep pace with these rhythms through her body.

Kinesthetic Listening

Technique: Bring digital audio recorder with a directional mic with you into the savannah. Rather than standing still, stay in movement while you are recording. Lean into the sounds to amplify their intensities, speeds, slownesses, and their affective charge. Turn and twist your body to feel through the multiple sources of sounds. This dancing with sound is a mode of *kinesthetic listening*. Back at home, use sound editing software to speed up and slow down the sounds. What do you hear?

Considerations: Sound palpates space and pulls at time. It is a remarkable tool for documenting ecological relations. Documenting the land's sonic ecology helps to tune in to the vibratory milieu of the savannah by tuning into its deep time, its seasonal cycles, its daily rhythms, its improvised encounters, fleeting moments, and disruptive events.

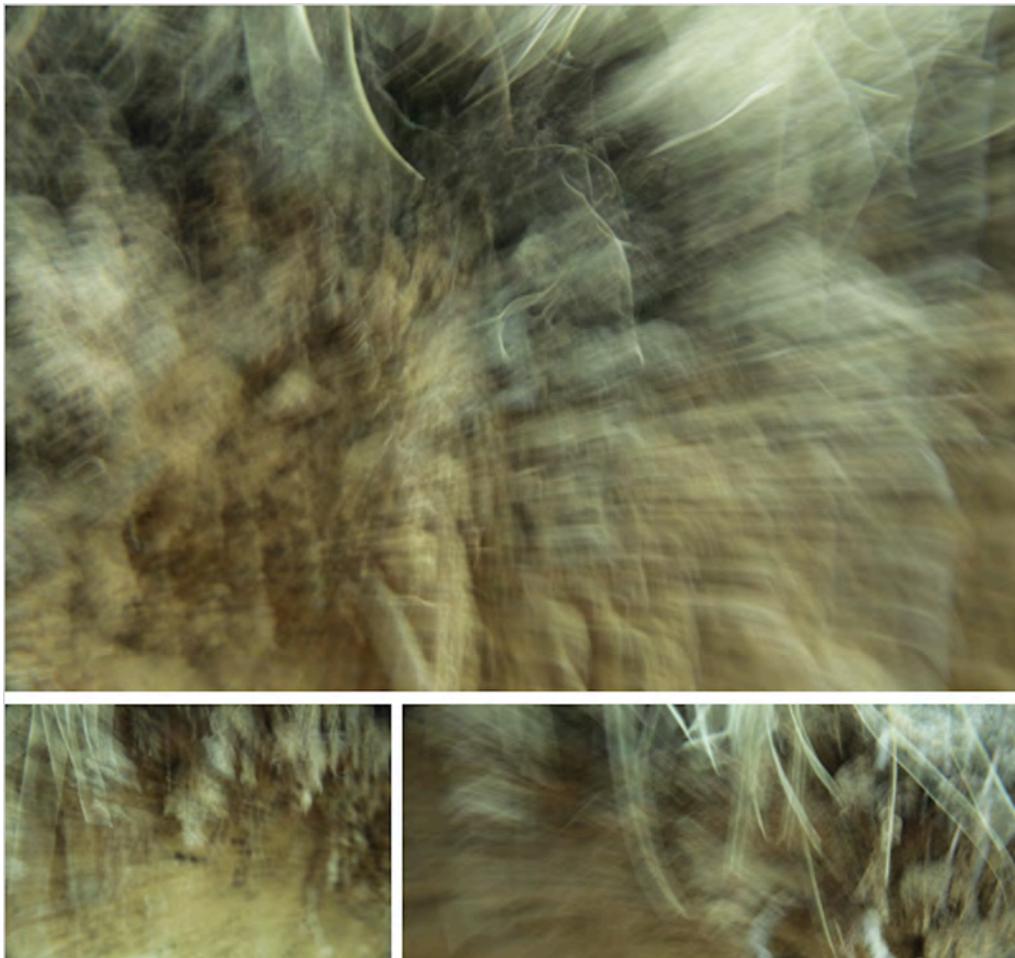


Figure 6. Vibratory Milieu. Photographs by Ayelen Liberona and Natasha Myers.

Note from April 2016: The sounds of cars and trucks and planes are never fully muted here in the oak savannah. They just propagate differently. Muffled and modulated by trees and shrubs, birds and squirrels and insects, ravines and slopes, city sounds resonate in a distinct vibratory milieu. *Sounding out the savannah* reveals that there are no boundaries between the rhythms of city life and the lives of the creatures who take root and take flight here. Speeding up and slowing down the recordings reveals otherwise unimaginable worlds and opens up new ways of telling stories. Stomping feet become falling trees, shaking the earth in ways that recall the geological forces that formed this land. Slowing down bird calls reveals other songs, other creatures and voices haunting the space. Gulls become coyotes. Traffic becomes rushing, rhythmic waves. Life churns to other rhythms. There is no silence here. (SOUND FILE <https://www.youtube.com/watch?v=J02XTtDmCrU&feature=youtu.be>)

Kinesthetic Smelling

Premise: To become a nose capable of sniffing out plants' alchemical utterances in an affective ecology. It is study that begins from the assumption that plants are creative and expressive synthetic chemists mattering and modulating the chemical composition of the atmosphere. Plants are alchemists who craft volatile concoctions to excite other plants, as well as animals and insects and people. The aim is to tune in to the significances and sentiments that plants articulate through their volatile chemistries.³⁴ Mapping these smells is a way to map *involutions* among plants and other plants, among plants and insects, and among plants and people.

Technique: To do this work you must become a *transducer* of the alchemical utterances shaping this affective ecology. You must let these scents excite your tissues in order to document your situated knowledge of this alchemical ecology. And you must learn to transduce chemical excitations through your tissues and record these as energy diagrams.

Step 1: Sniffing out the Savannah

1. Select individual flowers or clumps of flowers.
2. Lean right in to the flower, to take in its full bouquet. Pull away. Lean back in for a second sniff, and then a third. Let the range of smells move through your tissues. Feel how the scent has form, speed, height, depth, and weight.
3. Transduce each sniff as an energy diagram, letting the pencil in your hand loosely track the energies of this encounter.
4. Note plant species, the time of day, the date and time of the last rain, the location, and describe the composition of neighboring plants.
5. Repeat at different times of day and in different points in the season.

Step 2: Develop an ambulatory mapping of this smellscape over time.

³⁴ Hustak and Myers (2012).

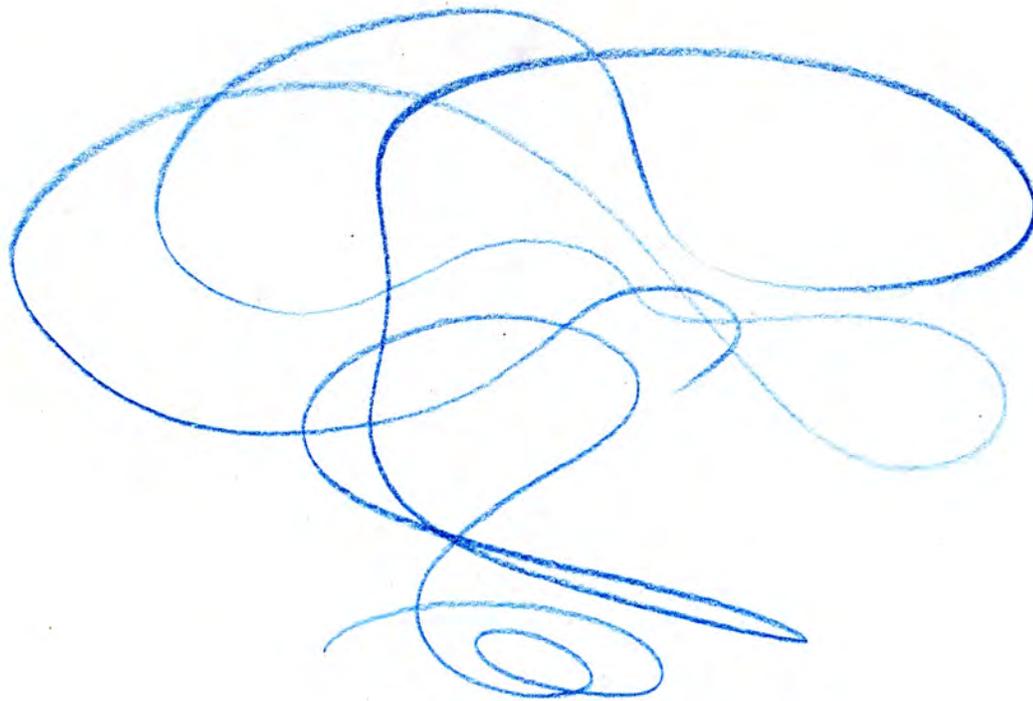


Figure 7. Energy Diagram of Queen Anne's Lace. Drawing by Natasha Myers.

Considerations

- a. Pay attention to atmospherics and temporalities: It seems as though evenings are a time when the scents linger, when they are no longer getting burned off by the sun or evaporated in the heat. When the sun's rays lengthen and the scented air cools the smells seem to drop down and gather in the troughs of the savannah's undulating landscape. Note where the smells mingle, and where the contours of the land shape the ways the smells gather.
- b. Be careful: the flowers are potent. Do not work with more than one species at a time. (NOTE from August 1, 2015: I got totally high after working with sweet clover, wild bergamot, Queen Anne's lace and goldenrod in one session.)

CODA

I return again and again to this oak savannah in High Park because I sense that it can teach me important lessons about the shape of people's relations with plants in a time of unprecedented ecological transformation. It is also a place where it might be possible to reimagine forms of *land care* that do not hinge on the removal of people; where saving a land's *nature* does not hinge on the displacement of its *cultures*. It is a place where I am learning it is possible to practice a queer, feminist ecology that is not bound to economizing, militarized, heteronormative, and colonial

logics. It is a place where ecological restoration might yet be disarticulated from incentivized management schemes that aim to maximize a land's ecosystems services. I have hopes that this is a place where moralizing discourses about invasive and native species might start to lose their traction; a place where the reproductive imperatives and productivist tropes of neo-Darwinian survival stories might become less salient.

And yet, the oak savannah is *becoming other*. The oaks have been coming down, and fast. Seven enormous oaks have fallen since I started coming here daily last year. The next generation, which have grown up in thickets on sites that have been burned according to urban forestry protocol, are just over fifteen years old. In spite of all the well meaning efforts of the city's Urban Forestry team, and the volunteer stewards, there is no saving the oak savannah. Intensive, ongoing efforts to restore the oak savannah through burns, plantings, weeding, and seed collection, remind me again that you cannot take people out of a savannah. New *naturecultures* are actively in-the-making. And so, it is necessary to keep posing the question, what matters to this land? And whose cultures, whose natures, and whose stories will get to flourish into the future?

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