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Forest Farming Double Header in Vermont

A team of forest farming researchers, advocates, and growers developed and co-led two workshops focused on forest botanicals this past October. The double header was kicked off at Smokey House Center in Danby, Vermont and the second workshop was hosted at University of Vermont's (UVM) Jericho Research Forest in Jericho, Vermont. From site identification to assessment, the workshops covered what people need to know about ginseng growing in Vermont, and included immersive wild-simulated ginseng plantings at two forested sites.

A 15-minute walk into the woods brought participants to a northeast-facing slope. Sugar maple and basswood trees dotted the area — key indicator species for nutrient rich soils. Participants learned about wild American ginseng's history as a product of high economic and cultural value. They also learned about site specific conditions including tree and herbaceous indicator species. After assessing the site, participants watched two experienced ginseng growers, Kai Thomas and Liang Cheng, demonstrate soil preparation and planting techniques. As they did so, Kai and Liang explained their methods and discussed lessons learned from a decade of experience growing ginseng in Quebec, Canada.

Participants were eager to get involved and help plant the quarter-acre plot. With either a bow rake or a leaf rake in hand, every participant was ready to prepare the area for planting.

Molly Williard, Vermont Department of Forests Parks & Recreation, Wood Energy and Forest Products Specialist, walks with participants into the UVM Jericho Research Forest. Photo Credit: Suzy Hodgson

Forest farming participants gather in the woods at UVM Jericho Research Forest at the start of the workshop. Photo by Suzy Hodgson

Almost eight pounds of ginseng seed was planted at each site, the seeds being planted at an estimate of five seeds per square foot. Recommendations for planting density are typically four to ten seeds per square foot but given ginseng's low germination rate, growers tend to err on the higher side. Germination is variable depending on site quality, soil moisture, rodent seed predation, and other environmental factors. To improve germination and establishment, it is recommended to plant as late in the season as possible to decrease the window of time for animal seed predation before the ground freezes.

At Smokey House, the planting area was divided into seven rows across the slope, each 15 feet wide, with pin flags to mark out the area. Starting at the lower level, participants followed the following steps, working on one row at a time:

- Rake back leaf litter
- Rake again to scuff up the first quarter inch of soil
- Scatter seed evenly, about a quart of seed per row
- Spread lime (or gypsum) evenly across the exposed soil after seeding
- Press seed into the soil by slowly walking along the row
- Rake back leaf litter, move onto the next row, and start the process again.

With many hands and lots of energy, the planting was a breeze.

Workshop leaders gave advice on amending soils. For soils with calcium levels under 500 parts per million (ppm), it was recommended to add gypsum (or dolomitic lime, if gypsum is not available) to raise the calcium level in the planting area.

The next day, the workshop team assembled at UVM's Jericho Research Forest to do it again — same preparation, same methods, but a new site with new participants. UVM's Jericho Research Forest site was steeper and rockier. Bedrock was even exposed in some places. However, there were more herbaceous indicator species like maidenhair fern in the understory, which is typical of ideal ginseng habitat in the Northeast. The previous night had delivered welcome rain after months of severe drought, which brought coolness and moisture to the site and was a boost for planting.

The learning at the workshops was active, immersive, and conversational. At the end of both days, participants took home a packet of ginseng seeds for test plantings of their own at potential future forest farming plots in their woods.

At Jericho, UVM will be monitoring the site regularly and will look out for other opportunities to showcase this work. Part of the mission of UVM Research Forests is to be a demonstration site for forest stewardship. As Jess Wikle, Manager, UVM Research Forests and Suzy Hodgson, UVM Extension Center for Sustainable Agriculture said, "Working

together allowed both of us to expand our activities beyond traditional forest management and conventional agriculture to bring a broader audience into the forest." Excited about their new collaboration across the Rubenstein School of Environment and Natural Resources and the College of Agriculture and Life Sciences, Suzy and Jess are already planning new workshops in spring 2026 when they can invite producers, foresters, farmers and other interested stakeholders back to the site to see to what extent the ginseng has germinated.

Suzy Hodgson and Jess Wilke prepare a demonstration site in UVM's Jericho Research Forest for ginseng planting. Photo by Mac Gamache.

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