**Native Tree Nursery Meeting, August 23, 2024**

**Agenda & Notes**

12 – 12:10 Welcome & Introductions

 Attendees

 In-person:

Ben Rogers (Intervale Center Nursery)

Ben Fishbein (Intervale Center Nursery)

Brooke Fleischmann (Intervale Center Nursery)

Christine Cramer (Intervale Center Nursery)

Sam Smith (Intervale Center)

Kiana French (Ausable Freshwater Center Nursery)

David Berg (Verterra Nursery)

Nick (Verterra Nursery)

Lisa Carper (VT Willow Nursery)

Aric Vanselous (VT Willow Nursery)

Sam Mayne (Essex C NRCD)

Clara Fernadez Odell (Essex C NRCD)

Courtney Grimes-Sutton (Mace Chasm Farm)

Spencer Hardy (The Farm Upstream)

Tico Wolff (Broadbrook Mountain Trees)

Lauren Jenness (Lake Champlain Basin Program)

Shawn White (Watershed Forestry Partnership Coordinator)

Online:

Daniel Keeney (Center for an Agricultural Economy)

Andrea Luchini (Hildene)

Althea Dacey (Redstart)

Gina Simmons (Intervale Center)

David Lee (New York State Nursery)

Gwen Kozalski (VT Urban & Community Foresty)

Recap from March meeting – issues, barriers, and opportunities

* + - * Issues & Barriers (*Brooke Fleischman, Intervale Conservation Nursery*)
			* Opportunities (*Shawn White, Watershed Forestry Coordinator*)

In 2023 about 100K trees were planted in VT. (Exact #s hard to figure ‘cause no one is keeping track of this).

About 60-70% of that plant material is coming from out-of-state.

Out of 23K trees used in Conservation Reserve Enhancement Projects in VT (USDA-NRCS) only 14% was locally sourced.

Lots of funding for riparian forest, upland forest, wetland restoration work, the 100K number could increase if we can bump up planting capacity.

Even without this increase in funding, big opportunity to replace plant material from out-of-state with locally grown trees.

Planting groups can be encouraged to buy local. Education, marketing about all the reasons why locally sourced plant material should be used. Ecological restoration projects should be locally sourced ecotypes (define) rather than Midwestern, Southern, etc.

Reasons to grow and use locally grown plant material with local genotypes:

* + - Adapted to local environmental conditions & pollinators. (more likely to survive AND reproduce).
			* Pollinators are also adapted to them in terms of flowering time
			* Native insects specialists requiring native plants may be better adapted to the particular local mix of plant defense chemicals. Support the local food chain.
		- Bringing in ecotypes from other states/environments risks altering the local gene pool and ecological relationships (reed canary example)
		- Out-of-state stock genetic diversity is unknown and may be low
		- Less risk of transmission of pests and diseases
		- Some evidence that locally sourced trees have higher survivorship (may be due to reduced shipping, handling)
		- Support the local economy, keep $ in VT.

Open Discussion on How a Tree Hub Might Work (*Ben Rogers, Intervale Conservation Nursery),* Feasibility report on tree nurseries (*Daniel Keeney, Center for Agricultural Economy), and* Business assistance available to nurseries *(both Sam and Daniel)*

 Ben opened the discussion of how the nurseries might work together and how ICN could provide support.

 Nick (Verterra) said they were interested in tapping into ICN cooler space, greenhouse, etc., at least until they are more self-sufficient. Will have some spring stems in 2025, but won’t be able to handle much traffic in and out of their nursery.

Sam Smith (IC) mentioned that one issue with VT native tree nursery production is we lack economy of scale. One way to overcome that is with shared equipment. IC is a non-profit, so can fundraise for equipment.

Sam also mentioned that while it is important to determine an average cost of production per stem, there will be no process for benchmarking since so many of the nurseries are recent start-ups. Have to use WAGs (wild-ass guesses).

Some species (pines and other conifers) might be too expensive to grow profitably.

Need to get a list of preferred species from planting groups. Alison Adams did a survey of planting groups in 2021. The only species there was consensus on in the limited number of responses she got were speckled alder, shrub willow, and Viburnum (probably nannyberry).

Some groups have species list committees that meet every year to update. Need to ask planters if they’d be willing to pay extra for the harder-to-grow species like nannyberry. There needs to be more back and forth communication btw nurseries and planting groups. It might also make sense to send NRCS/USFWS/DU a list of the species that are more expensive to grow so they know not to spec the pricier ones.

Another barrier nurseries face is the difficulty of keeping a current inventory – you may think you have a certain number of 2 to 3-foot of species X, but they grow, and by the end of the season you don’t have those anymore.

Kiana asked what is meant by a “tree hub”. The group thought it could mean a lot of different things. Courtney (Mace Chasm) grows for Fedco, which works as a sort of Tree Hub. They might be worth talking to.

Sam S (I think): Tree Hub could have an evolving purpose. It could start by simply having a directory of equipment, or we could organize which species are grown by whom in order to match supply & demand. It could be a place where a forecast of planting projects is distributed. Some nurseries may outgrow the hub over time.

Would we need a subscription to an inventory system?

Seed collection and sharing: Brooke said the ICN did a cost analysis of the seed collecting they are doing and found they are not very expensive. The number of seeds needed for nursery production is such a small fraction of what they’re collecting they could just give them out. They’ve been keeping track of source locations, so nurseries would need to continue keeping track of provenance.

 Sam S said the tree hub could been thought of as a “market access mechanism”

 Lisa (Vermont Willow N) ICN could ask other nurseries to grow specific species

Kiana (Ausable Freshwater Center) One issue with shared equipment is that everyone might need it at the same time (a tree lifter, at the beginning of April, for example).

This might be countered by differences in climate and phenology in different areas of NY & VT.

Daniel: Could also hire a custom operator, who holds ownership of equipment and goes on the road w/ the machinery. This could be one of the nursery businesses. Grant funds might be available for purchase of said equipment in this model. Working Lands, perhaps. There’s precedent for funding for greenhouses too. We should make a list of what’s needed (survey nurseries).

Sam Smith – standardization of product / production would be necessary.

Plants would have to be planted out at same distance, with same spacing btw rows for shared equip to work.

Althea – not many models of equipment are available that are good for native tree growing.

Sam Mayne – Seed starts might be a good way to start the Hub. Brooke: The ICN is ready to do this – could start tomorrow. Tray of 98 would be $200-300 for 6” tubelings. Dave: 1 year seedlings from Michigan cost $1/stem (for comparison). **If interested, send plug orders to Ben R.**

Sam and Daniel have worked with a lot of the nurseries present already. They can provide assistance developing business skills and business plans. They are available at any phase and work with business until it’s viable and meeting its goals. If interested, contact them for an enrollment questionnaire.

Daniel is excited about using native tree production as a way for pre-existing farms to diversify, but often doesn’t recommend it.

Spencer: Feels its important to get desired species lists from planters and the Intervale – what species are harder for them to grow? Ben F: elderberries, conifers, nannyberry, serviceberry, aronia

Nick – growers could also provide planting plans, recommendations for species.

Sam Mayne – NRCDs already do this.

Shawn: Redstart has been able to do project development/first landowner contact, partner with a non-profit org to get funding for a project, then provide planting crew and plant material. There may also be an opportunity for nurseries to do planting plans for landowners with small parcels, since most funding available has a minimum planting size of 0.5-1 acre, and most non-profit groups don’t like to mobilize for a small planting.

Misc announcements

* + Lake Champlain Basin Program Nursery Support Grant 2024 (Lauren Jenness, LCBP)

Lauren confirmed that LCBP will be offering funding for nursery support again next year. RFPs are being drafted. Grant writing period will probably be December.

* + Highbush Cranberry, native and non-native varieties (Brooke)

Brooke learned recently about a European highbush cranberry – a species that is present in the NE and hybridizes with the native HBC. It’s hard to tell the difference – the glands on the petiole near the leaf blade are the distinguishing trait (Shawn’s note: European have concave spot at the tips of the glands, native doesn’t.) European berries also reportedly taste even worse than the native and are bitter.

We discussed why it might be important to care about this – if the plants are virtually indistinguishable, why would it matter which ones are used in restoration?

Shawn pointed out that if the berries taste different to us, they also might taste different to birds – making the European variety function differently within an ecosystem. Since you can never predict how a new species or ecotype might function (or not function), it’s probably better not to risk introduction of something new if your goal is to restore ecosystems with good habitat.

Brooke suggested we organize a plant ID workshop where folks could learn how to distinguish HBCs, non- versus native willows, speckled versus European alder, etc.

Next Steps

Shawn asked if we should have regular meetings to stay in touch and keep the momentum going. The group thought this was a good idea and agreed to meet again in early December. Shawn will organize.

Shawn will also work on setting up a Native Nursery Listserv for everyday communication.

Ben R will put together a survey – what nurseries are growing, what needs they have, etc. He’ll also broadcast Intervale’s current inventory (Shawn’s note: Fall and expectations for Spring?)

Shawn will work on creating a survey of planting groups – what species they like, how many stems they expect to plant this fall and next spring.