

Introduction

INITIALY I THOUGHT I WAS GOING TO be writing a simple book about traditional weaving from the context of working in an urban center — sourcing materials from what was available and around, free for the taking. But as the book took shape I realized that the simple act of weaving and teaching hand-based skills is, for me, at the center of a quiet revolution.

How do we produce, consume and relate to the things we use in our daily lives?

How can we be enriched both personally and as a community when we shift our thinking to allow the time for, once again, making for ourselves?

After more than a century of outsourcing our daily needs, to become makers “from the perspective of local” requires a radical

shift in our current thinking. For most that identify as artists, makers or producers, there is still a need to consume goods that have come from somewhere else in order for that making to happen.

If you have picked up this book, it likely means you are a part of the growing number of individuals who recognize there are problems with the world we are currently living in; something has gone wrong on Earth. Surrounding us are various indicators that tell us in the Earth’s own language that we are in trouble. Figuring out how to respond to the crisis as an individual is incredibly challenging, complex, intricate — and stressful — knowing that our personal choices have global impact. Watching the news and hearing about disaster after disaster can stop one cold, feeling unable to do anything at all. One is left disempowered

and forlorn, feeling there is no change that can matter on such a small scale as a personal one.

But what each of us can do is think local: to look to the people, places and unusual resources that surround us. By recognizing that human culture is a part of the ecosystem — not separate — and by creatively reimagining what symbiotic relationships of local production and consumption might look like, we could go a long way as individuals and communities in changing our relationship to Earth on a local, personal level.

So this book is part philosophy and part toolkit; it breaks down not just the techniques of how to find materials and make in a local way, but also articulates the benefits when we embrace thinking and making locally.

The Three Ps: Places, Plants, People

The continuing thread that weaves throughout this book is the acknowledgment and discovery that our local resources can solve problems. The Places that support our production needs, the Plants that are available in abundance to work with and the People who have the skills to work together, when connected, can solve locally some of the problems we face. This book highlights the power of looking around our immediate surroundings. Close observation and inquisitive thinking by cooperative groups of

individuals can open up new directions of opportunity, and importantly, build community partnerships. We can see our full human potential and witness the power of community that is unleashed when we allow ourselves to:

- ask questions
- share knowledge
- have a sense of curiosity, patience and enthusiasm for the future use of what we are learning along the way

This book documents my own journey, as an artist, of looking at the world around me with the notion of having a one-mile-diet attitude towards sourcing art materials.

As an artist whose practice now focuses on up-purposing green waste and invasive plant species, I am often asked how I got started. For some time I had been working with what I called shed or unwanted organic materials: hair-clippings, organic seasonal debris. I was interested in what I thought of as a domestic alchemy. Could I change my thinking about mundane daily tasks if I approached the work by placing a value on the byproduct of the task completed? Floor sweepings of dog hair were spun and woven into slippers. Suddenly sweeping was an act of harvesting, and I was more enthusiastic about the boring but necessary labor that allowed the making of something beautiful from something unwanted.

One of my art installations was a series of 13 dresses varying in height from 2.5 to 3.6 m (8 to 12 feet) made of magnolia leaf skeletons gathered and sewn on an organza fabric backing. In total about 10,000 leaves were collected after a winter of decomposing into a lace-like structure. I was invited to bring the dresses to a show in Ireland where they were installed in trees in an old cemetery on the edge of a 12th-century priory ruin.

But I realized the falseness of having brought something made from the outdoors to another place; the dresses were like well-disguised imposters. The plan from the start had been that the dresses would stay behind to weather and decay in the trees. It was a release for me to leave the work behind; it felt very liberating to not have them in the studio any longer. It wasn't until I came home and got the message that the dresses were doing well, but a few had blown down and the sheep were grazing amongst them, that I realized the error of what I had done. I had effectively gone to Ireland and littered my art across the landscape. Someone else would eventually have to go and clean up the site behind me, and I worried about the sheep grazing amongst the dresses, thinking of the cotton threads getting tangled up in with the grasses being grazed.

Without thinking I had made a monstrous hybrid,¹ something both organic and inorganic that could not biodegrade. I vowed to shift my practice radically. If I was



Fig. 1.1: My dog's "floor offerings" were rearticulated into slippers.



Fig. 1.2: The dresses were ghostly and beautiful as they blew in the wind and looked incredibly like they belonged there, like they had been made there; but they had not.



Fig. I.3: *This early woven sculpture made entirely of green waste dogwood clippings could just biodegrade into the landscape.*



Fig. I.4: *There is something truly exciting for me about seeing a big green waste pile on the park horizon and wondering what opportunity lies ahead!*

going to continue to put work outside, then it needed to be made in total from what I found in my surroundings that could biodegrade. Otherwise I was just making litter. And if I was working with shed and unwanted materials, what else might those be? I discovered invasive plants and city green waste piles and realized that the act of “mundane labor,” that stewardship of the land, could itself be the act of harvesting. Those gathered materials were rearticulated through various handwork skills and then returned to the land to decompose. Leaving no waste behind, leaving no trace.

At home, my daily trips to the dog park began an ongoing relationship with a city groundskeeper who introduced me to her green waste pile, the place she stashed all of the park maintenance clippings until a truck came along at week’s end and picked them up. Over time this relationship formalized, now involving larger groups of community members, planning with Park Board on maintenance cutting times (for what I think of as harvests) and coordinating with environmental stewardship organizations to rethink the plant biomass left over from invasive species removal.

I now know that enough of anything can be made into something. Discovering what that something is can be an incredible journey — learning skills, developing a seasonal awareness, fostering community and building self-empowerment with a do-it-together attitude.

Contemporary artists often play the role of connectors between the silos of different disciplines. In my work that often means connecting ecologists and environmental groups or gardeners with a creative community to work with green waste piles or invasive plant species which have been removed. I don't intend *Common Threads* to be solely for artists, but for anyone with a passion to connect people, to make things by hand and a desire to work with others. You can hopefully pick up the torch I am handing over as I share my own experiences.

My art practice is now a hybrid of my own making; project management, environmental stewardship, a strong interest in traditional handcraft, people skills and keeping an eye out for opportunity are what I do. I believe strongly in building on individual strengths to realize our potential; when we work with others, our potential increases exponentially, and we learn to draw on each other's strengths and support each other through challenges.

Common Threads documents some of the discoveries I have made along the way. It introduces some of the people I have had the honor to work with and learn from, gives entry level basics for working with natural materials, highlighting projects I think are easily interpreted with communities in different places. In general I hope this



book creates a framework of possibility, allowing you to see what is “unwanted” in the world around as a creative resource waiting to be harvested.

Fig. 1.5:
Individuals of all ages
working together
weaving a structure.

Places



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Chapter 1

Work With What You Have at Hand

HOW DO WE FIND THE PLACES where humans, with our needs, skills and handwork, can play a part in sustaining a healthy local ecosystem? By rethinking “what we use and how we make” in the place we call home. We can look for ways that our production/consumption relationships can simultaneously broaden in creative thinking and shrink in geographical scope to refocus on local ecology.

In most environmental stewardship practice, conversations about invasive and native species are inclined to dualistic thinking: invasive plant = bad. But what if invasive species could be useful for something? What if, since invasives are what we have in abundance, we could find useful solutions for other environmental problems using materials from all these plants that we have at hand?



Fig. 1.1:
English ivy
covering a
forest floor.

Invasive Species for Erosion Control

In 2009 I began a project with Stanley Park Ecology Society (SPES) to rethink what could be done with the huge quantity of biomass left after invasive plant removal efforts. SPES, with massive community volunteerism, had pulled enough ivy and other invasive plants over the years to fill one third of an Olympic-sized swimming pool. Practices differ from place to place, but as I understand it there are various schools of thought on best practice. Some ecologists will say in the right conditions a single ivy leaf can root and begin a plant,

others say not likely. Some cities leave piles of invasives to dry out on-site and then compost; Vancouver's invasives are kept separate from other green waste and sent out for incineration. Any potential "good" the plant might have done in carbon sequestration goes up in smoke.

Stanley Park is a 400 hectare (988 acre) park in downtown Vancouver made up of managed forest, large manicured lawns and planted areas. SPES is a nonprofit organization that works alongside the Vancouver Park Board overseeing the ecology of the park as well as community environmental education and stewardship initiatives. Doing site walks around restoration sites with the SPES ecologists, we talked about the dramatic change in the environment from before an invasive removal to after; this dramatic change is stressful to the ecosystem. When an area has been completely taken over by English ivy ecologists call it an *ivy desert*. When the ivy is removed there are usually no mid-height shrubs or low-growing ground cover; just the big trees remain. In an ideal world there would be lots of money to buy native plant replacements, and all that removed biomass would be replaced with newly planted native plants. The local ecology would not be deprived of the food or shelter from predators that unwanted plants may still supply. Unfortunately that kind of budget rarely exists, and sites take a few years to catch up and fill the void left by the removal of invasives.

Fig. 1.2: A large pile of English ivy after removal.



Problems with Invasives = Solutions to Other Problems

Invasive species are introduced plants (or animals) that adapted over time to different growth conditions in a different ecology. They originally evolved with different neighbors; there was something to keep them in check — weather, animals, insects or other vigorous growers. Something in its home territory kept that species in a reasonable quantity relative to the other species around it. Many invasive plants are escaped garden ornamentals that originate from very biodiverse ecosystems; they have to be vigorous growers to survive. When planted in new locations with milder environmental variables they become superman-styled “alien-power” plants set loose. These vigorous growing super plants take over from native species and can starve them of sunlight and soil. I use the metaphor of a bully in a school yard when I talk invasive plants to kids; these plants don’t share nicely, and a monoculture ensues. Comparison of course can be drawn between invasive plants that colonize an environment and cultures that invade and colonize a people.

Removal and control measures for invasive species are now a constant concern for governments, environmental groups, agricultural interests and structural engineers. Even land developers can’t build in areas where the root growth of invasive plants like Japanese knotweed will break through concrete. Huge amounts of money are spent

by governments on dealing with invasives, and the approach taken tends to come from an industrial framework, a “big industry is required to fix this” mentality.

Land managers are also challenged to control or slow down bank or land erosion. Products made for erosion control typically break down into two types: one is a plastic-based netting product, the other is biodegradable and often uses coconut or palm fiber. I am an artist; I don’t know very much about erosion control products and am not claiming to be an expert. But, it struck me that plastic netting has environmental issues: it’s an oil-based product, it puts plastic into the environment and requires shipping over long distances to any remediation site. Biodegradable netting is made of palm or coconut uses fibers that grow very far away from where I live. And perhaps this is my cynical side showing, but I wonder what adverse environmental impacts are being caused by harvesting palm and coconut fiber in a land far away from me, all to protect my home. Thinking big picture, how do such methods for controlling erosion make any environmental sense?

As we again learn to embrace thinking locally in our social evolution, we need to be thinking beyond the 100-mile food diet. In what other ways can we embrace the “local” concept to creatively use what we find around us for solving our own problems? We need to not lose sight of opportunities

to use what is quite literally at our feet and unwanted.

I was having conversations about these concerns with ecologists from SPES while, back in Stanley Park, the Vancouver Park Board was still dealing with the fallout of major storms. In 2006, infamous storms brought down 10,000 trees, or 25 trees for every hectare (2½ acres) of forest in the park. There were ongoing restoration projects including bank stabilization.

Learning more about SPES invasive removal methods revealed that some sites had been deemed “unpull-able;” English ivy could not be removed because of the steeply sloped land on which the ivy grew. In typical fashion the plant became a matrix of vines, over time choking out most

other species. Removing the ivy from such a site would leave the slope vulnerable to erosion, as no roots would be left to hold soil in place. So leaving these sites as is seemed best until sufficient funding could allow a total restoration effort.

The idea of having two problems — and finding that one problem can be the solution to the other — just seemed too simple. But that is kind of what this story is about.

Problem one: Too much organic material being removed from the forest, having no purpose, as well as disposal challenges.

Problem two: What to do with areas too susceptible to erosion to allow for the complete removal of invasive plants like English ivy without having a budget for commercial netting and erosion control measures.

The consideration of global environmental impact regarding any imported netting introduced to the local landscape seemed also a question worth asking.

It seems logical laid out this way, and feels like the most obvious thing in the world. We all know our parents, grandparents or other generations before us would have thought the solution was obvious: work with what you’ve got. English ivy is an incredibly strong, pliable vine. I am sure in the time of my father’s childhood,



Fig. 1.3: Years and years ago, this slope might well have been a pull site.

kids playing Tarzan attempted to make ropes from it to swing on, and some surely succeeded. We have this incredible rich resource of rope making, weave-able strong fiber in abundance and we burn it or let it rot! Our ancestors would have labelled us crazy.

So in Stanley Park we found a slope that was compromised; some erosion was evident and there was very little organic material on the steep hillside.

I began experimenting with different techniques for crocheting and knitting ivy, and then figuring out how to best teach others. I had not knit or crocheted myself since I was eight and my mom got me spool knitting to occupy me while I had mumps. Spool knitting, also known as cording or French knitting, is the act of wrapping a yarn around a series of nail heads that circle the perimeter of a thread spool; each nail head acts as a hook for holding a stitch and essentially you have many hooks on the go at the same time. For knitting the ivy I began making large wooden spool-like frames using doweling instead of nails; these worked well for making net tubes. Then I realized the fence where I was working outside had open metal post tops. Instead of the fence having verticals that were welded to the top horizontal bar, every other post had a gap, essentially like my wooden dowel knitting frames.

The ivy netting was dried in the sun for several weeks before the installation. Before



Fig. 1.4: I began casting onto the fence top with ivy vines and quickly realized I could knit left to right and right to left.



Fig. 1.5: The technique was easy to teach to passersby who had never knit before.

Fig. 1.6: *As art projects go, this is by far the lowest profile public art I have ever made; when it was first installed, it was nearly impossible to see even when one was standing on it.*



we installed the netting, Greg Ferguson, the SPES Stewardship Coordinator I was working with, surveyed the netting installation site primarily looking to see if there was any evidence of ivy growing. We wanted to monitor the site to make sure the ivy netting did not reroot and grow; making sure there was no evidence of ivy on location that would skew our results was important. Our best-case scenario was that the dried netting would hold down freshly placed

organic matter, and newly placed native plant plugs would establish and take over the rooting; a natural succession would occur with the netting slowly biodegrading while the plants rooted and took over bank stabilization. And this is what happened.

Now, four years after the installation, the netting is completely gone; it disintegrated sometime between years two and three. The site is totally unrecognizable from what it looked like when we dug trenches and staked the netting; it's happily overgrown with vine maple, miner's lettuce, salal and other species — oddly not necessarily what we planted, but volunteers that self-seeded. I am happy to say no English ivy is in sight! Using the old craft technique of a knit stitch, we managed to shift the paradigm of the role that English ivy can play in the forest: from unwanted invasive and a threat to biodiversity to host and nursemaid for site restoration plantings.

Working with a group of people in a public area provides a great opportunity to get the message out about invasive plants and the impact they have on an ecosystem. While we knit ivy on the fence, lots of people would stop and participate. But even more would just stop and watch, ask what we were doing and read any literature I had about the project.

My favorite question to ask of the tourists walking by was “what’s invasive where you live?” This question provided an immediate connection point, comparing landscapes

and management strategies. It's impressive too how people knew what the invasive plants or animals were in their own community, or were suddenly curious to find out. The real winning opportunity, though, is still always in conversations with people who have no idea that ivy is invasive on the west coast but think that in the plant world, green = good. We had chances to inform new gardeners that planting ivy is a bad idea even if it is cheap to buy and available in just about every grocery store. What seems like an easy garden solution as an evergreen for shady locations will just cause problems down the road.

What Does This Mean for Other Communities?

In conversations that I have had with people from various North American cities, it seems often stewardship falls to small, independent, nonprofit groups that depend on volunteerism and goodwill. These organizations have all kinds of energy for tackling the invasive plants that threaten a specific ecosystem, but not necessarily funding to purchase commercially available erosion control netting.

The project described in this chapter allows community groups actively involved with removal efforts to remove locally invasive vine species from flat areas where it is easy to pull and where there are no erosion concerns and to crochet or knit the vines into netting during collective work



Fig. 1.7: While work is being made, environmental education opportunities exist; a teaching moment is provided. MARTIN BORDEN



Fig. 1.8: While we knit collectively on the seawall our “weird factor” drew just enough interest that folks who would walk on by if we had a straight up booth and table to talk about invasive plants now stopped to ask what we were doing: environmental education in action!



Fig. 1.9:
*Netting installation
in progress,
Spring 2010.*

parties. When the netting is dry, a community group can remove invasives from areas previously too susceptible to erosion, and do a planted netting restoration project.

Being a Community Connector

With most environmental art projects I find there are three phases; material harvest, material processing and making or installation. Not everyone loves each step, and this is true with making netting for erosion control.

Count on finding people interested in land restoration work and invasive species removal as well as people who are interested in making things and working with their hands. Occasionally the same people will be engaged in the whole process, but most likely there will be only a few.

Recognize you are building a symbiotic community: those that gather and those that consume and up-purpose what has been gathered. You are creating a new, closed-loop, locally-resourced product and environmental solution.

What Invasives Do You Have at Hand?

Begin to do some simple material exploration: try out cordage making, crocheting, knotting or open style weaving.

It is completely possible that you have a different invasive plant in your ecosystem that could be worked in some way to control erosion. Be sure worked material is completely dry before returning it to the environment to reduce rerooting possibilities and monitor the site frequently to verify that the netting has not rooted; gauge how long it will take for the material to completely decompose.

I have included more particulars about ivy and bionetting in Chapters 8 and 9; both should help you on your way. I strongly encourage you to collaborate with an ecologist or someone with experience in nature restoration work.

Most projects described in *Common Threads* have results far more difficult to measure than the ivy bionetting. Even where counting plants as an inventory can be done, there are unmeasurable factors hard to pin down:

- What are the true results of this project?
- How much new soil was created to support future growth?
- How many people learned about the invasive plants in their own surroundings, and then chose to do something about it?
- Who learned new skills that fed future personal creativity?

These are intangible echoes of our creative, collective actions:

- People met each other working side by side, and neighbors talked for the first time while working collaboratively.
- Some learned that the evergreen plant on their lawn and trees was not actually a good thing — that green doesn't always mean good.
- Together we made soil, we stabilized a degraded slope and we gave an unwanted plant that exists in abundance a new purpose.
- Through both the handwork and hard work of many people, the unwanted plant English ivy became an alternative, local, community-made opportunity for rehabilitating the land.



Fig. 1.10: Ivy netting installation complete.



- We have lived a modern tale of eco-alchemy, and we have collectively turned a plant thought of as “the unwanted blight of the forest” into a stewardship solution.

Fig. 1.11: Detail of site in Autumn 2013.

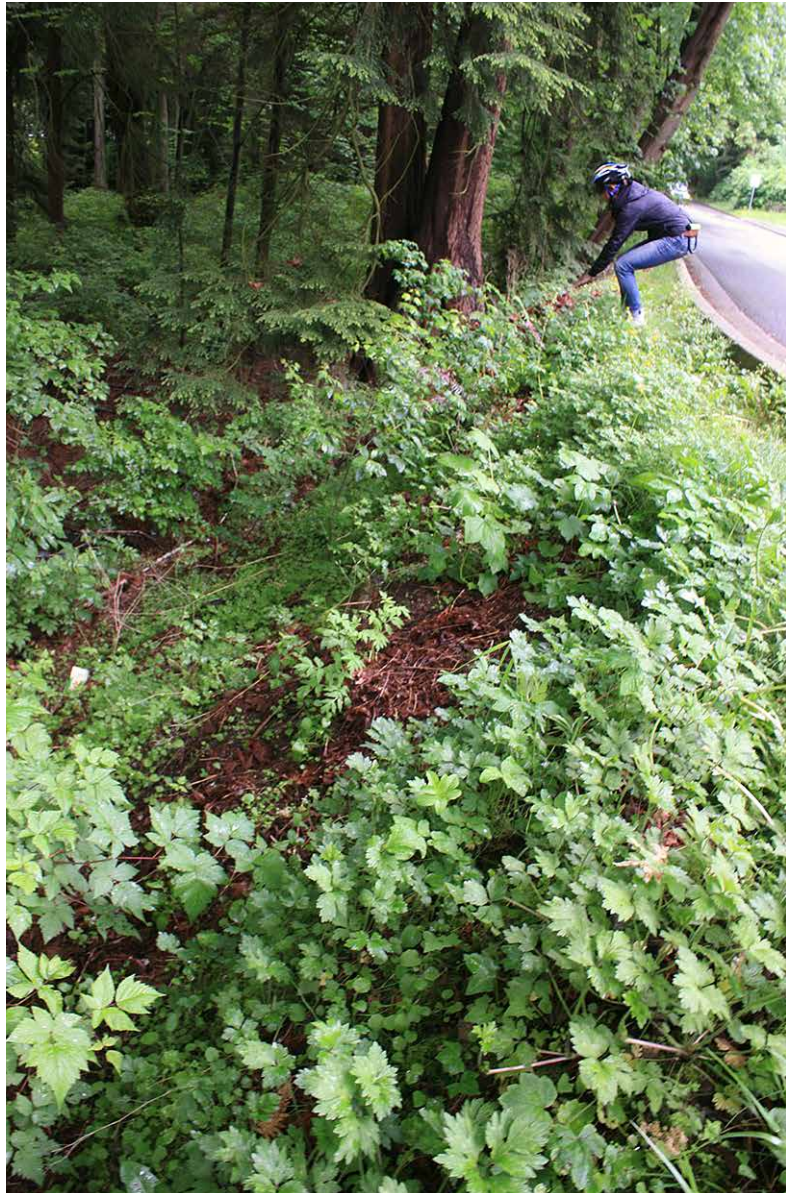


Fig. 1.12: Ivy Smith,
SPES stewardship
programs coordinator,
surveys the site in
Autumn 2013.