



A collection of articles about deepening our connection with wild spaces, understanding the impacts of colonialism on the land, and allying with the health and healing of the earth

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Welcome to the second compilation of articles from Knowing the Land is Resistance (KLR), collecting work from September 2010 to June 2011.

The nine articles and in this zine represent a lot of learning and growth for our little collective. But although KLR has grown, it remains a project rooted in our intimate relationship with the land where we live. These articles are then part of our continuing adventure in deepening our love and understanding of the wild spaces that energize and inspire us.

Over the past ten months, one recurring theme for us has been to challenge ideas of value. When is land deemed to have value and when is it dismissed as worthless? Is there another way to value the wild spaces around us outside of the logic of capitalism? While playing with that last question, we began to focus on systems and interconnectedness rather than on single places.

In our earlier work, we were trying to understand this or that patch of forest, but most of the articles in this zine ask bigger questions. What is the relationship between different parts of the same watershed? How does the health of the land relate to the social and political conditions of the human communities around it?

In working on the Seeds of Resistance article, we became so enraged about the senseless destruction of trees along the Niagara Escarpment that we decided to call a forum to vision solutions for better defending it. This desire to network with other people who share our values morphed into the Seeds of Resistance Tour. This summer, we'll be travelling the region meeting up with others who are passionate about preserving the health of the watershed.

This new focus on workshops is pretty exciting for us, and we look forward to writing about the things we learn from the communities we visit. If you want us to come visit you, or if you just want to say hi, drop us a line at knowingtheland@gmail.com or visit our website at knowingtheland.wordpress.com for articles and updates.

Til the water runs clean,

-the KLR collective



Streetlight to Starlight

On a cool autumn evening, under huge streetlights that blot out the sky, we're standing in the parking lot of University Plaza, at the edge of Dundas. Tonight, the urge to escape the city has become irresistible, and behind this plaza runs the hamilton-brantford rail trail. The trees that surround it are already in sight.

We are on the edge of what the city controls, approaching the area it does not. How far do the streetlights push into the trees, and how deep do you have to go before you can see the stars?

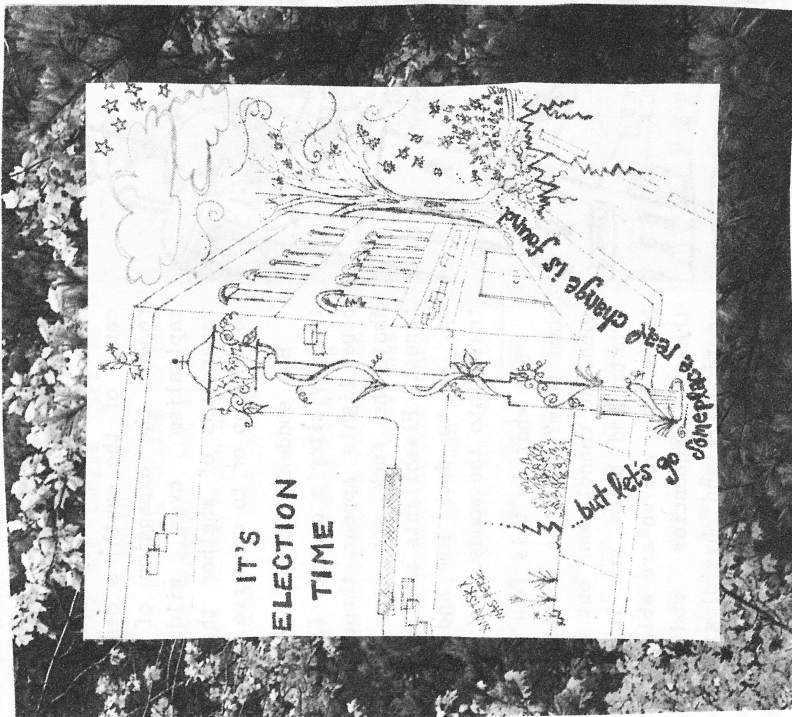
The city's story tells us that these lights are here for our safety. And as we head west on the trail, at first the forest is thin and the city is tight on all sides, and we do feel vulnerable and afraid.

But with each step away from the city, we settle deeper into our senses and experience the night around us. Our eyes adjust to the darkness, and we enjoy the twisting moonlit branches above, and can make out familiar trees and plants beyond the edge of the trail. The cool forest air washes and refreshes our skin. The silence of the forest blossoms into a rich nocturnal chorus as our ears attune to their tiny noises: Night-crawlers crackle in the leaf-litter, pulling last year's leaves underground to become soil.

With each step away from the city and into our senses, the forest becomes

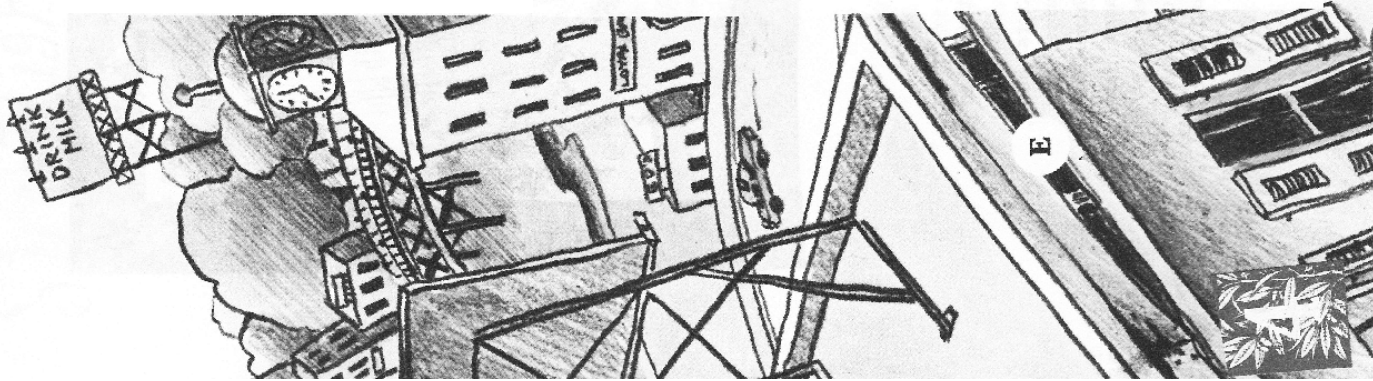


move like raccoons



something we are a part of, rather than something to fear. We consider the many ways in which the city restricts our senses: streetlights, traffic noise, the stench of exhaust, the whine of electrical lines. This increases our disconnect from the world around us. By shedding our city-selves, we can come more deeply into our senses, and enter the forest without fear.





But what is this fear? Where does it come from? Within a forest, there exists sound we cannot hear but we feel. Sounds 20hrtz and below are inaudible to the human ear, yet we are able to experience these frequencies and we respond emotionally and physiologically. Massive mature hardwoods radiate these sounds. A forest grove is full of these low frequencies. They resonate within our bodies and stabilize our nervous systems, reducing stress and clearing our minds. We need the voices of the trees, the cool breath of the forest, and the presence of the stars to feel healthy and strong. The stress and irritability we feel in the city is perhaps a symptom of our alienation from the forest.

Continuing west, we pass a sign telling us that we're now entering the Dundas Valley Conservation Area. This forest is claimed by the Hamilton Conservation Authority, and they installed this sign to tell us that we're supposed to pay money for using this section of trail. And we recall what Gramma cautions: the law is on the side of the wealthy and greed is the cause of the earth's destruction... We reject the expansion of the logic of capitalism over wild spaces — regardless of whether the intention is to develop or to conserve.

But suddenly, as we approach the rail trail visitor's centre, flashing red and blue lights appear through the trees. What the fuck are cops doing in the forest? Flashlights are fumbling towards us, so we duck low and slip off the trail into the woods.

A

In the deep darkness now, we're trying to be quiet, to hide, but we crack twigs with every step. A monstrous snort startles us as a buck bounds powerfully and easily through the tangle that we can barely navigate. We follow the hill down towards where he ran, trying to be so mindful of each movement, but we are the loudest things in the woods anyways. Looking back though, it was enough to escape the lights, for tonight.

We make our way to a grassy clearing. Lit up in clear moonlight, we reflect on where this escape from the city has taken us. Our clumsiness in the dark forest has shown us that although we can escape the city, it is not so easy to re-enter the forest. We feel some frustration at our ignorance and alienation. Our process is rooted in asking questions, in wondering about and exploring the land around us. Our questions lead to more questions, and new knowledge demonstrates how much we have left to learn.

The city offers us safety in return for our relationship with the land on which we depend. But the city's safety is an illusion. We need to protect the health of the water and lands we depend on, and to do this, we must resist the current system. Actively working to oppose the destruction is the only true safety we have left, not more streetlights or more police.

A first step in this is to rebuild our relationships with wild spaces. Knowing the land is its own reward — a wider world of freedom and connection exists all around us, just outside of the city's reach.

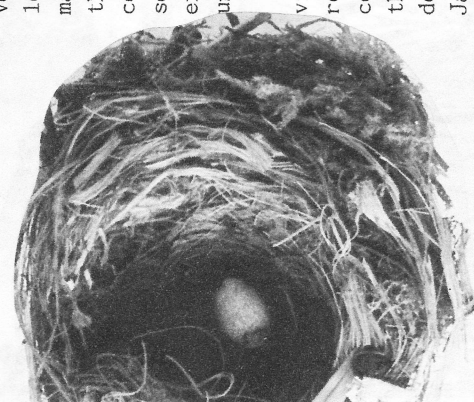
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Weeds, Traintracks & THE NORTH END

The afternoon is full of sunshine, warming our cheeks into squinting smiles. Today there's a street festival on James Street North, and it's easy to get caught up in the joyful atmosphere. The street is closed to vehicles, music is playing, and everywhere we look, some performer or information booth seeks our attention.

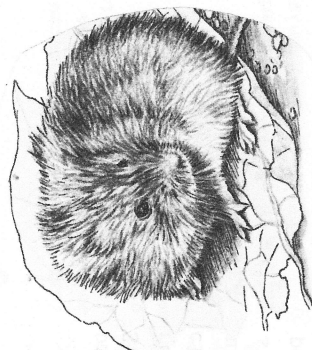
Up ahead, a cop is hassling someone to leave. As we approach closer, we see it's that same friendly person who often stands on that same corner chatting with voices we don't hear. This prompts us to look around again, and we notice that many of the familiar faces who are on this street every other day are conspicuously absent. It's starting to seem like invitation to this event excludes many local residents as undesirable.

These festivals are a much-celebrated vision of the new downtown, but are they really increasing the health of our communities? Hamilton is littered with the abandoned storefronts of former development enthusiasm — is the trend on James North any different? And what would building a healthy community even look like? With these questions rattling around inside us, we descend the hill along the West side of the James Street train bridge to explore the meadow that grows there and seek some clarity.

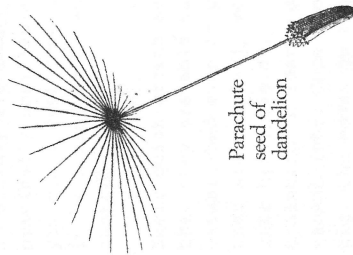


We tumble through the tangled meadow community of Raspberry, Asters, Goldenrod and grasses that have strengthened these damaged, polluted traintrack lands over time. Last year's growth has formed into a dry mat along the ground, offering shelter for the insects and small mammals that live here all through winter. Gall flies have lovingly laid their eggs inside Goldenrod stems so that as soon as their young hatch, they can start eating. Chemicals in the hungry grubs' saliva then trick the Goldenrod into growing a perfect, round belly in which the young flies can survive the winter freeze.

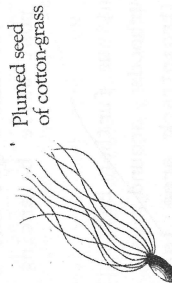
Low to the ground, we see a meadow vole hard at work designing elaborate tunnels beneath the matted grasses. In creating their homes, voles do good work of spreading the networks of fungus that are essential to the restoration of healthy land. While scurrying around, the tiny voles are also unknowingly distributing nutrients evenly over the land in convenient pellet packages. The value of this little community's accumulation of health seems huge in contrast to the destruction and poisoning of so much of the land around here.



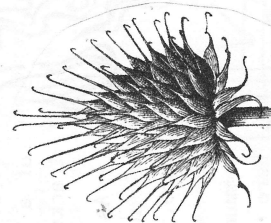
Meadow vole



Parachute seed of dandelion



Plumed seed of cotton-grass



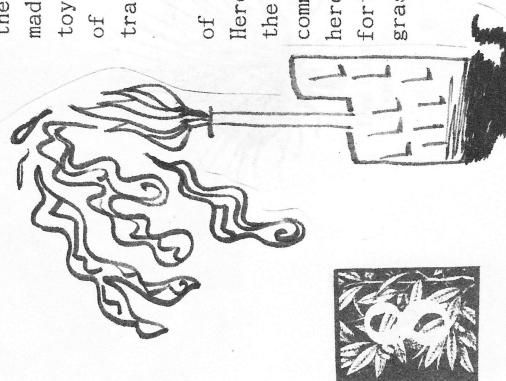
Barbed seed of burdock



Walking East along the tracks, we pause at the remains of the Catherine Street bridge, its concrete and stone run wild with trees and shrubs. We find cicarings strewn with smashed glass, used condoms, and the most vile of stench. These are the places the people considered undesirable, like sex trade workers, have been pushed to. It is a reminder of those who were absent at the street festival, and the prison just ahead at Mary St is a forbidding monument to their undesireability.

We kick at the accumulation of garbage here— beer bottles, shattered electronics, half-rotted mattresses, and countless bits of plastic. The landscape of the tracks suggests stories of people using this space for camp fires, smashing stuff, spray-painted self expression, using drugs or booze, or maybe just hiding out to take a break from it all. We feel relief in knowing of these narrow strips that are outside the control of the city — here, humans can run wild too. This is a place to scream and run rampant when the city's feels like too much to bear. It's also the place where great discoveries can be made! Did you know old hubcaps are great toys? I bet you can't get one over top of a fence post while balancing on the tracks.

As we continue further East, the type of neighbourhoods around us change. Here, this traintrack area is some of the only greenspace close to these communities. Almost every time we're down here we find some young kids creating forts and playing pretend in the grasses. The neighbourhoods here are



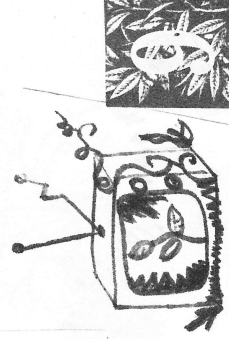
junk tree Love.

Junk Trees were introduced as ornamentals from China and have quickly become, to our delight, one of the most reviled weed trees here.

They grow quickly, and thrive in the most damaged and disturbed sites - only

Manitoba Maples are anywhere near as brave. If a seed from a Junk Tree gets into even the smallest crack in the concrete, you can count on that crack being torn wide by its enthusiastic growth before long. They are known to be practically unkillable. If you cut a Junk Tree down, it will send up dozens of suckers.

Their quick growth means that they are able to get established even in places that are regularly mowed, like hydro fields, traintrack borders, and vacant lots. Once they're big, the mower just goes around them, making space for other plants to thrive and succession to take place. Junk Trees need lots of sun, so once they reclaim a contested area and other trees begin growing around them, the Junkers won't reproduce well and will give way to other species.



made of treeless streets interspersed with factories and junkyards, and the buildings cling to the roadsides leaving no space even for grass. There are no parks or jungle gyms or pretty waterfront trails to be found. Skipping off the tracks at Wentworth Street and turning North, we're immediately confronted by the sight of a lake-front factory spewing smoke and fire into the sky.

In the city's downtown, a very exclusive kind of progress combined with spiking rent prices is displacing a huge segment of people into these neighbourhoods further east. This area is disproportionately plagued by heavy pollution. There's no healthy forest nearby, heck, there aren't even any grocery stores here anymore. We begin to realize that in order to fully understand the implications of the types of progress occurring in the downtown, we need to better understand the situation in the city's East.

Just one block North along Wentworth, we come to an overgrown set of tracks no longer used by trains. At the entrance there's an old wooden tv set with the screen smashed out and tiny plants growing inside of it. We take this as a welcoming sign and tiptoe around the piles of garbage to enter a jungle of vines and shrubs that twist around scrappy trees. There are many Trees of Heaven here, an invasive, fast growing plant that you can count on to grow on any site, no matter how devastated or poisoned. (We lovingly call them junk trees). A closer look reveals that the beat up thing acting as a giant flowerbox was once a boat. There's Manitoba Maple here too, a plant we remember from the banks of the Don

River. The feathery sumacs with leaves of yellow, orange and red ~~fall~~ sweep up particulate pollution from the air with their hairy leaves and fruit, sending it to the soil to be dealt with by the communities of fungus there.

A rabbit hops by us, pausing close to a tree we hadn't ever noticed here before. It's a young Honey Locust, a rare native tree that protects itself with thick thorns and is especially good at living in highly polluted areas. Their spines defend this wild community from the very real threat of humans intent on "cleaning up" these areas. This scrappy stretch of land is part of a vital corridor linking forests in different parts of the city for raccoons, skunks, squirrels, and even coyotes, who are sometimes spotted out on the Dofasco pier.

We pause in the thick cover of brightly coloured leaves and feel safe in knowing such incredible vibrant things can spring up in these unloved, devastated places. Sucking on wild Mint leaves among the huge piles of debris piled beyond the fences, we can hear water spill from an abandoned rooftop into a grungy little pool. Small poplar groves are just beginning near the fences. This area is now the only thing close to forested within tens of kilometers, and it's surrounded by one of the most toxic neighbourhoods.

We wander out of the overgrown tracks and go North along Sherman to catch the next set of tracks and return west. Passing a row of factories we observe strange metal barrels and 'dead spots' in the vegetation where chemicals have clearly been dumped. It's hard to see the benefit that those living nearest



young junk tree leaf.

Thank you

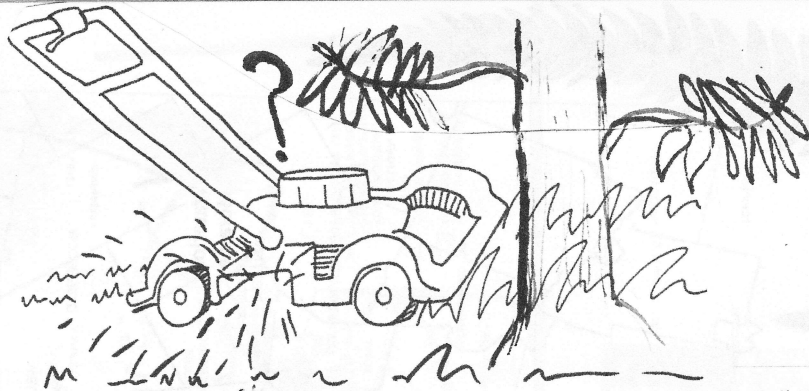
momma junk tree



these industries get from them. Those who do profit live far away where it's safe to sleep with your window open. Who decides whose health it is acceptable to poison? We stop to climb into the most giant of junk trees and are immediately covered in soot.

Reflecting again on the street festival, it was so easy to get caught up in the happy myth of the downtown development building healthy community. But who is included in that vision? Is deciding who is desirable in the core the same as deciding who will be subjected to industrial pollutants? Unhealthy land is a product of unhealthy societies, so what can we learn from these healing traintracks about creating a society that value all its members and contribute to healthy communities?

There is comfort in the junk trees growing in the old dump site, where water drips and pools to quickly form swamp communities. The plants and creatures existing here integrate themselves into poisoned spaces and bring richness back to them with their bodies and daily energy. We can learn so much from the work of a tiny meadow vole. Each being adds to the whole, and the health of wild spaces is synonymous with diversity of life. By allowing so many to be excluded from the downtown development, we are submitting to the same logic that would mow down the Honey Locusts in the name of tidiness. By rooting ourselves in our daily experience in these neighbourhoods, and in the relationships we build with the others who live here, we can avoid being misled by myths of progress.



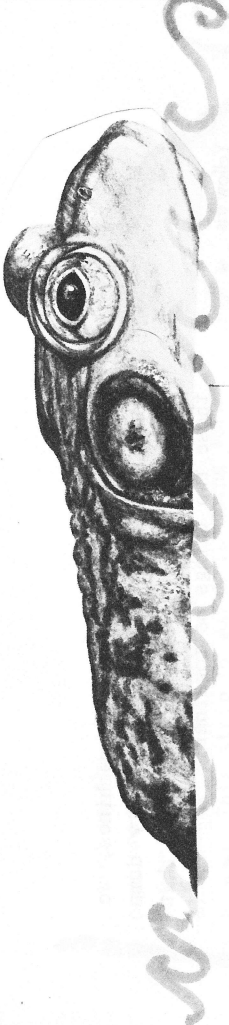
Kitchener-Waterloo is a rapidly growing double city on the banks of the Grand River. After biking from downtown Kitchener, we're stopped to catch our breath at the intersection of Erb St W and Ira Needles Blvd in the city's west end. With wide eyes, we take in the landscape of a newly developing shopping centre and its sprawling parking lots—all in the place of the abandoned farmers fields and healing meadows here just last spring. It is being built by Voisin Developments Ltd, responsible for another twelve similar malls across the province.

The centre will be called The Boardwalk, a name that is grimly appropriate, considering that it is built on top of what was recently part of a wetland. Friends who have brought us out here for a walk in the adjacent woods are stunned to see the fast transformation of the earth as far as the eye can see. They question the continued development of this land. This mall and the surrounding neighbourhoods of houses are built on an unstable moraine system, and many of the new houses are sinking, their basements chronically flooded.

We cross the parking lots to the mall's South end, where at least twenty heavy machines are scattered over the more than one million square foot area newly flattened. The land here is not yet paved, but has been graded, with the topsoil scraped away and stacked up in a huge pile near the back of the site. A

"Under the Boardwalk:
Beneath Comfortable

Myths" first appeared
as a zine publication
in Kitchener-Waterloo



Watershed:

A system of converging water systems collecting rain and surface waters to form streams which join rivers or lakes or oceans! Watersheds are the keystones of health for all life existing in an area.

patch of grasses and wildflowers have precariously sprouted from the top of the mound of precious soil. Some of the machines are working now to move dirt from the pile into large concrete flower beds around the parking lot.

Nearby, a rectangular, sod-lined pond has been created in an attempt to divert the meadow's waterflow and deal with the flooding that comes with covering the land in pavement. A shallow, stagnant pool is forming. Water that was once enriching and valuable to this land is treated as waste, a potential hazard to be managed. We wonder how the watershed in the lands surrounding this is responding to these changes.

Marsh:

Marshes are defined as wetlands frequently or perpetually covered with water. They are characterized by emerging vegetation, like cattails. Marshes moderate stream flow, an important function during periods of drought. The presence of marshes in a watershed also helps to reduce damage caused by floods by slowing and storing flood water. As water passes slowly through a marsh area, sediment and pollutants settle to the floor of the marsh. Marsh vegetation also collect excess nutrients like nitrogen and phosphorous. This wetland type is very important to preserving the quality of all waters.

As we explore, we get a clearer picture of how the story of this sort of suburbs-n-malls model of development goes. All land is interchangeable, it says. Whatever the local features of the ecosystem, they are to be destroyed and the land standardized using grading and fill to create that prefabricated product we see emerging in countless city suburbs these days.

One friend tells us of spending time in this meadow earlier this year. There used to be lots of birds here. We see many goose droppings and tracks on the dry flat earth. Geese who have been stopping in these grassy meadows for generations, will this year find a parking lot instead. This South end of the mall will be home to a Wal-Mart, and

Cattail

Yellow iris

Wetland:

As you likely know, wetlands are lands that are wet, either all or some of the time. There are many different types of wetlands, including bogs, swamps and marshes.

Wetlands are natural water purification systems. Of all of Southern Ontario, the Kitchener area has lost the least, percentage-wise, of wetlands at a 37% loss of habitat. Compare this with London at 97% and Hamilton 82% losses, and an overall estimate of 80-90% total loss of wetland habitat in Southern Ontario. We start to see the importance of protecting these remaining pieces...

as we walk away from the machines, we see the barren hills of the city dump close by — it seems appropriate that those two things be together.

Around the perimeter of the construction site are sediment barriers that are intended to prevent runoff from entering the intact wetlands beyond. But the barrier is covered in a dried layer of sediment up to the top, suggesting that it has overflowed recently. We eagerly step beyond it too, continuing South towards the marshy lands, glad for a hint of what this whole area once was.

A little slice of serenity, the narrow marsh holds a slow meandering stream between lush banks of cattails. Cattails slow the waterflow, filter sediment and take up toxins. Clearly, most of this area was part of a wetland system in the past — we're in the headwaters of the Grand River after all — but now, this is one of the few spaces where storm water can naturally drain and filter. This wetland is overburdened and overflowing, all flooded and silty. It's doubtful if it could sustain the load even without this new mall coming in. We sit quietly among the drying fall grasses and watch as a blue heron, flying low, closely follows this healthy strip around the mall and the landfill.

Going a little further though, we find a sign indicating that the marsh has been designated as the site of an expansion of the dump.

And so the story of these developments continues. Not only is all land interchangeable, but it has no value at all until it is put to some use for humans. This strip of marsh is doing work that is far more important than creating crappy jobs at the mall or hiding the consequences of our actions from sight at the dump. But as it is now, this culture considers it to be without value.

In 2002, during municipal government talks about future developments in KW, some worries arose about water quality in the twin cities. Strange, considering that these cities are situated in an area with an abundance of fresh groundwater. In response to those concerns, they floated the idea of a pipeline to Lake Erie. Presented as a contingency plan, these types of solutions are in fact an acknowledgment that this watershed is going to be destroyed. It tells us that the city's elite intend for these cities to grow to the point that they will not have clean water locally.

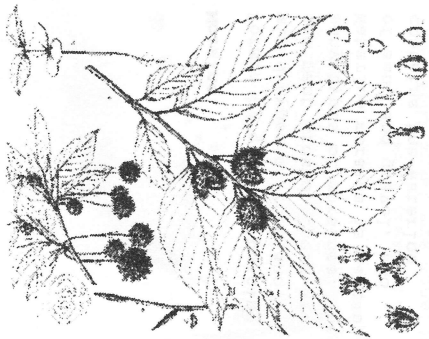
And so the story grows further. Not only does the land have no value until we use it, but we are not dependent on any of the natural systems here. No need to worry, once this watershed is poisoned and destroyed, we will simply find some kind of technological solution to the resulting problems. But the pipeline plan is not certain, it was just pacifying words. There are many logistical hurdles to its creation, not to mention that the water in Lake Erie is a finite resource that is already heavily burdened. But development around KW continues to destroy the watershed as if there already exists an alternative source of drinkable water.

Moraine:

Formed by glaciers pushing mixed types of rock and sediment around. There are many types of moraines. The Waterloo moraine is made up of sand and gravel, and contains the Waterloo Moraine Aquifer- the source of all drinking water for the surrounding cities. The moraine landscape is constantly changing, as shown by the many dips and hills here. It's perfect for mountain biking, but it underlines the ridiculousness of building those sinking homes. And they must have used a huge amount of gravel fill before beginning construction, gravel that was likely extracted from the quarries just to the East, near Guelph. Some of those quarries have made headlines in recent years for breaching the aquifer. This means that tons of pollutants and debris were able to enter the groundwater, which is part of the same watershed being impacted again by the developments here.

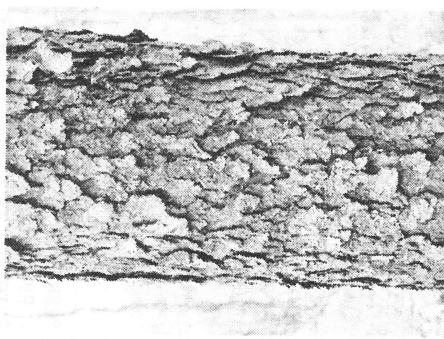


horsetail



Fagus sylvatica L.
Fagus 21

Beech
leaves and fruit



Black cherry
(bark like burnt
corn flakes)

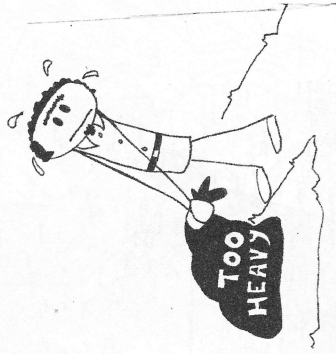
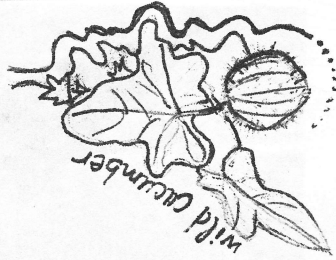
We cut North up a dirt road, where the ditches are flooded and grow thick with green algae blooms. We soon come to a patch of forest that's crossed by some well-used trails. Our friends tell us that it was formerly owned by Ontario Hydro, but that it was recently bought by a local cycling club and turned into mountain biking trails.

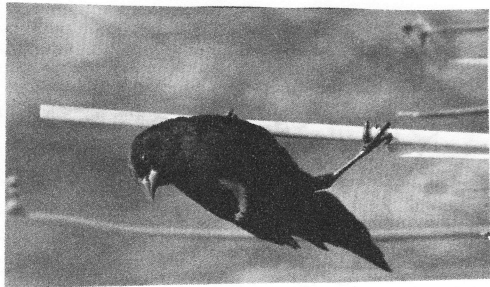
The forest is boggy and dominated by Beech trees. We know Beech well from our adventures in Cootes Paradise and the Dundas Valley, but its presence here is unusual. We usually encounter it as a secondary species, growing in Sugar Maple or Oak dominated forests. As well, we've never seen Beech growing on boggy soil like this — they like to keep their feet dry! One of our friends informs us that all the development around here has happened in the last ten years — before that, it was all farms, marsh, and forest. It's likely that these changes to the water system have turned this area into a bog quite recently. There are also many beautiful patches of moss and exciting mushrooms. On the forest's perimeters, we encounter older stands of Red Oak, Black Cherry and White Pine. It's almost surprising to find such signs of health and diversity just beyond the sprawling construction and dumpsite.

On the South edge of the forest, where it becomes a field, we notice an old apple orchard. Young Hawthorns mingle with the tidy rows of abandoned apple trees as the forest encroaches. We find some rusty equipment that invokes the past use of DDT here — how does that history affect the water now? Further east, the forest's edge is a small plantation of White Spruce, a longterm investment planted by the farmer who used to work this land. But the land around here is no longer farmed, because of toxic runoff from the landfill.

And all of this water from the moraine enters into a series of creeks and streams that pour down to join the Grand River. All of this silt and debris, all of this pollution, is being dumped into the Grand. While Pondering the strange and delicate shells of dried Wild Cucumber vines, we pause to consider what we have seen.

Our discussion brings us to realize that it is impossible for us to think about the Grand River without thinking about the Six Nations of the Grand River. All of the land within six miles on either side of the Grand is part of the Maldimand Tract, and belongs to Six Nations by treaty law. This includes most of Kitchener-Waterloo. We reflect on how all the negative effects of these developments will now flow downstream to (what remains of) their land. This is in spite of all the treaties promising consultation and the guarantee of hunting and fishing rights, particularly the Nanfan Treaty, which has been upheld by Canadian courts.





People in KW have their comfortable myth of an imaginary pipeline for when their water is too polluted. But Six Nations draws their water directly from the Grand, and even their new water treatment plant is already overworked. The Two Row Wampum is a treaty that describes First Nations and settler communities as being on parallel paths that do not cross, each community existing without interfering with the other. It is our responsibility as settlers to resist the unhealthy and destructive interference with Six Nations sovereignty that these developments in Kitchener's west end and others like them represent.



Area originally
granted to the
Six Nations Confederacy

Kitchener/Waterloo

HAMILTON

Current land of the
Six Nations of the
Grand River

"The witch was a triple threat to the Church: she was a woman and not ashamed of it. She appeared to be part of an organized underground of peasant women. And she was a healer whose practice was based in empirical study. In the face of the repressive fatalism of Christianity, she held out the hope of change in the world."



from Witches, Midwives and Nurses
by Barbara Ehrenreich & David English

Wind-blown Ironwoods

The forest at Iroquois Heights has a unique composition and a strong diversity of plants, mammals, and birds. Forest fragmentation is a cause of this uniqueness but also makes the forest vulnerable.

Traffic passes by below us in an endless, noisy, polluting stream. Where the Bruce trail runs through Hamilton, it is squeezing through the most urbanized stretch of the Niagara Escarpment ecosystem. Inevitably, the trail here includes crossing massive city infrastructure, like the section of trail that is the 403 pedestrian overpass.

We're on our way to explore Iroquois Heights, a patch of forest and field on the edge of the escarpment in Ancaster. It's been in the news a fair bit over the last year or so, because of its unhealthily large deer population. The forest there is no longer connected to any other suitable deer habitat, and the Meadowlands development encroaches from the south, so the deer can't disperse. To animals, it is an endless, impassible barrier, keeping Iroquois Heights to the East cut off from the much larger forests to the West.

Once across the bridge, we've entered Iroquois Heights. We catch the Bruce Trail heading North-East into some scrubby lands, old fields that have rewilded into tangled groves of Hawthorn and Dogwood. These shrub lands are ideal songbird habitat. As we walk the narrow

Deer
3 1/4 ins

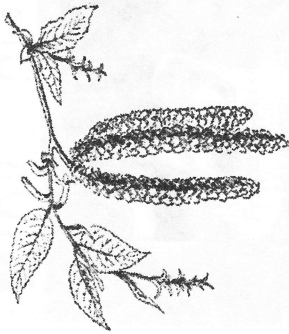


path, we move through circles of the sharp 'chip-chip' alarm sound of cardinals. To encourage birds here further, folks have attached birdfeeders into many trees along the trail.

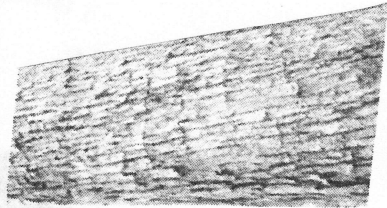
The trail descends slightly and the shrubs thin out, leaving us in a flat, low meadow. Now that the ground is clear, we can see that this land lacks the characteristic hills and bowls that form in an old forest as trees uproot and logs slowly decompose. The flatness of this land means that it was likely graded and ploughed after the original forest was cut. A hawk circles slowly above, and we get down into the grasses to excitedly watch a tiny black shrew squirm between Goldenrod roots.

To the east of the meadow is a dense deciduous forest. Approaching it along the trail, we observe that its border with the meadow is quite sharp. Typically, borders between forest and meadow are gradual, with distinct edge communities of shrubs forming a buffer between the two. But here, we see a large White Pine right next to open ground. One of the uses of that buffer area is to slow down the wind, and as we step into the forest, we're immediately struck by the very large number of downed trees within the first fifty feet.





Ironwood leaves
and flowers



flaky
Ironwood
bark



The most astonishing thing about this forest is the odd composition of tree species. Ironwood, or Hop-Hornbeam, is by far the most dominant tree species throughout. Normally, Ironwoods are scattered sparsely throughout Oak or Maple-Beech dominated forests, but here, there are more of them than all other tree species combined. So we wonder, why is that?

We remember what we know about Ironwood: their wood is very hard and dense, and they grow very slowly. It's likely this forest was once used as a woodlot—a source of firewood, building material, and saleable timber that is selectively logged by many generations of farmers. On this site, we find some of the largest Ironwoods we have ever seen, but usually, their small size means they are of little economic importance. As well, their density means that they are difficult to cut down, to the point that someone doing so risks dulling or damaging their equipment.

In trying to follow the story of this land, we realize Ironwoods were the only trees that were not cut by humans during probably over a century of logging. It seems that Maples, Beech, and White Pine were selectively cut out of this forest as they reached maturity. Today, these species stand sparsely and mostly as young trees. We find several very large Red Oak, White Oak, White Ash, and the largest Black Cherry we've ever met, all scattered throughout, but these species likely experienced some logging as well, preventing them from dominating the forest.

So the humble Ironwood, with its flaky bark and hanging fruits, emerged to fill the canopy. The fruits are a favourite of White-tailed Deer, and are perhaps a key reason why this tiny forest has supported such a large population of them. Since it's not connected to any other forests, there are no seeds arriving to help restore a more common balance of trees, and so this amazingly odd Hop-Hornbeam dominated forest has endured.

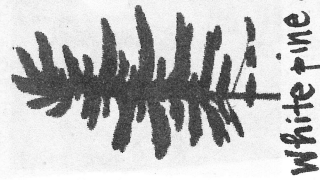
This forest is very unique and beautiful. Fragmentation is one of the causes of this uniqueness, but it also makes the forest vulnerable.

An herbalist friend gave us a definition of health that we use to guide our understanding of wild spaces: Health is the ability of a system to respond to stress and change. This forest seems healthy now, but it has almost no ability to respond to stress, whether that be a wind storm or a large population of hungry deer — it's just too isolated. No amount of deer-culling, bird-feeding, or native-species-planting is going to fix that. It's hard to say what would.

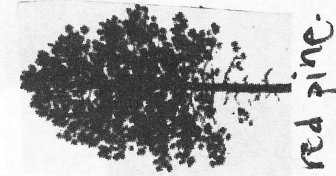
We can prevent further fragmentation of the wild spaces that exist today by resisting the types of mindless urban sprawl that persist on the west mountain. And by supporting projects to create wildlife corridors beneath or above highways to create space that is

One striking thing about Iroquois Heights is the few towering white pines, with their brush stroke-like branches towering above the canopy. It's easy to estimate the age of a white pine, since these trees grow a new round of branches each year. The branch of a white pine begins to grow from deep within the heartwood of the tree's trunk. That's good reason to give in to your urges to climb up these towering giants! Their branches are the most secure and trustworthy, all the way up!

Hemlocks are also thriving here. These conifers can stay tiny for centuries, growing slowly in the shade of fast-growing deciduous trees and waiting for an opening in the canopy. When the tree their beneath finally falls (or in this case, was logged out), the Hemlock can shoot up quickly to giant size, finally giving its delicate branches of small, tightly packed and flat needles their turn in the sun.



white pine.



red pine.



we ♥ to
climb
white
pine
trees

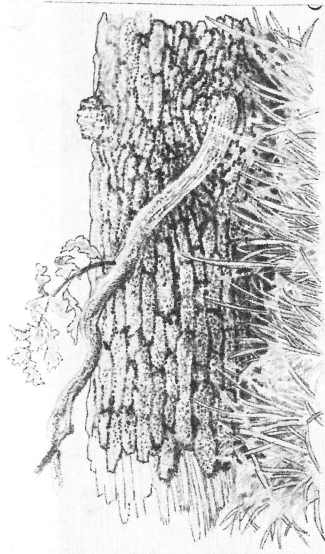
25

slightly less impossible to navigate. It's hard to imagine solutions when this forest's capacity for health has been damaged so.

With these thoughts in mind, we continue East through the forest, and within a few minutes it is reduced to a thin strip, at the place where the Chedoke Radial Trail and the Bruce Trail merge. We consider that this trail was once a rail line linking Hamilton to Brantford, built about one hundred years ago. Today, the rail lines are long removed, and the rich thicket we see lining the trail is what re-wilding traintrack lands can look like when left to heal for 50 years. The 403 was built about fifty years ago. What will this land look like in 50 more years?



Bloodroot.



It shouldn't surprise us that a rotting log on the ground, with all of its microbes, fungi, invertebrates, & plants

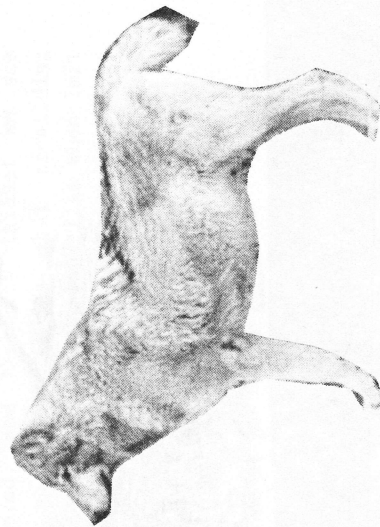
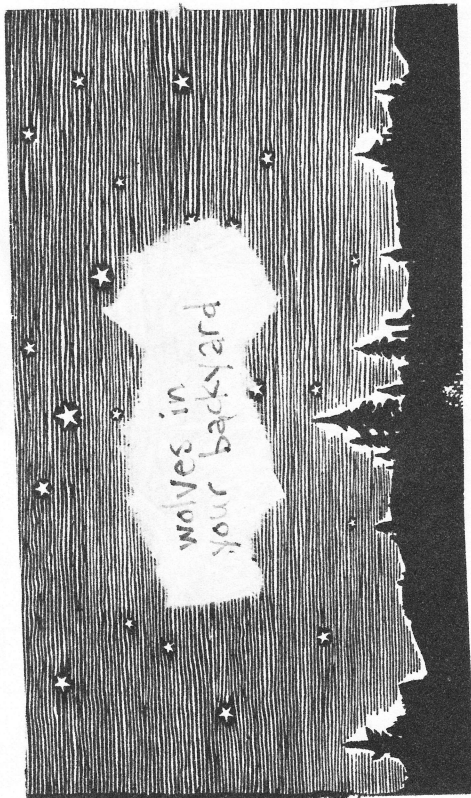


has far more living tissue than it ever had when it was alive. 59% of the weight of a healthy tree is composed of living cells, but as much as



20% of a rotting log can be living.

—Michael Henry & Peter Quinby



Living down here in South-Western Ontario, we're told here are no wolves around. But how do we know there's no wolves? Most of us only know about wolves by reading books and articles written by someone who claims to know better. However, there are no reliable studies of wolf population and distribution — most numbers and ranges quoted today can be traced back to an 'estimate' made by the Ministry of Natural Resources (MNR) over forty years ago! Where does that leave us if we want to know about wolves today? Well, one thing it means is that so-called 'authorities' aren't much more reliable on this subject than anyone else.

There's plenty of stories about people seeing wolves in this area, mostly along the corridor created by the Niagara Escarpment and the Bruce Trail. But some sightings have occurred in Rockwood along the Eramosa River, just outside of Guelph.

By official reckoning, the southern-most wolf in Ontario is the Eastern Wolf, which is badly endangered and lives mostly in Algonquin Park. Typically, it was dangerous for the wolves to leave the park, because until 2005, it was legal to kill any wolf at any time if they weren't in a protected area. Wolves can travel 70km a day for many days, and their social structure produces a steady stream of lone wolves who go out looking to form a pack and carve out a territory. Algonquin Park has the highest concentration of wolves in Ontario, so it's likely that wolves would seek to leave the park if they could. In fact, people have seen them leaving the park to the South in the wintertime, following browsing deer, and they have been reported to have made it as far South-East as Kingston. This phenomenon is common enough that wolves have been given further special legal protection to the South of Algonquin and protected corridors are slowly being established.

Now, probably most of the reported sightings in the South-West are just folks seeing a Coyote, especially because, in this area, many Coyotes have some Eastern Wolf blood in them. However, the MNR states that the main requirements for wolf habitat are a strong population of prey animals and freedom from human interference. The

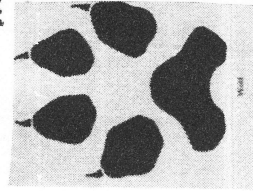
RABBIT

RABBIT RUNNING

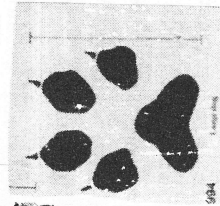
population of White-Tailed Deer, the primary prey of the Eastern Wolf, has been exploding in recent years throughout Southern Ontario, especially in the South-West. And it is possible that changes in laws and in land-use by humans has made this area suitable enough for the Eastern Wolves that the odd group or individual may find a niche in which to survive.

So! How do you know there are no wolves around here? The only way to really answer that question is to go looking for them. The best way to find any creature is to be active when they're active, and to go where they might want to go. Head out in the early morning before the sun is up and follow a forested corridor out of the city. Look for deer trails and follow them, upwind if possible. Keep low, be silent. Settle into your senses and pay attention to everything you can see, hear, and smell as the sun rises. If you find a spot you feel good about, sit there and wait and watch until the sun is fully risen. Then come back to the same area again the next day or the next week and do the same thing until you know that area well enough to know for sure if wolves are there.

Wolf



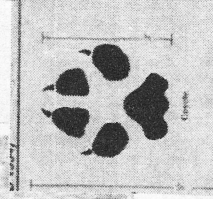
Dog



So much of what we know about the land and other creatures is defined by experts who act as intermediaries between us and our own homes and neighbours. But we don't need to accept the narrative that we're offered by books, television, and class rooms. By working to build our own relationships with these places and animals, we can gain an understanding that is far truer, and that gives us the strength to act in their defense.

[This article was initially published in The Peak, a magazine out of Guelph. But we've heard tell of interesting wolf sightings happening as far South along the escarpment corridor as St Catherine's, so get looking!]

Red fox



Coyote

31

Seeds of Resistance:

Clearcut at the Psych Hospital

There was once a time when the nuts of the American Chestnut tree fed the eastern half of this continent.

Each winter, millions of humans and other animals relied on them for survival. As time went on and settlers arrived here, even as they destroyed the forests, they planted the Chestnut in their fields. One such place was the Hamilton Psychiatric Hospital, now known as St. Joseph's Centre for Mountain Health Services (CMHS). The gardens, food trees, and forested patches on the hospital grounds provided patients there with activity and refuge and, for a time, almost all of their food.

American Chestnut
Stump.

Starting in the 1900's, an imported fungus, often called the Chestnut blight, began destroying American Chestnuts, devastating the Eastern forest. The fungus crossed the Great Lakes in the 1940's, and the American Chestnut vanished almost completely from Ontario within thirty years, becoming an endangered species. However, on the CMHS lands, some Chestnut trees remained.

That is, they did remain, until today. It is Saturday, January 15th. We are on the South side of the CMHS lands at the corner of Fennel and West Fifth. The snow is thick on the ground, and the huge machines have just stopped their work for the day. Much of the large field here that was once full of big trees of all kinds is now packed earth, and the trees that once stood there are now stacked in piles as large as houses. Among them are what may have been some of the last American Chestnut trees in the Hamilton area.

We meet a man who is a patient at the hospital. He is quite sad to see the trees go, but he's excited about the new hospital, because they say that everyone will have a private room, so his stuff won't keep getting stolen.

Many other local residents are shocked and saddened by the loss of an area where families have gathered for generations. This is similar to the outrage in the neighbourhoods around Gage Park this summer, where 34 massive Beech trees were removed in the name of public safety. One of us tells a story about collecting and roasting chestnuts from these trees, which were the same trees that her mother had visited when she was young.

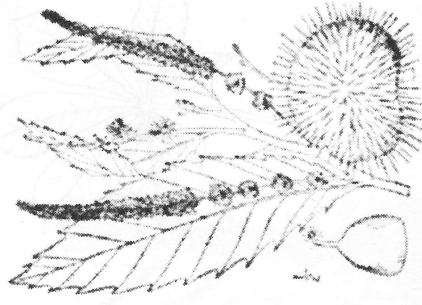
Chestnut Varieties of Southern Ontario

The American Chestnut

- Each leaf stands along on its own leaf stem (not compound, like Horse Chestnut)

- Broad, toothed leaves
- Nuts have a thick, prickly, green coat
- American Chestnut trees are protected by law.

However, this protection only covers trees that are genetically pure, not hybrids. This distinction is problematic, because hybridizing with the closely related Asiatic species might be a way to encourage blight resistance within the plagued genes of the American species.



The Asiatic Chestnut

Very much like American chestnut, but with tinier leaves and nuts, and a smaller overall size

(varieties continued...)

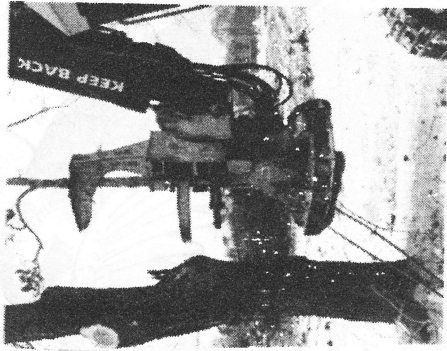
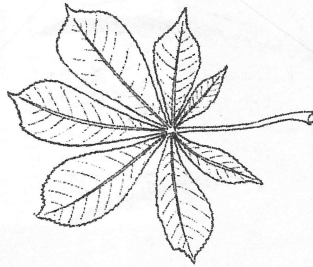
Although the fungus has nearly caused the American Chestnut to disappear, we remember that disease can be a natural part of a tree species' history. It is said that the greatest remaining abundance of mature, healthy American Chestnuts is here in Southern Ontario. Some chestnut activists (like the Canadian Chestnut Council) have noticed old stumps sprouting from their underground root systems that are unaffected by the fungus. The Chestnut simply needs time to adapt before it can once again thrive and nourish the creatures here. And so, in spite of the sadness we feel, we strengthen our resolve to resist further mindless killing and support these trees during their recovery.

Trees are health. Spending time with trees is important to the well-being of all people who live in cities, and especially those who spend much of their time in an institution like CMHS. And yet the number of places where we can go to be with trees is shrinking. These Chestnuts are among the last-of-the-last of their kind — what other rare tree communities might we be on the verge of losing?

One threatened ecosystem close at hand is the Niagara Escarpment. We remember that several swaths of forest have been cleared from this section of the Escarpment in the past year. The Chestnuts and the other trees cut today were just a few hundred metres from the Escarpment forest and played various roles within that community. The owls who nested in them would hunt in the forest at night, and squirrels would move seed back and forth between them.

The Horse Chestnut

- Not related to the American Chestnut, but produces similar looking nuts. These nuts are quite poor tasting and not a common food
- Commonly planted as front-lawn trees
- Nuts have a leathery, green skin with sparse spikes
- Compound leaves, meaning a single leaf-stem branches off to form a fan of leaves



We leave the CHMS property through its North fence that borders the Escarpment, and we descend the short icy stairs to catch the Bruce Trail heading West. Just after we cross Queen St, we come to where a large section of forest has been cut. A little further along, the forest around the trail has been reduced to just a few metres thick. The trees lining the trail are enclosed in a wooden cell marked "Tree Protection Area" while construction goes on just above. As we walk through this, we recall writing about a similar story last April, as the forest at the top of Ferguson St was cleared to make way for a new pump station.

How many more summers of cuts and new developments does our thin band of Escarpment forest have left? And what can we do about this ongoing destruction, as the threat of a new highway looms?



Red squirrel



the saddest day...

RESPECT FOR Healing Lands:

Cootes Paradise is often described as the most valuable wild space in the Hamilton area, while nearby disturbed sites are widely dismissed as valueless. But what other forces have acted on Cootes and the surrounding area, and how does the land's past relate to ideas of value?

FROZEN islands, forgotten HILLS

Overnight, snow has covered the land.

Since there are so many fun things to do in the winter that are harder to do other times, we set off towards the frozen marshes of Cootes Paradise.

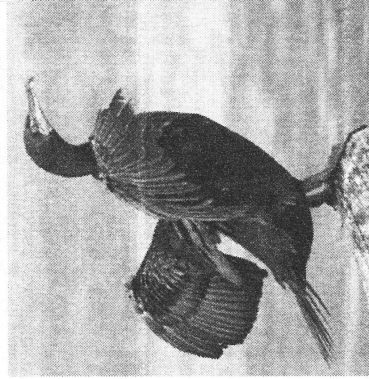
From Dundurn Castle, we cross York Blvd and dip down to the traintracks below the Hamilton Cemetery. We pause by the tracks and remember a friend of ours who, standing in this spot, gestured to the shrubby hills below the York St bridge and the other wild spaces along the tracks and said that they had "no value." Then he turned and pointed out towards Cootes Paradise and said, "Over there, celebrate that."

He did however give respect to one tiny strip growing along the west side of the tracks. It's easy to spot the single, tidy row of tall White Oaks shading a healthy understorey of Witch Hazel here. This shred is some of the last old growth oak savannah remaining on this side of hwy 403, but not long ago, these

savannahs covered most of the sandy soils of West downtown.

Cutting under the highway towards Princess Point, we find it troubling that our friend would dismiss these wildlands that, although mostly non-native species, are doing the work of stabilizing these disturbed, manufactured landscapes. We arrive at the point with with these thoughts in mind, and, stepping down onto the frozen marsh, we resolve to walk due North to Hickory Island across the ice.

We have heard a lot about the damage that has been done to Hickory Island by the large flocks of migratory Double Crested Cormorants that have taken up nesting there. The birds are accused of killing all the vegetation on the island, and today we want to take the opportunity to go check it out for ourselves.



a cormorant
dries its wings.
less waterproofing
on your feathers
means you can
dive through water
more rapidly.

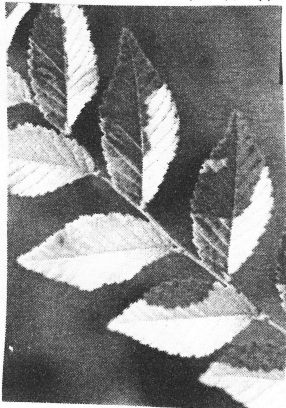
Trudging through snowdrifts, we see many big stumps and dead trees on the island as we approach it. But no such large trees stand here now. Now, the island is mostly covered in an early succession stand of Sumac, while on its Eastern shore, there are some small trees that we don't recognize. Its buds and twigs remind us of the Elm family. In the remnants of a tent caterpillar nest we

find a small leaf with many teeth, pinnate veins, and an asymmetrical base. These are all traits of Elms, so we decide that this might be a foreign Elm of some kind.

The snow banks around the island are freshly streaked with soil — the Sumacs are doing their best, but with the trees gone, erosion seems to be happening rapidly. We find Mullein growing from these collapsing banks, and celebrate its presence as a familiar friend of places where soil is scarce, like city cracks and gravel fields.

The impact of nesting Comorants on this island has lead the Royal Botanical Gardens (RBG) to actively prevent the birds from taking up roost on the other islands in Cootes: Goose and Rat. Typically, Comorants prefer to nest on bare rocky shores, like the artificial islands along the east shores of Hamilton harbour. Recently however, conservation authorities have decided to sink Farr Island, a large island in the middle of the harbour and a favourite nesting spots for the birds. Where will the birds who once nested there go next? Last year, over six thousand Comorants were culled in Lake Erie — could the Hamilton flocks be facing the same fate?

Siberian Elm



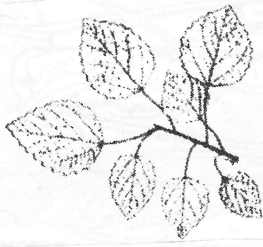
Mullein

To better understand the current state of Hickory Island, we trek back across the frozen marsh towards Goose Island for comparison. (According to maps, it's called Cockpit Island, but we like Goose Island, because geese hangout there in the summer.)

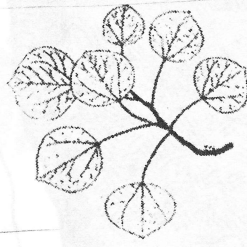
Goose Island is longer than Hickory Island, but equally narrow. Unlike Hickory though, it is home to many large trees — we find several Red and White Oaks, both young and old, probably relatives of the Oak Savannah on nearby Sassafras Point. As well, we meet some Willow, Alder, Paper Birch, Trembling Aspen, and the dried stalks of many wildflowers. Despite the healthy stand of young and old trees here, the banks of Goose Island seem to be rapidly collapsing as well. We don't know much about the history of these islands yet, but erosion is clearly a constant pressure, regardless of whether or not the islands are treed.

Looking at the dirt-streaked snow here though, below the sprawling canopy of a mature White Oak, we are humbled by the reminder that change is constant — these islands were once different than they were today, and they continue to transform. And yet, while listening to the rumble of the highway nearby, we remind ourselves that there are many unnatural forces acting on this land today, forces bigger than the simple observation of the presence of the pesky Comorants themselves.

White Elm



Bigtooth Aspen

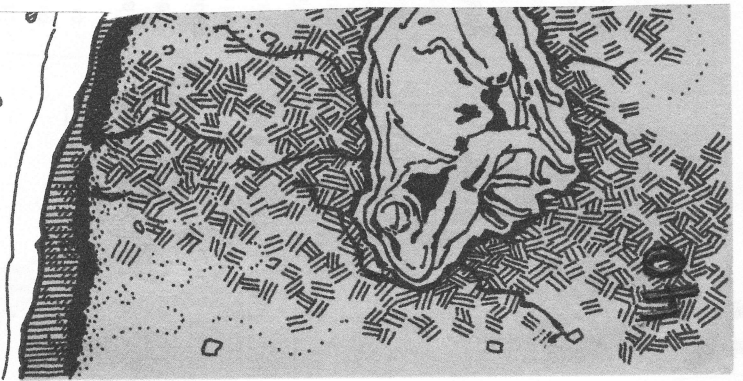


Trembling Aspen

From the highest point of the island, the red of Scots Pine and the yellow of Weeping Willow back on the North shore catch our eye. Why not cross the ice for a third time today? It's not every day we have such a direct and quick route to the other side.

Scots Pine and Weeping Willow are both foreign species planted for decoration, and, arriving at the North shore, just beyond them we see the cleared lawns of the RBG, where many trees are on display. We follow some deer tracks along the ice and munch a bit of well-browsed White Cedar beside a massive feral Lilac tree, another escapee of the tree museum above.

With a bit of Cedar under our tongues, we climb up to walk a section of trail that's lined with many nut and other food trees, and soon come to an old flaking signboard. One part of the board shows two rough maps: one depicting this area in 1860, and one depicting it as it appears today. It takes us a moment to realize what we are seeing. In the map from 1860, the section of Cootes covered

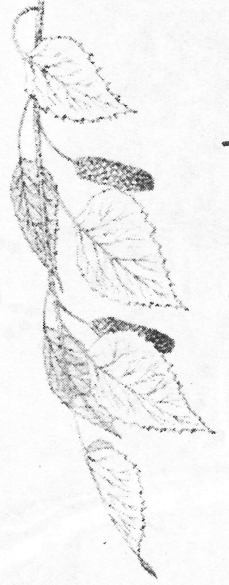
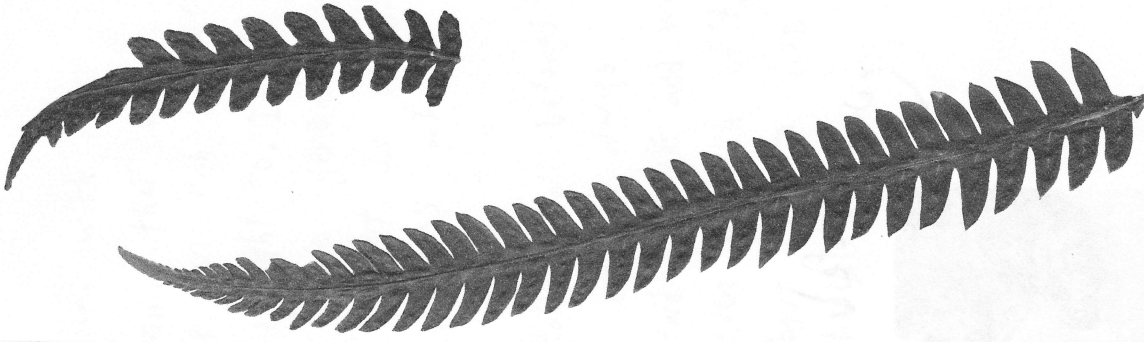


by open water is much narrower — and there are no islands at all!

These are dramatic changes. The forested banks were probably in about the same place, so we can conclude that the area between the banks and the standing water in 1860 was marshy and covered in plant life — a much larger marsh than today. We take from this map that, in the hundred and fifty years since then, the marshland has retreated to just hug the shoreline, leaving the islands alone in open water.

We pause by the shore to consider our observations and wonders from the day and how they might fit into the story these map tell.

The first thing we discuss is that there have been many major development projects in this area since the map's date of 1860. The marsh was dredged several times as the Desjardins Canal struggled for viability until 1895, and The construction of York Blvd and the 403 completely reshaped its East end. Invasive Carp became established in the area soon after, continuing to disrupt the stability of the marsh floor. As well, near-complete deforestation and rapidly accelerating urban sprawl throughout the watershed means an ever



Birch branch

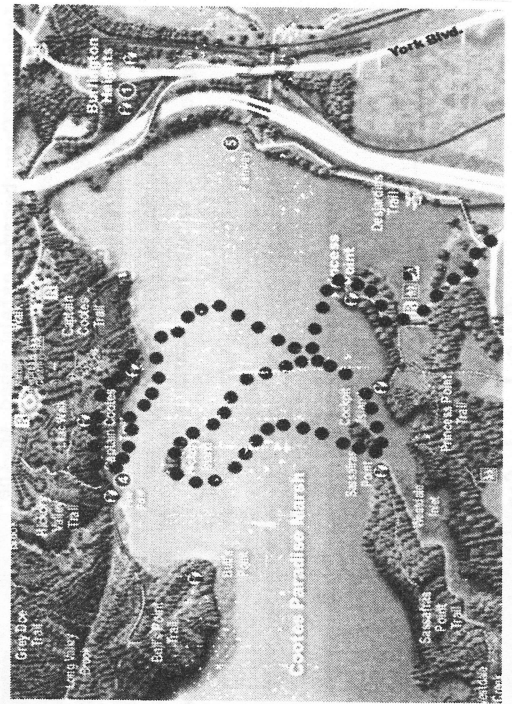
greater amounts of silt washes down into Cootes...

The landscape here today is radically different than it was in the past — this ecosystem has adapted to many changes, from the development projects, to the Comorants, to the intrusion of a museum of foreign trees. The scrubby hills by the traintracks that look out over the remaining sliver of old growth oak savannah have done the same. There is overwhelming hope in all of these different lands.

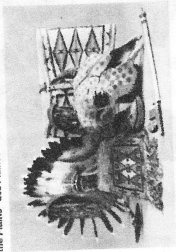
All land has the capacity to heal and become richer, even the scrubby hills and Hickory Island. We need much more wild space than we currently have, so it's time we begin including the amazing ability for land to heal in our ideas of value.

Defining value for ourselves is an important place to begin. This process of unlearning means going beyond notions of conservation as valuing isolated parcels of land, and instead recognize equal value to all parts of whole systems.

our route ↓



Canada 8



Canada 8



Canada 8



Canada 8



Canada 8



Canada 8

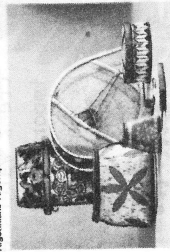


We share our land with the complete understanding that we're not giving away an inch, because we don't have the right to. It belongs to the future generations as well as the present. It belongs to the past generations who still remain...

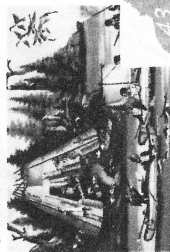
I believe that Haida-Gwaii belongs to the Haida people and will always belong to the Haida people, and we can't compromise even an inch of it. We can talk about how to live together from there.

-Lavina White
Elder, Haida Nation

Canada 8



Canada 8



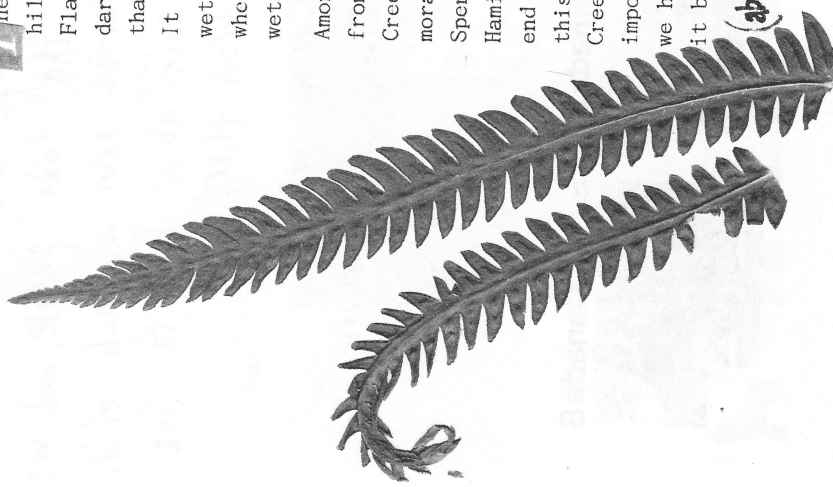


The remaining wild spaces along the Spencer Creek show the marks of a patchwork history of land management and restoration practices that continue to affect the health of everyone in the watershed today. To gain a better understanding of the Spencer Creek, we begin in the headwaters at...

The Beverly Swamp. Looking South from a hill near Hwy 97 and Brock Rd in Flamborough, the swamplands seem a vast, dark patch of stillness on a landscape that is otherwise all fields and farms. It is one of the largest forested wetlands remaining in Southern Ontario, where more than 90% of the original wetlands have been destroyed.

Among those trees below us, the water from Valens reservoir joins with Fletcher Creek, flowing from the Paris-Galt moraine, to form the main branch of the Spencer Creek. In most of western Hamilton, a drop of rain that falls will end up in the Spencer Creek, meaning that this whole area is part of the Spencer Creek watershed. It is one of the most important water systems around here, and we have made it our goal to get to know it better.

(above: trout lilies)

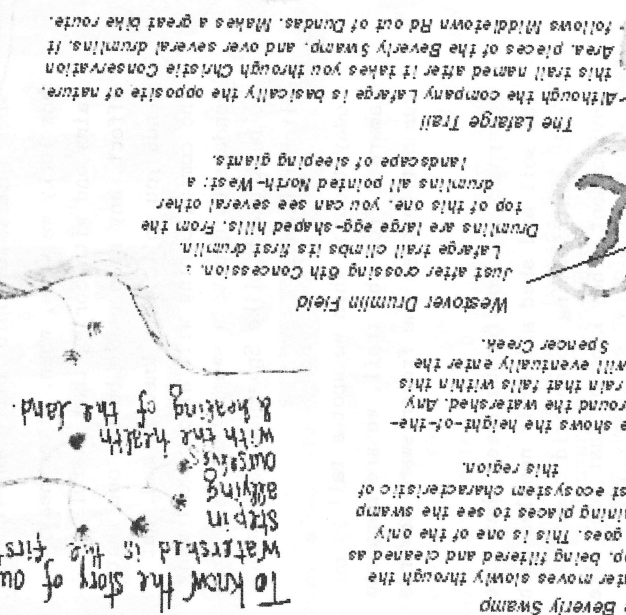


We follow the LaFarge trail South, and when we descend into the swamp, we find the ground and water in it is frozen. A week later, we would return and realize how lucky we were, when, after heavy rains and with Spring thaw in full effect, any step could be the one that sends you up to your knee in mud. But the coming Spring will also reveal many wonders unique to a swamp that will draw us back again, like Sphagnum Moss and Pitcher Plants.

Today though, when we spot a tall Tamarack from the trail, we are happy to run out through the frozen swamp towards it.

Tamaracks are coniferous trees that love wet soil and shed all their needles each fall, contributing to an acidic soil environment. They kind of just look like dead spruce in this season, but the large nubs on their branches where their needles grow gives them away in silhouette. We decide to set our packs down by this tree while we explore the depths of the swamp, but we don't get more than a few steps before we notice the other trees around us and are overcome with curiosity.

Many of the trees here seem unfamiliar, so we stop to look at them more carefully. To identify the trees and plants of a site is to begin to learn the language of that place, and it is one of the first things we try to do



SPENCER CREEK Watershed

Green are up here, in the Pans-
Gait Moraine. A moraine looks
like a landscape of rolling,
rocky hills, and they are
important recharge areas for
groundwater.

To know the story of our
watershed is the first
step in
adding
ourselves
with the health
& healing of the land.

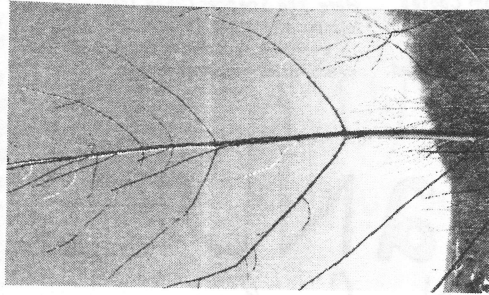
The Beverly Swamp
Water moves slowly through the swamp, being filtered and cleaned as it goes. This is one of the only remaining places to see the swamp forest ecosystem characteristic of this region.

This line shows the height-of-the-land around the watershed. Any drop of rain that falls within this area will eventually enter the Spencer Creek.

Westover Drummin Field
Just after crossing 8th Concession,
Large trail climbs its first drummin.
Linnins are large egg-shaped hills. From the
top of this one, you can see several other
drummins all pointed North-West: a
landscape of sleeping giants.

the Lafayette Trail. Although the company Lafayette is basically the opposite of nature, this trail named after it takes you through Christie Conservation Area, places of the Beverly Swamp, and over several drumlins. It follows Middletown Rd out of Dundas. Makes a great bike route.

the large train



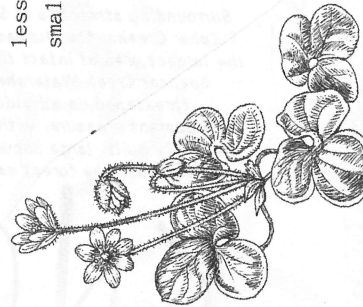
Red Ash
branches

when exploring a new place. We call it forest literacy.

One tree we see has pale, scaly bark, thick twigs, and clusters of dried seeds still hanging on into the winter. Looking up at the branches against the blue sky, we recognize a familiar pattern of paired, branching in the twigs, the same as we see in Ash trees — it's a Red Ash!

Another tree has deeply furrowed bark and fine, paired twigs, and we soon realize it is a White Elm. Both Red Ash and White Elm are trees we often see growing in ditches and on other disturbed sites, where they frequently assume a gnarled, shrubby form. But here they grow tall and graceful, forming a large part of the canopy, along with Silver Maple, White Cedar, and Aspen.

We find some Coyote tracks and let them be our guide, following them over the twisting landscape of hills and depressions. We observe that White Cedar and Aspens prefer to grow on the highest places, along the edges of the main, raised trail. Red Ash takes the wettest places, often growing right in the water, with White Elm and Silver maple taking the spots that are just a little less wet. By spending time noticing small details of these trees' form and

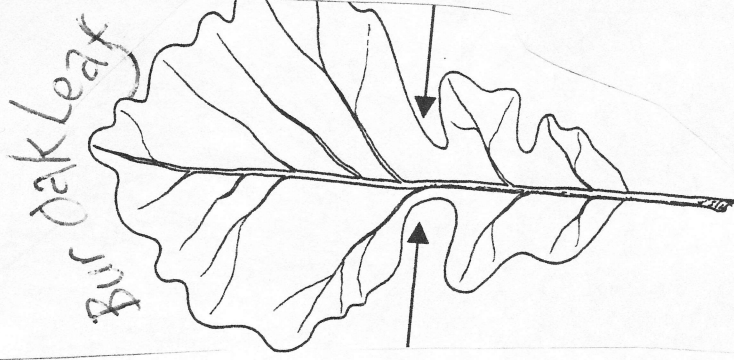


Round-lobed hepatica

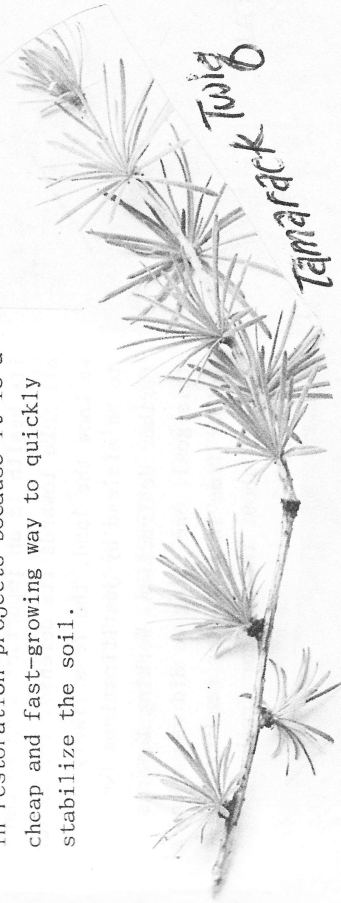
habitat, we are soon able to identify them even in peripheral vision, allowing us to focus on the tracks we're following.

Soon, the Coyote tracks intersect some Deer tracks that are more recent, and we switch to following those instead. Spending time wandering along an animal's trail and creating a story of who was here and what they were doing can be a fun game for developing forest literacy. The Deer lead us uphill, into a slightly different swamp community. Before, in the swamiest spots, there was little undergrowth, but now we're in an area with a thick tangled understory of Dogwoods and other shrubs. The canopy is dominated by White Cedar, a favourite spring snack for deer, with a thick tangled. But as we continue higher, the forest becomes entirely White Cedar.

Normally, entering a stand of Cedars is one of our favourite things, but here, they grow densely, almost on top of each other. The experience is a little disturbing. They must have been planted to be this way, so why were they planted? We recall that White Cedar is often used in restoration projects because it is a cheap and fast-growing way to quickly stabilize the soil.



Bur Oak leaf



Tamarack
Twig

Back on the main trail, we find a signboard that explains that 60% of the Beverly Swamp is privately owned, and that it depends on "good land stewardship" for its health. The Cedar monocultures are examples of hasty stewardship, within a logic that land must be actively managed to have value, whether it be to a farmer or to a granting body approving a restoration project.

In the past, the Beverly Swamp was much larger than it is today, even extending far enough to nourish the waters of the Grand River. Stewardship programs, like the one covering the Beverly Swamp area, are clearly good steps to be taking to protect lands and allow them to recover. But these efforts are insufficient if we step back and think about the scale of the threats to our watershed. They also play into the common story that only property owners and people with access to money can participate in addressing problems that we all face. Why should we trust landowners, governments, and corporations to determine the health of the land water for us?

Building a personal knowledge of our watershed and the factors that influence its health is an important step we can all take towards its defense. The better we know the land, the less likely we are to be misled by justifications for further destruction. Working towards this goal, one thing we did was spend a lot of time in libraries reading old reports about the Spencer Creek Watershed.

Yellow Birch
Bark is darker and shaggier than its relative, the Paper Birch, and doesn't peel off in such big strips.

White Spruce
Pyramid-shaped evergreen Grows along shores of streams or lakes.

We found that back in the fifties, controlling the flow of water in this area to deal with the spring floods and summer droughts was the overwhelming concern. And so dams were installed, reservoirs like Valens and Christie were created, and waterways were channelized or buried, like what has been done to the Spencer Creek as it flows at last into Cootes Paradise.

But there is more to this story. These concerns about floods and droughts only began after almost all of the original forest in this watershed was destroyed. When the land is covered by forest, water moves much more slowly, filtering through the deep soil on the scale of years as a part of the watertable. From here, water enters the Spencer Creek evenly and constantly. When the forest is cleared, more water runs off the land rather than entering the watertable, lessening the base flow and causing flooding and droughts.

As we consider this story, we emerge from the wonders of the swamp world and find ourselves at the foot of a large drumlin. Drumlins are hills left behind by the retreat of the last glaciers. The huge sheets of ice left this area moving North-West, and so here, (around Safari Rd), we can see seven or eight egg-shaped hills pointing in that direction. The trail runs through a strip of wild between farmers' fields over the top of the drumlin. From this high ground, we look South and out over the Spencer Creek Watershed. From here, we see large metal electrical towers marching towards the city, we see barns and farms and roads, and patches of trees.

The second leg of our journey along Spencer Creek will be through these lands — towards the Escarpment and over it, through Dundas to join with many other creeks, and at last into Cootes and Lake Ontario. We decide to take a break here and camp for the night, but we will continue this story soon.

START

Quaking Asp
Straight tape delicate horizontal branches.

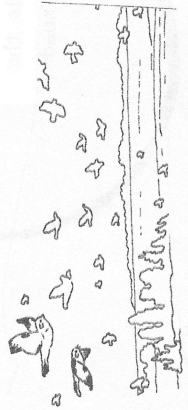
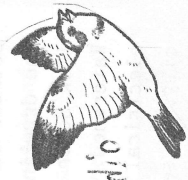
Yellow Birch



Obviously, one of the things that I never forget is that when I'm gardening or growing food or farming, I'm doing that on stolen land. I live on Hove Island, and this whole island, and this whole area, this whole country, essentially, was stolen from Indigenous Peoples. When I'm growing food, I recognize that part of the reason I'm here is ~~the~~ because of an original injustice, a fundamental injustice that's baked into Canada as a country. One of the things that we have to do, as farmers and people that work on the land in any capacity is to work for justice, and to try to correct these deep injustices in society.

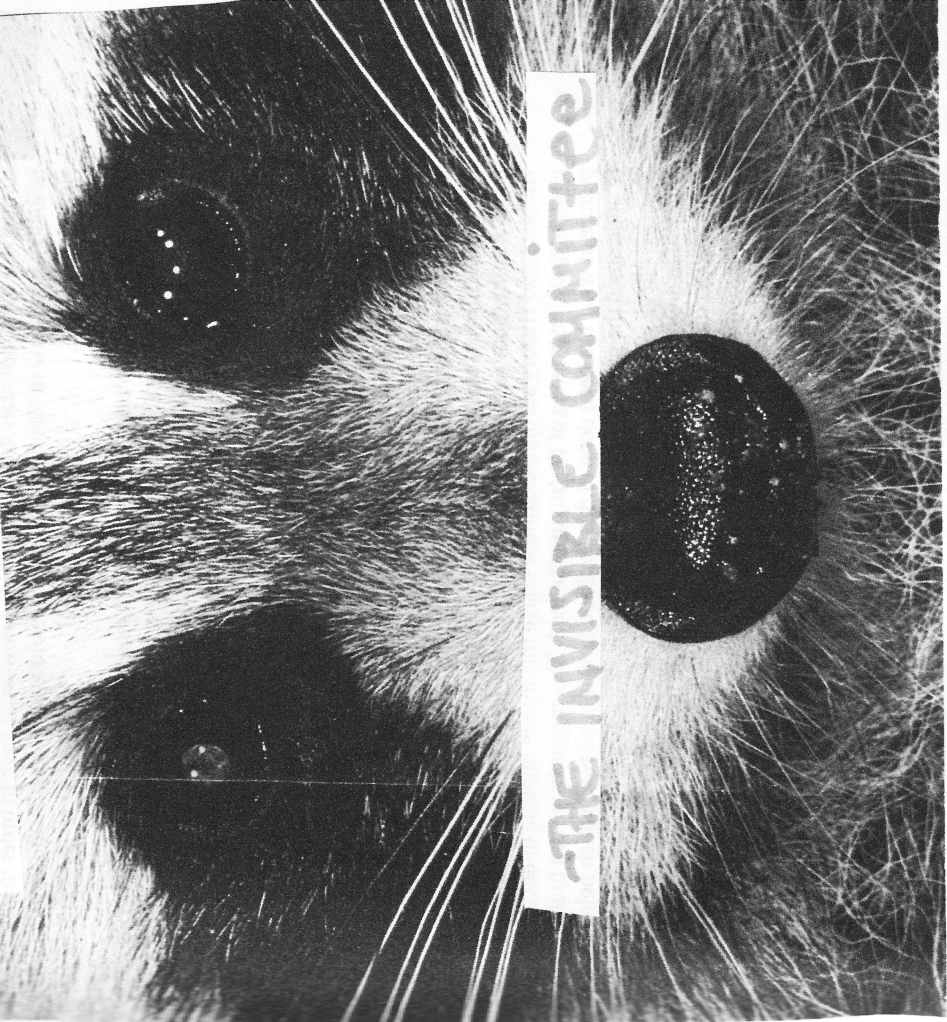
-Aric McBay

speaking on Healing the Earth Radio



IT IS COMMON
SENSE NOW TO
SEE PROGRESS
AS SYNONYMOUS
WITH DISASTER.

-THE INVISIBLE COMMITTEE





more...
KLR Bookclub!

While we were writing these articles, we read lots of different books that were interesting and inspiring to the work we were doing. Here's some of the books (and other stuff) that has kept us talking:

Newcomb's Wildflower Guide, by Lawrence Newcomb – This guide helps make spring even more exciting than it already is. The uniquely thorough and easy-to-use key means we can look up any unfamiliar flower in just one minute, which means covering more ground and finding even more wildflowers!

Ontario's Old Growth Forest, by Michael Henry and Peter Quinby – Basically all the land in the area where we live has been devastated by this culture. The places we grew up loving are now buried by malls, and the ancient trees were out of living memory since before we were born. But this book reveals that many tiny fragments remain, tucked away along creeks and in precious corners throughout the Carolinian Zone. We need to know what have in order to defend it, and learning how to identify and appreciate old growth sites is an important step.

The Book of Swamp and Bog, by John Andrew Eastman – Most guidebooks are content to just identify the plants, animals, or insects that you happen to see, giving you a name to go with the experience of beauty. But this book goes ten steps further, focussing on the mind-bendingly complex network of relationships between all the plants, creatures, soils, and water in wetlands. This book demonstrates the next level beyond basic forest literacy. And there's another good one called *The Book of Forest and Thicket* by Eastman too.

The 3rd Floor of the Hamilton Central Library

We recommend balancing time spent in the forest with a healthy dose of library time in order to follow up on wonders and to gain new ones. In particular, we suggest the shelf with books around call number 585.4 on the third floor. A lot of our past and present book club features are found right there. Another spot we spend a lot of time in on this same floor is the Local Archives and History section. Colonizers have this insane impulse to document every step of the process of destroying the land. This means is we can build a picture of what has been done to this land and how it once was, which helps us to understand the present and plan for the future.

The Witch's Child, by Unsettling America – From the blog Unsettling America: Decolonizing in Theory and Practice, reflecting on the importance of celebrating Spring: "*This is your story, child*. This is why it seems you have everything, but you feel you have nothing. Trust your feelings. Do not numb them with the pills they offer you. Because those feelings of anguish and rage

are the same itch the seed feels in the last days of Winter, before it bursts open and sends out its buds into the world. It is this growth—uncontrolled, spontaneous—that would deprive them of their soldiers, which is why they fear it above all else."

Princess Mononoke, by Hayao Miyazaki – In this film, a young man from a small isolated tribe finds himself in the middle of the final stages of a siege being mounted by the forces of civilization and progress against the very spirit of the forest itself. It seems a bit insane to us that he decides to help rebuild frontown at the end, but we keep coming back for the vision of the primordial forest and the passion with which the beast-gods defend it.

Forest Forensics: A field guide to reading the forested landscape, by Tom Wessels – This is a field guide to the traces understanding the history of disturbance in a forest. Was this area logged, or was there a fire? Can we tell what was once cultivated on the overgrown field? A very useful books, with lots of pictures, and a few good tricks that go a long way.

Bird Behaviour, by Donald Stokes – Again, going beyond field guides, this book lays out the displays and behaviour patterns of twenty five birds common in this area. It's really fun to be able to watch ducks and have some sense of what the games and politics are out on the pond.

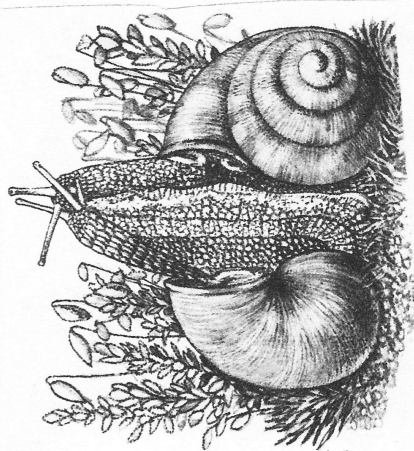
Bruce Trail Reference Guide – This guide is a three-ring binder stuffed full of fold-out maps and information about every inch of the Bruce Trail (which, as you know, runs the whole length of the Niagara Escarpment). If you want to explore the wild spaces in this area, this book is pretty indispensable.

Silent Spring, by Rachel Carson

The success and popularity of this book is probably a result of the perfect blend of storytelling, discussion, and stark messages of doom. Rachel Carson was one of the first to bravely dismiss 'authority' and ask the question of whether a civilization waging relentless war of life has lost the right to call themselves civilized at all. Do you know the entwined history of the Elm and the songbird? We suggest falling in love with chapters 7&8.

Pilgrim at Tinker Creek, by Annie Dillard – A poetic love song to the marvels our senses and mind can find when we tune them to the rhythms of nature for a full cycle of seasons. The chapters meditating on what parasitism reveals about the meaning of life and considering the nature of sight are particularly compelling.

5/2/00



Goodbye!
We love you!



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