



NEXT EPOCH SEED LIBRARY

CONVERSATIONS

with Wave Hill staff
Winter 2017



ISSUE 1

NESL with Jonathan Billig,
School Programs Educator



NESL 2019, share & share alike
<http://nextepochseedlibrary.com>

<http://nextepochseedlibrary.com/wavehill>

Winter 2017 Seed Viability Testing at Wave Hill

(from seeds collected and stored in 2015, 2016, 2017)

Species, Common Name, Location Collected, germinated? (Y/N)

Phytolacca Americana, pokeweed, Bushwick (Y)
Phytolacca Americana, pokeweed, Wave Hill (Y)
Ipomoea purpurea, morning glory, Bushwick (Y)
Oenothera biennis, evening primrose, Snake Hill, NJ (Y)
CheNpodium album, lambsquarters, Providence, RI (Y)
Symphotrichum, (heath?) aster, Snake Hill, NJ (Y)
Solanum lycopersicum, (meadowlands) tomato, Snake Hill, NJ (Y)
Lepidium virginicum, Virginia pepperweed, Crown Heights, Brooklyn, NY (Y)
Rumex crispus, curly dock, Snake Hill, NJ (Y)
Rumex crispus, curly dock, Hunters Point South, Queens, NY (Y)
Rumex crispus, curly dock, Bushwick, Brooklyn, NY (N)
Datura stramonium, jimson weed, Snake Hill, NJ (Y)
Solidago sempervirens, seaside goldenrod, Snake Hill, NJ (Y)
Setaria viridis, foxtail, William Paterson University, Wayne, NJ (Y)
Verbascum thapsis, Common mullein, Snake Hill, NJ (Y)
Ageratina altissima, white snakeroot, Snake Hill, NJ (N)
Plantago lanceolata, buckhorn plantain, Bushwick, Brooklyn, NY (N)
Mentha arvensis, wild mint, Snake Hill, NJ (Y)
Taraxacum officinale, dandelion, Snake Hill, NJ (Y)
Rhus typhina, staghorn sumac, Snake Hill, NJ (N)
Celastrus orbiculatus, Asiatic bittersweet, Snake Hill, NJ (N)
Hypericum perforatum, St John's Wort, Flushing Meadows, Queens, NY (Y)
Artemisia vulgaris, common mugwort, Snake Hill, NJ (N)
Alliaria petiolata, garlic mustard, Flushing Meadows, Queens, NY (N)
Daucus carota, Queen Anne's Lace, Snake Hill, NJ (Y)
Allium vineale, Wild garlic, Ingalls Ave, Troy, NY (N)
Saponaria officinalis, Soapwort, Ingalls Ave, Troy, NY (N)
Asclepias incarnata, Swamp milkweed, Bergen Arches, NJ (N)
Rhus glabra, Smooth sumac, Ingalls Ave, Troy, NY (N)
Oenothera biennis, evening primrose, Ingalls Ave, Troy, NY (Y)
Solidago canadensis, Canada goldenrod, South Troy, NY (N)
Asclepias syriaca, Common milkweed, South Troy, NY, (N)
Lepidium campestre, Field pepperweed, South Troy, NY (Y)



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THE NEXT EPOCH SEED LIBRARY (NESL)...

is an artist-run seed saving project focused on novel, spontaneous, and adaptable plants (aka weeds).

Rather than focusing exclusively on agricultural species, we gather, store, and share the seeds of plants that thrive in landscapes heavily impacted by human activity, from sidewalk cracks to superfund sites. These weedy species harbor ecological adaptability, nutritional attributes, and healing properties that have been overlooked, forgotten, and even demonized under pressure from monoculture cultivation. Reinvigorating reciprocal networks of plants and people in disturbed landscapes can contribute to a solid foundation for building ecologically just communities. Alongside our seed collection, we spearhead site-specific installations, walks and workshops, open-access curriculum materials, and deep time storage experiments. Based in Brooklyn and Jersey City, USA, we maintain a semi-permanent headquarters in Troy, NY at the Sanctuary for Independent Media's NATURELab. We've been featured at galleries and museums nationally and internationally.

LET'S TALK! SEEDS, PLANTS, HUMANS,

& OTHER PEOPLE!

NESL was in residence at Wave Hill in Winter 2017. We used the time and space provided by the residency to set up our temporary Winter headquarters in the Glyndor Gallery Sunroom. While in residence we did seed viability testing on our collection, and organized a series of gatherings that included a reading group, garlic pesto making, and seed sorting and packaging. We also took advantage of the wealth of knowledge held in the staff at Wave Hill to do some casual, conversational interviews about plants, people, education, and conservation with folks who stopped by our winter headquarters. Thanks so much to those who participated! Portions of the interviews we carried out (edited for clarity) are reproduced in the 3 issues of this zine, along with our winter reading list and a garlic mustard pesto recipe. You can read all three interviews on our website, at www.nextepochseedlibrary.com/wavehill



GARLIC MUSTARD

allaria petiolata



FIRST YEAR ROSETTE
(SWEET + TENDER LEAVES)



SECOND YEAR STALKS + FLOWERS
(LEAVES ARE MORE TOUGH + BITTER, BUT STILL EDIBLE)

Garlic Mustard Pesto Recipe* (*Alliaria petiolata*)

(or Reciprocal Restoration Sauce, as suggested by Jonathan)

We made this recipe for studio visitors several times during our residency at Wave Hill. The garlic mustard was collected in January from Wave Hill grounds, particularly from the Abrons Woodland Trail.

Ingredients:

- 1 cup loosely packed, freshly collected/de-stemmed young garlic mustard leaves, rinsed/dried**
- 2 tbsp roasted pepitas (pumpkin seeds)
- 2 tbsp fresh grated parmesan (for a vegan version sub a little nutritional yeast)
- 2-3 tbsp extra virgin olive oil
- pinch of sea salt, to taste

Instructions:

- Collect your greens! Young garlic mustard greens come up in late winter and early spring, and can be used through summer. Greens are said to be milder & tastier before the plant flowers.
- Rinse leaves, remove any remaining stems, pat dry.
- Combine all ingredients in a large mortar and pestle, and grind to desired consistency, adding more olive oil as necessary.
- Season with additional sea salt to taste.
- Scoop onto crackers or bread, or toss into pasta, and enjoy!

*Thanks to artist and Coyote Walk founder Dillon de Give for introducing us to his version of Garlic Mustard Pesto, which we riff on here.

**It's probably safest to forage far from roadways and maintained landscapes, where the other foliage nearby looks healthy, to avoid exposure to herbicides and toxins often present in urban soil. Take care that you're certain about what you're foraging! Garlic mustard is pretty distinctive (smells like garlic!), but do your due diligence and forage with an expert your first time out!

Jonathan Billig, School Programs Educator

(in conversation with Ellie Irons and Anne Percoco)

Jonathan Billig explores diverse fields as mutually reinforcing playgrounds for who we are and could become. He has created and coordinated innovative nature and science-based programming as part of Wave Hill's education department, worked with synagogues and experiential Jewish education programs, and spearheaded the design of the volunteer program on New Hampshire's Mount Monadnock, the most climbed mountain in the United States. He is committed to the ongoing process of seeing and transforming injustice and suffering, while simultaneously practicing love of people and the more-than-human world. Jonathan currently resides in the Muhheakantuk (Hudson River) Valley, where he works with Beacon Hebrew Alliance and Wild Earth, and volunteers as a co-chair of the Equity, Access, and Inclusion committee for the NYS Outdoor Education Association. Jonathan spoke with Anne and Ellie at NESL's Winter Headquarters in February 2017.

E - There are a class of seeds that are good at grabbing onto fur.

J - Hitchhikers, that's what they're called.

E - One of the first questions we ask is if there is a particular plant at Wave Hill that you're more enthusiastic about, for any reason.

J - I think the main one is the big white pine [*Pinus strobus*] outside of Wave Hill House, just past the Cape French terrace on open lawn, and it's a wonderful place to sit under. In the winter, because of the spread of the white pine's branches, and the way the sun comes in from the west, over the Hudson, there's a dry patch of needles, even when there's snow. That's risky because now people might take my spot! But no, we should share it.

E - One of the things we've been thinking about while we've been here is the role of gardens in conservation, and how Wave Hill is different from a botanical garden and how it has this mix of different desires for gardens. I think there's a question within that. When you're working with kids, do you talk about how there are some plants that live outside, some plants that live in glass houses, and then the plants we're interested in, which are the plants that just come up on their own. Do you talk with kids about that?

J - You're talking about niche and how it relates to things like cultivation in glass houses and also it seems you're talking about invasives and novel ecosystems. In my teaching I sometimes talk about plant adaptation, I know I talked about it a lot more when I worked at the New York Botanical Garden. When we're doing a lesson that incorporates the greenhouse, we would address that more. I know an area of the education department

that focuses on this prominently is the Forest Project, because they deal with a lot of restoration and removal of what they call invasive species- what a lot of people call invasive species. I like to problematize that term a little more, because it's mildly offensive to some of our plant friends. (laughter)

E - We're certainly there with you on that. Do you want to open that up a little bit more?

J - I can, but I need to separate my Wave Hill educator self from my larger nature professional self.

E - Well that's interesting too, what hat you wear here versus how you think when you're not here.

J - It's really interesting—When you are in a forest, like Riverdale Park, and you see porcelain berry overwhelming trees, you understand why pejorative names are applied to these plants. However, when you're walking around with an ecologist, and the only thing they see are threats all around, you wonder why there are these pejorative names applied to these plants, so it's complicated. Here [in the education department at Wave Hill] I try to sprinkle in a larger approach to who is a *person* in the natural world.

A - Cool, how do you do that?

J - Our lesson on coyotes has people examine the best mammal teeth they have access to, which are in their mouths. Just the way that I explain plants: once you really do treat plants as people, which is kind of a weird and radical thing to say, and I'm not used to saying it, but I'm being reminded to say it by [Robin Wall Kimmerer's] *Braiding Sweetgrass* --

A - Yeah! I'm reading that right now, and Ellie has read it!

J - I'm being reminded to say that. If you, as an educator, say, "We're not going to rip leaves off plants because that's part of a plant's body. Do you like having parts of your body removed? No, so just don't do it." And it's a really simple turn as an educator, that is very effective with kids, because they get it.

A - (to E) and you called those plants "folks" before [points to plants on terrace]

E - (Laughs) I think I'm starting to absorb that lesson. And I love that idea, and how you can introduce it at the age that you're working with.

NESL Winter Reader

A Selection of Writing on Weeds, Humans, and Possibilities for Living (Better) Together

For discussion on January 29, 2017.

- Gary Snyder, *The Practice of the Wild: Essays by Gary Snyder*, 1990. Pages 8-15.
- Eileen Crist, "On the Poverty of Our Nomenclature", *Environmental Humanities*, vol. 3, 2013.
- Peter del Tredici, "Flora of the Future", *Places Journal*, April 2014.
- Frieda Knobloch, "The Bad Seed", *Cabinet Magazine*, Issue 10, Spring 2003.
- Michel de Certeau, *The Practice of Everyday Life*, University of California Press, 1984. Chapter 3, Pages 34-39.

Other texts mentioned in the interviews:

- Robin Wall Kimmerer, *Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge and the Teachings of Plants* (Milkweed Editions, 2015).



E - Totally, link it to something much larger.

J - And then you could talk about how it's restorative to our bodies too. It's helpful, probably, to have some greenery.

E - And we got to this when we were talking with Matthew and Shane. At some point in the conversation, he was like "Oh, that Boston Ivy, it's a terrible plant!" But then they come back around later and they're like, "Well, actually, we think it might be holding the soil in place in the winter."

A - There's this Freida Knobloch quote: "If you're going to use a plant (for something) you're missing the point. It's like saying a fire-breathing dragon can make a good welding torch"...(but) knowing that you can use it for something is definitely a way in. And it's a way in for me too. So you know how it tastes. Which is just like seeing, touching...

E - Experiential.

A - Yeah.

J - This gets at what you were saying, about what does it mean to bring people to this beautiful place, and how does it relate to how they appreciate less cultivated spaces? I think one of the I struggle with as an educator is, I started working in really beautiful places. I got my first inspiring education experiences at the NY Botanical Garden, and lately I've been moving in a direction of kind of deconstructing these ideas of nature because it is part and parcel with our cultural imperialism...(But utility) like you were saying, it's an entry point. Seeing something as a good welding torch is a lot different than saying something is terrible and you have to kill it. At least it's a good welding torch, maybe that's a step. But it's such a tricky line. Because if something's a good welding torch, you might not kill it, but you might put a collar on it and enslave it, instead of having a respectful approach to it.

A - Yeah, you're not excluding wonder.

J - That's an important word for me. Before I took a full time job, I was developing a possible educational adventure called "Working With Wonder." It came out of my masters work and my approach to the NYBG and it's about taking an awed approach to nature and science education.

A - An odd approach?

J - A-W-E-D. O-D-D as well!

J - Because they really get it.

E - It's before they've lost the capacity to imbue (perceived) "things" with animism and before they've been told that's silly, but if they can find a way to access it...

J - Yeah. And also, that's actually something that I do incorporate into my teaching practice. So if there's a wind in the leaves, we will stop and listen to it, and these sensory embodied experiences to help people feel a connection. Adults, too. That's why I got into this field. Seeing kids' experiences of wonder and learning in the natural world, and also what it did to the adults who thought they were the chaperones but who really ended up seeing differently.

E - That's one of the things that can be really satisfying, in doing workshops for kids, is how you get secret access to their parents. Even if they're not in the room, the kids are going to go home and say something to them — I'm really interested in pedagogy and how that can infuse out into the world, but also really interested in the stuff you've been talking about in terms of novel ecosystems and where those fit into your understanding of plantlife. When we were talking to Matthew [Assistant Director of Horticulture] he talked about these plants that were thought of as weeds but actually are really great, potentially, for having in a garden. But he was talking about them as something you design with. And if you're designing with a goldenrod, say the more aggressive kind of weedy goldenrod, that grows along the edges of the Gowanus Canal, it grows really big if you put it in good soil. It's just too big! You can't design with it, because you can't keep it looking proportional in a way that's pleasing to people. It needs this tough landscape.

J - That makes a lot of sense. It doesn't behave because it's used to a rougher environment. We have that problem with school groups coming on the grounds sometimes. Because they're not as quiet as some of the elderly people who like to come to this garden and read a book or contemplate. The NY Botanical Garden struggles with that too. I don't really want to get into categories but I will say that that sounds very similar.

E - We certainly are in situations where we find the language around undesirable plants as connected to the language around people who are undesirable. We're interested in investigating that language use.

J - It is a part of the legacy of this place, the conservation movement. When I teach groups, I've stopped saying as much because it really doesn't mean that much to a 4th grader. And for it to really mean something to an adult, you need a day or a week with them, but I'd like to say, "Look, you're not

just in a 28 acre garden, you're in an area of New York that was shaped by this place and its relationship to Perkins and Teddy Roosevelt." You're looking at a legacy of mutual amplification, but also privilege and exclusion. Like the Riverdale neighborhood was landscaped by Frederic Law Olmstead to look like a nice suburb, and it's a big transition to the Marble Hill neighborhood and the rest of the Bronx. And the complicated and important legacy of these places is to take that original vision of their founders and apply it to the cogent moral barriers of this time.

E - You went in a really good direction with the students and the disruptive goldenrod. I think the other direction I was thinking with that question is about what it's like to be in a beautiful place-- what kind of desires are we cultivating in people for what landscape, and nature, and "perfection" should look like, and can we be better able to tolerate that kind of unruly goldenrod? How do we learn to do that?

A - Frederic Law Olmstead thought that you should have some unruliness in there.

E - Yeah, that kind of suggestion of decay.

J - Well this, relative to the NY Botanical Garden, is unruly.

E - In some ways, yeah.

J - In many ways...It's not a botanical garden...here, they (plants) are much more organized by their aesthetic relationships. I'm not as sure about ecological relationships. But it's a different way to organize things. But your question is really interesting, about what kind of appreciation are we training?

E - It's so valuable for people to be in a place where they can have a kind of distracted attention. That's supposed to be really good for the brain.

J - Like a flow state.

E - Nature's supposed to induce that in folks. You go for a walk and come back into the classroom, and you do better on a test and do better if you've been walking in nature versus walking on a highway. That seems really obvious, but we're just trying to think about a vacant lot, which Anne and I have come to love, to spend time in these kinds of places and feeling a kinship with nature there. I think it is completely, fully, a thriving, ecological system, but I am trying to figure out how it's separate from people.

J - But it's not. It's the least separate from people. I see you have Gary Snyder

up there...

E - Yes, that's our reading list (laughs)

J - I haven't read those other people. I've only read Gary Snyder. Gary Snyder had a huge impact on me. He's good. One of his poems is on the 1 line subway, have you noticed that? Novel ecosystems are people. They're just the reflection of our urban spaces. All plants are related to people, especially in the era of climate change. Because there's no place untouched. But particularly: I look at people's revulsion for pigeons and rats as a veiled self revulsion.

A - That's funny.

J - It's the same reason we hate on our relatives. You say "this is annoying."

A - (to E) One of your readings said, the monoculture of phragmites [common reed] is a symptom of what we're doing. It's not the cause of biodiversity going away. It's a symptom of our culture. You can't just get rid of the plant, you have to change the culture.

J - Yes, that's right. And this is where Robin Wall Kimmerer is really useful. Where she repeatedly gives examples of people playing a constructive part.

E - I love that, the biocultural remediation piece. The idea that you'd put that reciprocity back in place. Because right now, the plants, the weeds, the vacant lots are an expression of people. They're what sprouts up in our backyard.

J - They were, and they can be, but I think that's where you folks are important. People come in and say, "no, this is important, too," and you can enter a dialogue with places like this that are more conservative about what is beautiful and what is nature.

E - We've been making garlic mustard [*Alliaria petiolata*] pesto since we've been here. It's tasty, but it easily gets put under the rubric of "eat the invaders." These plants are entirely bad, therefore we'll destroy them by eating them, and our ultimate goal is to get rid of them. Which, we run into that a lot, because we're interacting with a plant that people think is bad, and we advocate using it in some way.

J - Have you folks experimented with taking it beyond the garlic mustard? As part of an ecosystem regulation project? You could call it garlic mustard pesto, but you could also call it "restoration sauce."