

UConn Forest Strategic Vision and Plan

Dr. Robert T. Fahey, UConn Forest Director

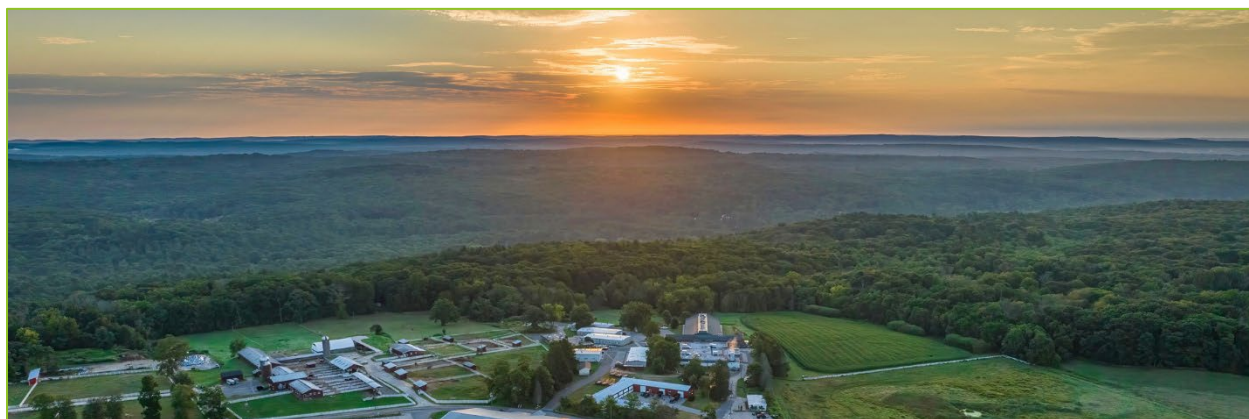
Executive Committee:

T. Worthley, J. Vokoun

12/2025

Mission Statement for the UConn Forest

The UConn Forest is a living laboratory and extensive natural classroom supporting academic, research, sustainability, and outreach programs in the Department of Natural Resources and the Environment (NRE) and for the entire University of Connecticut (UConn) community. Our core values of maintaining, managing and perpetuating the UConn Forest align with and support the teaching, research and public engagement mission of the University and the Strategic Vision of the College of Agriculture Health and Natural Resources (CAHNR) to move the state, country, and world toward a sustainable future through scientific discovery, innovation, education, and community engagement.



About the UConn Forest

The physical footprint of the UConn Forest is comprised of several forested parcels or “tracts” covering ~2100 total acres and located primarily in the Town of Mansfield, in close proximity to the Storrs campus, with additional parcels also located in the nearby towns of Willington and Coventry (Table 1, Fig. 1). A full accounting and description of the major parcels is included in the Appendix. UConn Forest properties support a wide variety of forest types and other ecosystems, including riparian, wetland, and successional open-field habitats. The Forest has an extensive trail system that is utilized and maintained by UConn faculty, staff, students, and citizens of the local area for passive recreation. The Fenton River runs through the Moss, Fenton, and Spring Hill Tracts and Cedar Swamp Brook through the North Eagleville Tract, thus UConn Forest has an important role in regulating water quality and quantity for the

local area. The sequence of properties along the Fenton River also represents an important protected areas corridor and is transected by the “Blue-Blazed” Nipmuck Trail maintained by the Connecticut Forest and Park Association. The juxtaposition of UConn Forest with other protected open space and trail systems provides a unique opportunity to engage with local partners and organizations, establish partnerships for research and outreach purposes and maintain other mutually beneficial working relationships.

Land Acknowledgement

We acknowledge that the land on which the UConn Forest is located is the territory of the Mohegan, Mashantucket Pequot, Eastern Pequot, Schaghticoke, Golden Hill Paugussett, Nipmuc, and Lenape Peoples, who have stewarded this land throughout the generations. We thank them for their strength and resilience in protecting this land and aspire to uphold our responsibilities according to their example.

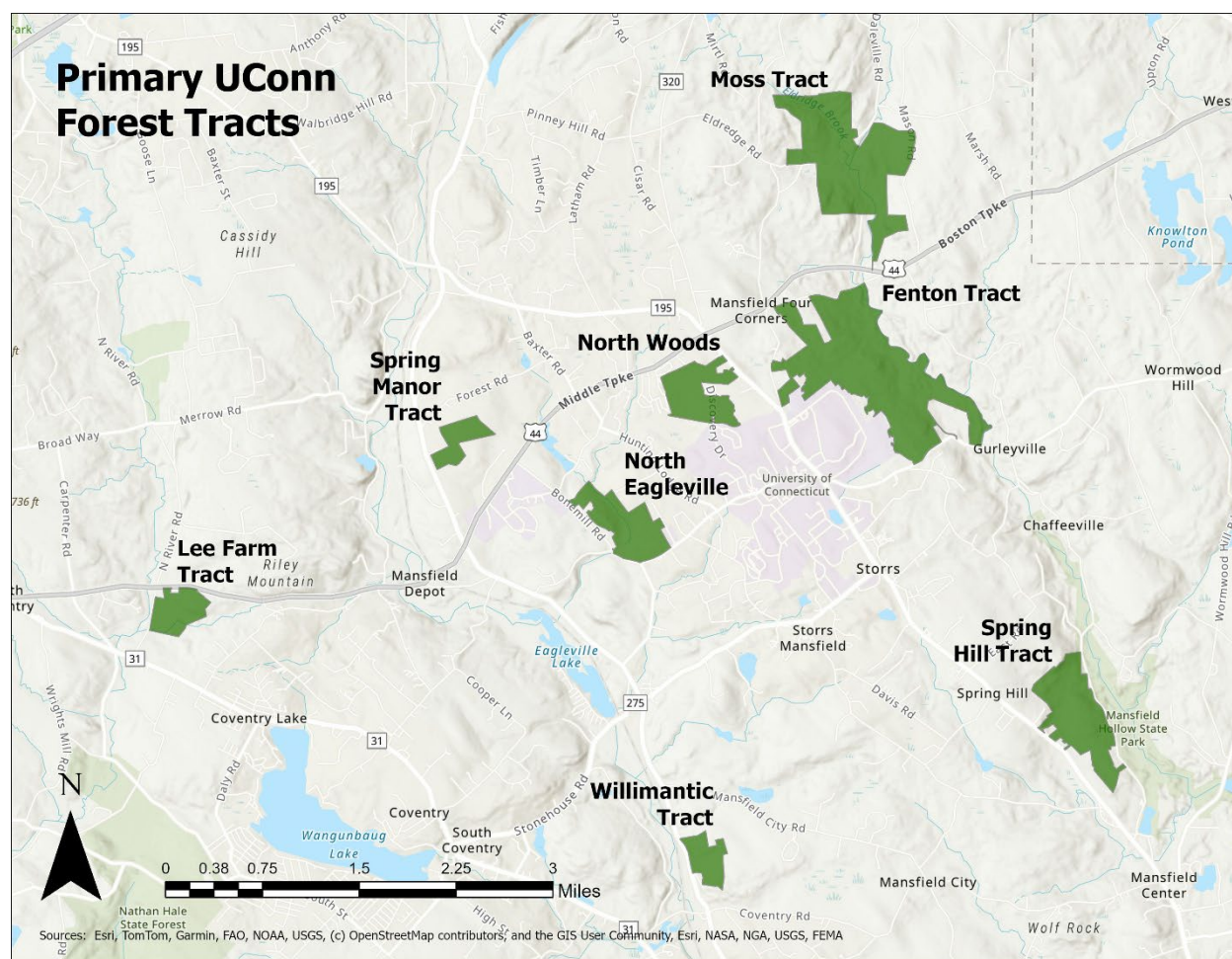


Figure 1. Map of the location of the primary tracts of the UConn Forest

Table 1. Information on the primary properties or “Tracts” making up the UConn Forest. Detailed descriptions of these properties and a listing of additional minor properties can be found in the Appendix.

Tract	Location	Area (ac)	Forest Types	Primary Uses
Fenton	Mansfield	570	Oak-hickory, maple-beech-birch, white pine, red maple swamp, hemlock	Teaching, Research, Recreation, Management
Lee Farm	Coventry	63	Oak-hickory, pitch pine	Research, Teaching
Moss/North Property	Willington	416	Oak-hickory, hemlock, maple-beech, white pine	Teaching, Research, Recreation
North Eagleville	Mansfield	139	Oak-hickory, maple-beech white pine, red maple swamp	Research, Recreation
North Woods/Industrial	Mansfield	110	Oak hickory, white pine	Student Engagement, Research
Spring Hill	Mansfield	208	Oak-hickory, maple-beech, white pine	Management, Recreation, Teaching, Research
Spring Manor	Mansfield	20	White pine	Teaching
Willimantic	Mansfield	69	Oak-hickory	Teaching

Governance of the UConn Forest

The UConn Forest is directed and managed by an Executive Committee, broader Steering Committee, and staff and volunteers under the supervision of the members of these committees. The Executive Committee includes the Forest Director (a faculty member in NRE), NRE Department Head, and an Extension Forestry faculty member from UConn. The Steering Committee is intended to engage all interested parties from across the university, but largely made up of faculty and staff (current makeup of committees in Table 2). Student organizations and workers are also involved in the management and maintenance of the UConn Forest, including the UConn Forest Crew, Forest and Wildlife Club, and Outing Club. The UConn Forest is utilized by researchers from across the university and from other universities and research organizations in CT and beyond (Table 4). Requests to conduct manipulative or long-term research are reviewed and approved by the Executive Committee with feedback from the Steering Committee in select cases. Classes from a wide variety of units across the university use the UConn Forest as a learning environment (Table 3) and instructors are encouraged to engage with the UConn Forest leadership to coordinate uses.

Table 2. Structure and makeup of UConn Forest Committee.

Subcommittee	Lead	Departments/Units Represented
Executive	Fahey	NRE, Extension
Management	Worthley	NRE, Extension
Research	Knighton	NRE, PSLA, EEB, IOE
Teaching	T. Rittenhouse	NRE, PSLA, EEB, ANSC

Recreation	Morzillo	NRE, ANSC, ARE, PSLA
Outreach	Cisneros	NRE, Extension

Overall Future Vision and Plan

The UConn Forest will continue to support the teaching, research, and extension activities of NRE and the University of Connecticut and we will work to expand its impact and visibility both internally within the University, to the broader Forestry and Natural Resources research communities, and across the state and local populace. Future research and course-work will focus on forest response and adaptation to the many aspects of global change including drivers such as climate change, invasive pests and plants, and urban-exurban development and fragmentation. Recreation will focus on promoting safety, accessibility, and inclusion and enhancing the health and well-being of the UConn and local communities. Management will focus on promoting the sustainability of the Forest and its component organisms and ecosystems, providing habitat for a variety of wildlife, hosting a wide biodiversity of organisms, enhancing water quality and regulating quantity, providing locally, regionally, and globally relevant ecosystem services, and promoting local timber and non-timber forest products. Outreach and extension activities will translate and promote research outcomes, provide training and workforce development opportunities, and connect the Forest to diverse audiences. Future work of the UConn Forest will be made in coordination with the CAHNR Strategic Vision and college leadership. The mission and future goals of the UConn Forest align directly with all of the CAHNR Strategic Initiatives (see below).



Alignment with the CAHNR Strategic Vision

The mission and activities of the UConn Forest align directly with the Strategic Vision of the College of Agriculture, Health and Natural Resources, which is focused on moving the state, country, and world toward a sustainable future through scientific discovery, innovation, education, and community engagement. The Forest is an exemplar and an integral part of the goals of promoting safe, sustainable, and secure plant and animal production systems, healthier individuals and communities, greater protection and conservation of our environment and natural resources, balanced growth of the economy, and resilient local and global communities. The mission and activities of the UConn Forest can be related directly to each of the CAHNR Strategic Initiatives:

Advancing Adaptation and Resilience in a Changing Climate through research and teaching focused on the role of forests and associated ecosystems as a natural climate solution. The research, teaching and outreach activities of the UConn Forest provide a living laboratory to study climate change impacts on forested ecosystems such as flooding, droughts, more intense storm events, heat waves, invasive and

nuisance species, and tree-power infrastructure interactions. Research and extension programs such as the ASCC Network and Stormwise directly address climate adaptation and the outcomes of these programs are utilized in training for current and future land management professionals.

Fostering Sustainable Landscapes at the Urban-Rural Interface as a living laboratory for research and teaching situated in an exurban landscape connecting the relatively urbanized Storrs campus and eastern suburbs of the Hartford Metropolitan region to the rural Last Green Valley of northeastern Connecticut. The UConn Forest exemplifies the exurban forests that are such an essential component of the Connecticut landscape (and beyond) and strategies for promoting the sustainability of these landscapes (including water resources, interconnected natural/infrastructure systems, and small-scale agroecosystems) is at the core of much of the research and outreach conducted on the Forest. Programs at the UConn Forest help to promote an informed, environmentally aware citizenry to protect the ecosystems on which our society depends.

Ensuring a Vibrant and Sustainable Agricultural Industry and Food Supply through modeling small-scale forestry programs that can be implemented by farmers and other landowners to support their operations. The UConn Forest is a source of locally produced wood products and forest-derived agricultural products (such as maple syrup) and provides an essential training ground and workforce development platform for current and future forest managers focused on locally grown wood and non-timber forest products. The Forest is also adjacent to the UConn Farms and provides an example and research lab for understanding the role of connected forest-farm agroecosystems in promoting ecosystem services provisioning in the exurban landscape.

Enhancing Health and Well-Being Locally, Nationally, and Globally through providing recreational and mindfulness opportunities to the campus and local communities. The recreational activities and nature access provided by the UConn Forest play an essential role in the health and well-being of the UConn and local communities. Research, teaching, and outreach activities focused on recreation and One Health extensively utilize the UConn Forest.

Promoting Diversity, Equity, Inclusion, and Justice through increasing access and visibility of the forest for a wide variety of users. The UConn Forest provides nature access and recreational activities, research opportunities, and training and workforce development to a wide array of students and community members from a diversity of backgrounds.



Component Visions and Specific Plans

Teaching

The UConn Forest endeavors to support the use of the forest by a broad array of students and provide a safe and inclusive active learning environment for students with a variety of backgrounds and interests from a wide variety of units across the university (Table 3). We aim to create and maintain an “outdoor classroom” teaching environment where University students and Cooperative Extension clientele can develop skills and gain practical experience in renewable natural resource conservation and be immersed in nature to promote understanding and appreciation for the environment.

Goals:

- *Maintain and expand teaching facilities:* The Forest hosts a small amphitheater in the Fenton Tract that is used by a variety of courses as an outdoor learning space and we are in the process of building a new covered pavilion (on Horsebarn Hill, also in the Fenton Tract) that will provide a more accessible and scenic space for teaching and meetings in the Forest. Development and maintenance of these structures has been entirely accomplished through the efforts of NRE faculty and students.
- *Expand use of the Forest by courses beyond NRE and CAHNR and outside UConn:* Especially including Environmental Literacy courses and First Year Experience (FYE) courses.
- *Develop experiential learning programs focused on the Forest:* Could include training programs such as NSF Research Experience for Undergraduates or USDA National Needs Fellowships, also K-12, non-traditional students, and Extension clientele. Could also include certification programs and continuing education credits for professionals.
- *Coordinate teaching and learning with research and management activities:* Including expanded focus on mentored and student-led research experiences and continued focus on undergraduate internships and graduate research training.

Table 3. UConn courses utilizing the Forest currently or in the recent past.

College/School	Department	# of Courses	Partial course list
College of Agriculture, Health, and Natural Resources	Natural Resources and the Environment	20+	NRE 2010, 2415, 2455, 2550, 3105, 3125, 3185W, 3210, 3275, 3345W, 3385W, 3425, 3500, 4000W, 4150, 4205, 4335, 4370, 4475, 4544, 5335, 5390, 5461
	Plant Science and Landscape Architecture	5+	LAND 2120, LAND 2410, LAND 3130, SPSS 2120/2125, SPSS 3410,
	Animal Science	1-3	ANSC 3453, 3553
College of Liberal Arts and Sciences	Ecology and Evolutionary Biology	5+	EEB 3240, EEB 3266, EEB 4200, EEB 4230W, EEB 4252, EEB 4261, EEB 4272
	Geography, Sustainability, Community, and Urban Studies	1-3	GEOG 3420
	Earth Sciences	3+	ERTH 1050, ERTH 3020, ERTH 4210, ERTH 4240

College of Engineering	Civil and Environmental Engineering	3+	ENVE 3202, ENVE 3530, ENVE 4320
Cross-college	Environmental Sciences	5+	ENVS 2000, NRE courses
	Environmental Studies	3+	NRE courses

Research

The mission of the research program of the UConn Forest is to provide space and support for short- to long-term research projects and experiments focused on a broad range of topics including forest ecology and management, entomology, wildlife ecology and management, recreation and human dimensions of natural resources, geology and geomorphology, stream and wetland ecology, ecotoxicology, and hydrology (Table 4). We encourage a variety of student and PI led projects and aim to provide opportunities for both passive, observational research as well as more intensive research involving active collection and manipulative experiments.

Goals

- *Develop integrated and interdisciplinary research programs focused on the Forest as an exemplar of exurban forest ecosystems and socio-environmental systems:* Support and coordinate multi- or inter-disciplinary research projects and grant proposals.
- *Conduct high-level research on the effects of climate change and other components of global change (e.g., invasive species, pollution) on forests and associated organisms and ecosystems.*
- *Conduct applied research on silvicultural and other management techniques focused on promoting resilience to climate change and related stressors:* Including maintaining and promoting research conducted with the Adaptive Silviculture for Climate Change Network.
- *Develop monitoring programs to characterize ecosystem services and functions associated with the Forest, include C sequestration and storage:* Including developing a comprehensive Continuous Forest Inventory (CFI) program and plot network across the primary properties of the UConn Forest.
- *Broaden research participation from both within the university and from universities and research organizations outside of UConn.*
- *Increase visibility of research while maintaining integrity of research sites:* Including developing and maintaining signage describing research activities and conducting research-focused tours.
- *Document and publicize research being conducted within the Forest:* Including developing a searchable research bibliography for projects conducted in the Forest, potentially also annual research symposium.
- *Archive data and make publicly available when appropriate:* Focus on developing a public data repository and encouraging researchers to contribute.
- *Provide and support multi-level training through research experiences for undergraduate, graduate, and post-doctoral trainees:* Develop training-focused grant proposals to support existing and new research training programs.



Table 4. Current research projects utilizing the UConn Forest properties.

Project	Organization	PIs	Funder	Subject area
Adaptive Silviculture for Climate Change	UConn, URI, USDA Forest Service, CT DEEP	T. Worthley, R. Fahey, C. Riely	USDA	Forestry/Silviculture, Climate Adaptation
Continuous Forest Inventory Network	UConn NRE	R. Fahey, T. Worthley	Foundation	Forest Ecology, Forest Management
Canopy Structural Complexity Manipulation	UConn NRE	R. Fahey	USDA	Forest Ecology
Stormwise Roadside Forest Management	UConn NRE/Engineering	T. Worthley, R. Fahey	EEC	Forestry/Arboriculture
Tree Species Loss	UConn NRE	J. Knighton, R. Fahey	NSF	Hydrology, Forest Ecology
Beaver Biogeochemistry	UConn NRE, Earth Sciences	A. Helton, B. Lawrence, L. Wang	USDA	Wetland & Stream Ecology
Fire Effects on Soil	UConn PSLA	M. Maltz		Soil, Microbial Ecology
CT Trail Census	UConn NRE, Extension	A. Morzillo, E. Wilson	CT DEEP	Human Dimensions of Natural Resources
Superinvaders	UConn GSCU, Clemson U.	J. Rojas-Sandoval, J. Fridley	NSF	Plant Ecology
Fragmented Ecological Networks	UConn EEB, Wesleyan U.	R. Bagchi	NSF	Ecology

Management

The UConn Forest is an actively and sustainably managed forest ecosystem that balances multiple management objectives. Fundamental management objectives for the UConn Forest include: 1) maintaining the health and natural biodiversity of the forest ecosystem, 2) demonstrating state-of-the-art forest management practices appropriate for private forest landowners, land trusts and municipal forests, 3) incorporating practices designed to improve wildlife habitats, protect rare or endangered species, protect and enhance water quality, enhance recreational opportunities, and produce high value wood products and demonstrate innovative alternative income opportunities, and 4) maintaining self-sufficiency and periodic income from harvests to support student projects and the UConn Forest Crew

Goals

- *Develop updated management plans for all primary tracts aligned with goals for each tract (Table 1):* Plans of conservation and management exist for the Moss, Spring Hill and Fenton Tracts of the UConn Forest, but need to be updated. Management plans for the Lee Farm, North Eagleville and Willimantic Tracts have been developed by Forest Management course students in the past, but likely need to be formalized.
- *Promote adaptation and resilience to climate change through research-informed management actions:* Includes work occurring under the auspices of the Adaptive Silviculture for Climate Change Network in the experimental management treatment site at Lee Farm, but also across the Forest as a whole as informed by that and other work
- *Promote and quantify the provisioning of essential ecosystem services from the Forest property:* Could include carbon sequestration, water quality and quantity, wildlife habitat – would be a primary goal of a Continuous Forest Inventory program.
- *Control the spread and impact of non-native invasive plant species:* Monitor spread and manage for removal at invasion “fronts” for Japanese barberry and other invasive species. Need for proactive monitoring for potential new invaders across properties through regular early-detection surveys.
- *Limit the impact of non-native pests and pathogens through salvage and pre-emptive actions* Emerald Ash Borer, Hemlock Woolly Adelgid, Beech Leaf Disease, and Beech Bark Disease are present in the forest and are having an impact on forest structure and composition. Recent spongy moth outbreaks have caused substantial oak mortality in some areas. Continued monitoring will be conducted to watch for potential introduction of Asian Longhorned Beetle, Oak Wilt, and other “on the horizon” pests and pathogens.
- *Promote the production of local wood products and non-timber forest products through management and demonstration activities:* Includes small-scale timber harvesting and production of value-added wood products using portable sawmill and woodshop, firewood production, and maple syrup production in collaboration with the UConn Forest and Wildlife Club.
- *Develop and promote training and experience for the next generation of forest professionals through internships, work experiences, and workshops:* Including training and financial support for the UConn Forest Crew, access for students and staff to the industry standard “Game of Logging” chainsaw and tree felling training courses, and internship and independent study courses focused on preparing students for the CT Foresters exam.



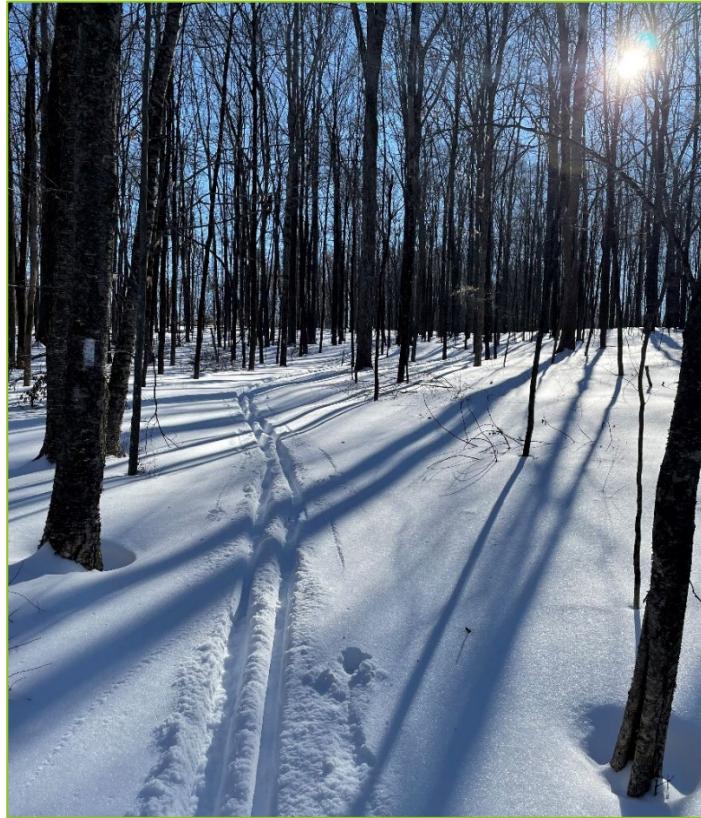
Recreation

The UConn Forest is an invaluable resource to the UConn and local area communities, providing space for active and passive recreation and forming an essential part of the local open-space network. There are a large number of trails that traverse the UConn Forest tracts, connecting to other public properties and supporting a variety of different uses including hiking, horse riding, trail running, cross-country skiing, and mountain biking (see Appendix for Trail Maps of primary properties). The forest also provides the local community access to natural habitats and is used extensively for birding and other natural history observations. In addition, the rivers, ponds, and streams that occur within or pass through the UConn Forest are used for a variety of recreational purposes including fishing, canoeing/rafting, and swimming.

Goals

- *Promote accessibility and inclusion for a wide variety of audiences and users:* Focus on trail and trailhead marking and maintenance and improved overall signage.
- *Match uses to appropriate locations to balance recreational needs with ecological integrity and property use restrictions:* Focus on directing usage by mountain biking and horse riding communities to appropriate locations and clarifying appropriate uses.
- *Limit inappropriate and prohibited uses while maintaining access for safety:* Coordinate with UCPD and UCFD to limit unauthorized motorized vehicle trespass, camping, campfires, and illegal hunting. Clarify property rules and prohibited uses on signage.
- *Increase use and visibility to university and local communities while managing potential negative impacts:* Formalize or discourage unauthorized trails as appropriate, develop “Friends” group/network to assist with maintenance and monitoring of forest conditions, clarify property boundaries where needed.

- *Promote wellness and mindfulness for the UConn and local communities in partnership with student organizations, UConn Health, and local government and NGOs: Coordinate increased connection to student and student-focused organizations, develop public-focused events through Last Green Valley or other NGOs.*
- *Support and incorporate artistic uses and installations where appropriate*



Outreach and Inreach

The UConn Forest is an essential component of CAHNR's Extension mission surrounding sustainable management of the forests of Connecticut. The Forest also is an important component of UConn as a place (connecting to the Main Campus and UConn Farms) and institution, providing opportunities for students, staff, and faculty and organizations that support these groups such as the UConn Outing Club, Forest and Wildlife Club, Woodsmen Team, Student Wellness, and ROTC.

Goals

- *Provide examples and training opportunities focused on sustainable production of forest products and marketing: Including workshops, short-courses, and internships.*
- *Illustrate sustainable and climate-adapted forestry techniques and best management practices and provide training opportunities for students and professionals to learn those techniques*
- *Develop and provide information of management options for small acreage parcels in exurban landscapes: Including combined arboriculture/silviculture strategies to promote resilience in coupled forest-infrastructure systems.*

- *Promote management and control strategies for non-native invasive plant species in CT forests: Partner with CT Invasive Plant Working Group and other organizations.*
- *Provide forest management and production training opportunities for student employees and volunteers through the UConn Forest crew, Forest and Wildlife Club, and other organizations*
- *Provide space and support for training activities for student, staff, and faculty organizations focused on outdoor activities and wellness*



Resources and Needs

Staffing

The UConn Forest has no dedicated staff positions and is entirely managed and directed by faculty from NRE and Extension in a capacity that is additional to their core teaching, research, and outreach appointments. Beyond this work, the majority of the “on the ground” work (forest management, recreation maintenance) in the forest is conducted by undergraduate student workers (paid through grants and occasional product sales coordinated by faculty) and volunteers.

A dedicated **UConn Forest Manager and Coordinator** position (at the MS or PhD level) would greatly expand the potential for the Forest to be a teaching, research, and recreation resource for the university. Such a position would allow for more effective coordination of research, teaching, and management activities and promote the development of funding streams to support the work of the forest. This would include both grant proposal development (including for training programs such as NSF REU or USDA NNF) as well as more effective production and marketing of UConn Forest branded value-added wood products and non-timber forest products (such as maple syrup), which have the potential to provide substantial and sustainable funding streams to support the mission of CAHNR and the Forest. This position could also be leveraged to promote the teaching and outreach mission of the college through formal or informal instruction. This position could also help to expand the teaching and inreach potential

of the Forest by offering an FYE course to connect incoming students from diverse backgrounds to the Forest and opportunities. In addition, a dedicated forest manager would have the ability to more effectively coordinate the myriad issues associated with recreational use and unapproved/prohibited uses of the forest (including safety issues in coordination with UConn Police and Fire). This could include development of a Friends group and coordination with staff from local government and NGOs with cross-boundary concerns and opportunities.

Peer and aspirant universities (e.g., Cornell, UVM) with research and teaching forests of similar scope and aims (although none as directly connected to the main campus and student population as at UConn) have dedicated manager positions at the PhD or MS level.

Facilities and Equipment

The UConn Forest has no specifically dedicated facilities, but does utilize laboratory and office space in Building 2 at the Horsebarn Hill Sciences complex for producing value-added wood products and storing equipment and supplies. A dedicated **UConn Forest Operations Building** with indoor classroom/conference space (as well as a lab and office workspace) in or adjacent to the Forest property would greatly enhance the potential for the forest to conduct its research, teaching, and outreach missions. There is great capacity for increasing the effectiveness of the teaching and outreach missions by having classroom space available in close proximity to the Forest where UConn classes, training programs, and workshops could be held.

UConn Forest activities are supported by vehicles from the NRE department including a small tractor dedicated to UConn Forest work. The Forest also utilizes a portable sawmill that is also extensively used by the UConn Extension Forestry program. Currently the Forest has minimal capability for moving and transporting wood and there is a need for more efficient, dedicated forest management equipment, such as a forwarding log trailer or similar wood management system.

Funding

Currently the budget for all activities conducted in the forest is related to sale of timber and value-added wood products or small grants developed and managed by UConn Extension Forestry and faculty from the NRE department.

There is great need to develop new funding streams to support the wide variety of programs associated with the UConn Forest and to assist with the upkeep of its trails, promotion of safe access for first responders, and sustainable management of its ecosystems. The Forest would benefit from increased attention to fundraising and more dedicated connection with the UConn Foundation.

Visibility and Collaboration

The UConn Forest is largely directed and administered by faculty from NRE and Extension but the UConn Forest Committee includes faculty, staff, and students from across the university (Table 2). CAHNR and UConn Communications staff have been highly invested in promoting the work of the Forest and programs that utilize it, collaboratively developing (with UConn Forest-associated faculty, staff, and students) multiple press releases and articles for outlets like UConn Today and WNPR. Further connections with other units within the university and beyond and promotion of the mission and impact of the UConn Forest would strengthen the Forest and help further secure its future sustainability.

Development of stronger community connections would be beneficial, including potentially a “Friends” group to help maintain and monitor the forest. Could include citizen science and related outreach activities as well as extra eyes to watch for unapproved uses and safety concerns.

Connections within the university should be expanded to a greater number of student organizations and student-focused organizations and there is a need for formalization of current connections with groups such as the UConn Outing Club and ROTC.



Appendix: Primary Teaching and Research Properties

Fenton Tract

The 580-acre Fenton Tract is the largest contiguous parcel of the UConn Forest. It borders Old Turnpike Road to the north, the Fenton River to the east, Gurleyville Road to the south and various sections of Moulton Road and the UConn campus to the west. It is adjacent to multiple land trust/municipal properties and easements. The forests are a mix of late-successional hemlock forests along the Fenton River, mid-successional oak-hickory forests on upland slopes, pine forests on glacial-contact landforms, and young, early-successional forests in areas of recent agricultural abandonment. The Tract includes areas of wetlands including red-maple swamp, open marsh and beaver meadow, and vernal pools. Past land use is readily apparent throughout the Tract including abandoned roadways, foundations, orchards, quarries, research facilities, and a ski hill. Current uses are for education, research, forest management focused on promoting forest health and sustainability, non-timber forest products (e.g., maple syrup production), and low-impact recreation. The Fenton Tract contains a wide variety of ecosystems and glacial geomorphological features (eskers, kame terraces, till slopes). The Fenton tract is drained by five main intermittent streams that flow northeast into the Fenton River, which in turn flows into the Natchaug River.

Like most of Connecticut, the entire tract was cleared for agricultural use at various times during the past 300 years. With the exception of a six-acre meadow bordering the Fenton River and a small portion of the Warren Farm along Old Turnpike Rd., the entire tract is now forested. Most of the forest is mixed hardwoods with occasional stands of white pine and hemlock. As one of the largest contiguous forests in the Storrs area the Fenton Tract has considerable local environmental importance. Along with the 400-acre Moss Tract in Willington to the north and Town of Mansfield conservation property (Torrey Preserve) to the south, it protects a sizable portion of the Fenton River watershed and forms the basis of an important local habitat corridor that includes more than four miles of riparian habitat along the Fenton River and Eldredge Brook.

The Fenton Tract has been utilized for decades by NRE and other departments for research, teaching and extension education. Numerous research and outreach initiatives use portions of Fenton Tract. Ongoing research includes projects in entomology, invasive species, phenology, forest ecology, climate science, tree biomechanics, wildlife habitat, small scale operations, and storm resilience. A large number of long-term research projects are located on this property including biomechanics monitoring associated with the Stormwise program and two of the replicates of the long-term Canopy Structural Complexity Manipulation Experiment.

Some examples of classes using the Fenton Tract are Dendrology, Forest Ecology, Exurban Silviculture, Forest Management, Wildlife Management, Wildlife Techniques, Summer Flora, Fisheries Management and others.

Recreational use is heavy, primarily by students, faculty and neighbors for hiking, fishing, horseback riding, and mountain biking. The Nipmuck Trail, part of the Connecticut Blue Trail hiking system runs some 10,000 feet along the Fenton River from Gurleyville Road to Old Turnpike Road and an extensive (~8 miles) network of UConn-maintained trails span the area.

The management history of the Fenton Tract spans several decades. In the late 1900s there were several red pine salvage operations on the Fenton Tract. Silvicultural treatments have been applied in several areas to demonstrate white pine regeneration and hardwood management techniques. Augustus's

meadow and an area bordering Old Turnpike Road have been managed for wildlife, particularly woodcock, grouse and turkey. White ash (*Fraxinus americana*) was an abundant species in some portions of the Fenton Tract, but that has been recently largely removed an invasive insect, the emerald ash borer. Recently, the pre-salvage of some ash timber, in advance of emerald ash borer infestation was conducted in selected locations under stand-by-stand operational plans. Stormwise (wind resistance) prescriptions have been implemented along the power-line right-of-way that bisects the Fenton Tract. Wildlife habitat and teaching sites have been maintained along the old ski trail. Sugar maple trees along Old Turnpike Rd. have been tapped for the production of maple syrup.

Most active management implemented on the Fenton Tract is accomplished by a trained crew of undergraduate students using small scale equipment and hand tools. Sales of fuelwood, logs and specialty lumber and other wood products helps to support management operations.

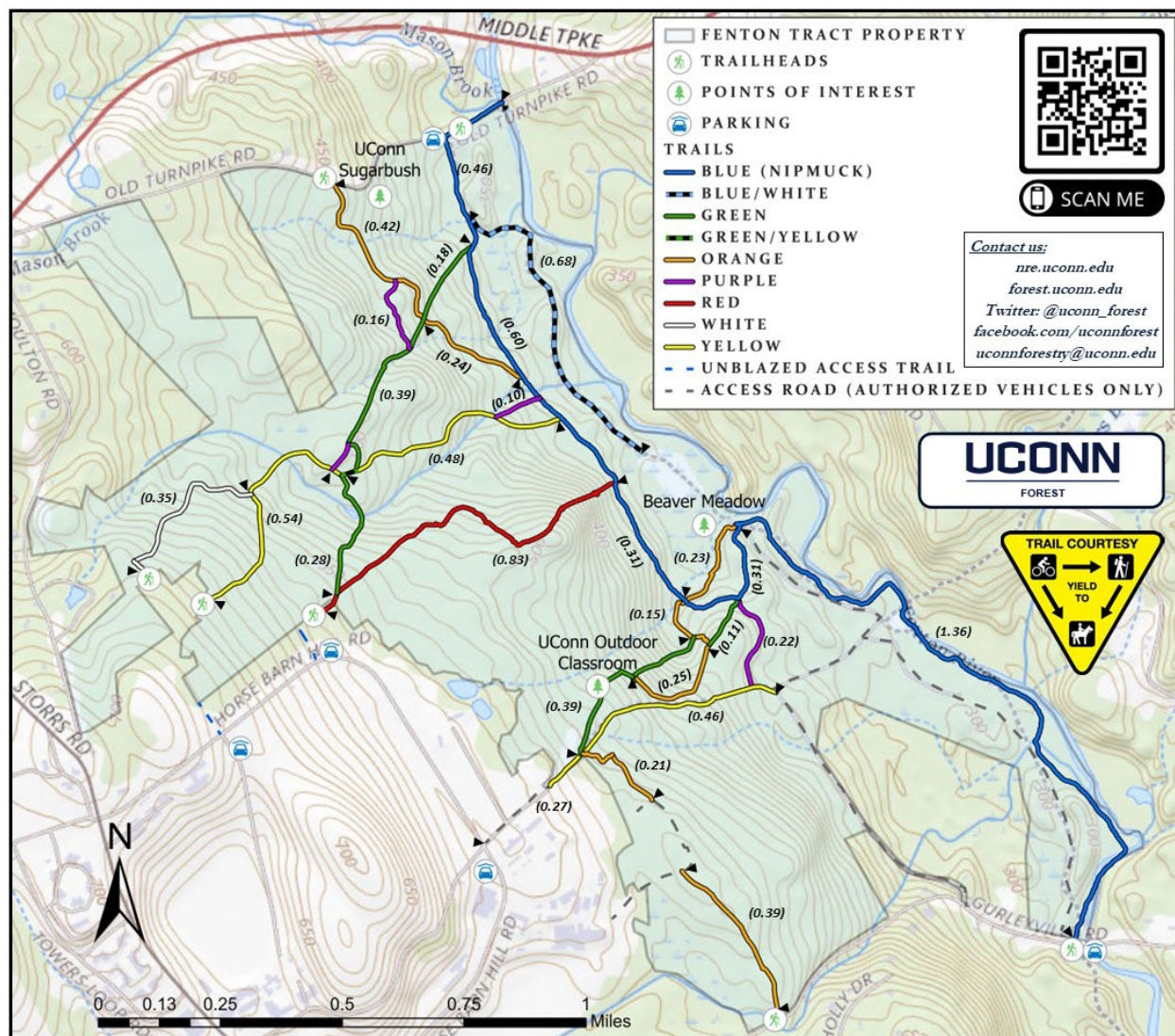


Figure A1. Fenton Tract property and trail map.

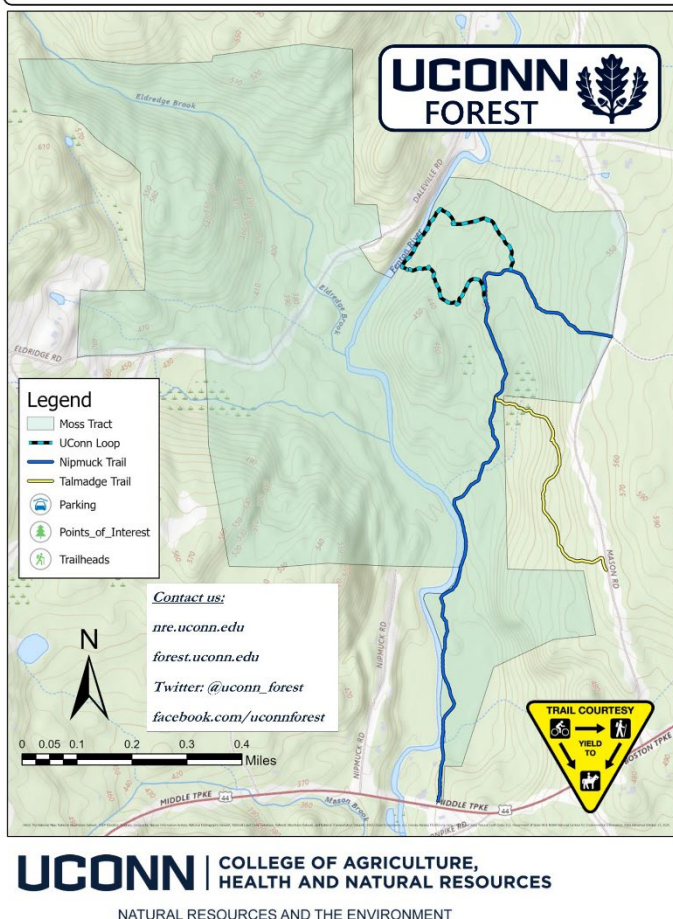
Moss Tract/North Property

The Moss Tract consists of approximately 400 acres of forested land located in Willington on both sides of Daleville Road and extending southward to Route 44. It includes nearly three-quarters of a mile of the Fenton River: another quarter mile of the river forms its western boundary. Also, on the property is 4,000 feet of Eldredge Brook, a natural hatchery for native brook trout. The Moss Tract has been managed by NRE since 1969 for teaching, research and extension education and is presently being used for field instruction in Dendrology, Forest Management, Forest Ecology, Exurban Silviculture, Fisheries Management and Wildlife Management Techniques. One of the replicates of the long-term Canopy Structural Complexity Manipulation Experiment is located on this property. The Moss Tract was recently designated as a long term research forest (UConn Experimental Forest) by the board of trustees.

Several forest management projects including a red pine salvage and white pine regeneration demonstration site were conducted in the 1980s on the Moss Tract. Also, permanent vegetative study plots have been established in several stands. The tract contains a sizable stand of old, relatively undisturbed hemlock forest along the Fenton River. The Moss Tract contains the only stand of planted European larch on UConn Forest, a small area north of Daleville Road. The property includes a long section of the Nipmuck blue-blazed hiking trail and connecting spur trails within UConn property and adjacent Town of Willington conservation properties. A network of illegal ATV trails and “dirt” bike trails exists, resulting in erosion and wildlife disturbance problems. In addition, because of the isolated nature of the site a considerable amount of illegal dumping and camping has occurred. Numerous attempts to establish control over motorized trespass have met with limited success.

The Moss Tract features extensive late-successional hemlock forests with occasional large white pines bordering on the Fenton River which runs through a ravine at the north end of the property. The other forests in the Moss Tract are largely mid-successional oak-hickory forest. Current uses of these properties are for education, research, forest management focused on promoting forest health and sustainability, and low-impact recreation.

Moss and North Tract Forest *Willington, CT*



Rules and Guidelines:

- No unauthorized motorized vehicles
- Dogs must be on leash at all times
- Park in designated areas only
- Respect private property
- No cutting of trees/shrubs, or collection of firewood
- No campfires—to report a campfire
- No dumping of ash, brush, or trash
- No hunting
- Stay on designated trails per activity type (Blue Nipmuck Trail- hiking only; Other trails - Multi-use: hiking, equestrian, cycling)
- Do not create new or modify existing trails
- Stay clear of active forest management. Roads and trails may be temporarily closed to accommodate forest management activities
- Respect and stay clear of ongoing research sites throughout the forest
- Leave no trace – pack out what you packed in
- Thank you for helping keep the forest safe and clean for all users!

Figure A2. Moss Tract property and trail map.

Spring Hill Tract

This 187-acre forest lies south of Storrs between Chaffeeville Road and Route 195. It includes nearly three-fourths of a mile frontage on Chaffeeville Road and abuts UConn farm land with frontage on route 195. The tract is dominated by timber sized, second growth deciduous trees in the 80 to 100-year age class. As one of the largest contiguous forests in the Storrs area this tract has considerable local environmental importance. It abuts the Army Corps of Engineers flood control land to the east, which in turn bounds the Mansfield Hollow State Park and Reservoir. The 100+ acre abutting tract to the north called the Fifty Foot Preserve is owned by the Town of Mansfield. The parcel contains intermittent streams, vernal pools and other wetland areas. Recent management activities include the implementation of a “[Stormwise](#)” management prescription along Chaffeeville Rd. and a silvicultural treatment on approximately 30 acres in the interior of the parcel, best described as a “group retention” irregular shelterwood treatment to foster oak and hickory regeneration and young forest habitat conditions.

The Spring Hill Tract has been utilized by the Dendrology, Forest Management, Forest Ecology, and Exurban Silviculture classes and has been used for several years by the Natural Resources Conservation

Academy as a forest-tour location. The Spring Hill Tract is used regularly for public hikes, walks and other outreach events, as well.

The property includes a section of the Nipmuck blue-blazed hiking trail and has connecting spur trails within UConn property and adjacent Town of Mansfield and Joshua's Trust conservation properties. There is an extensive unsanctioned mountain biking trail network that is heavily used by the local community.

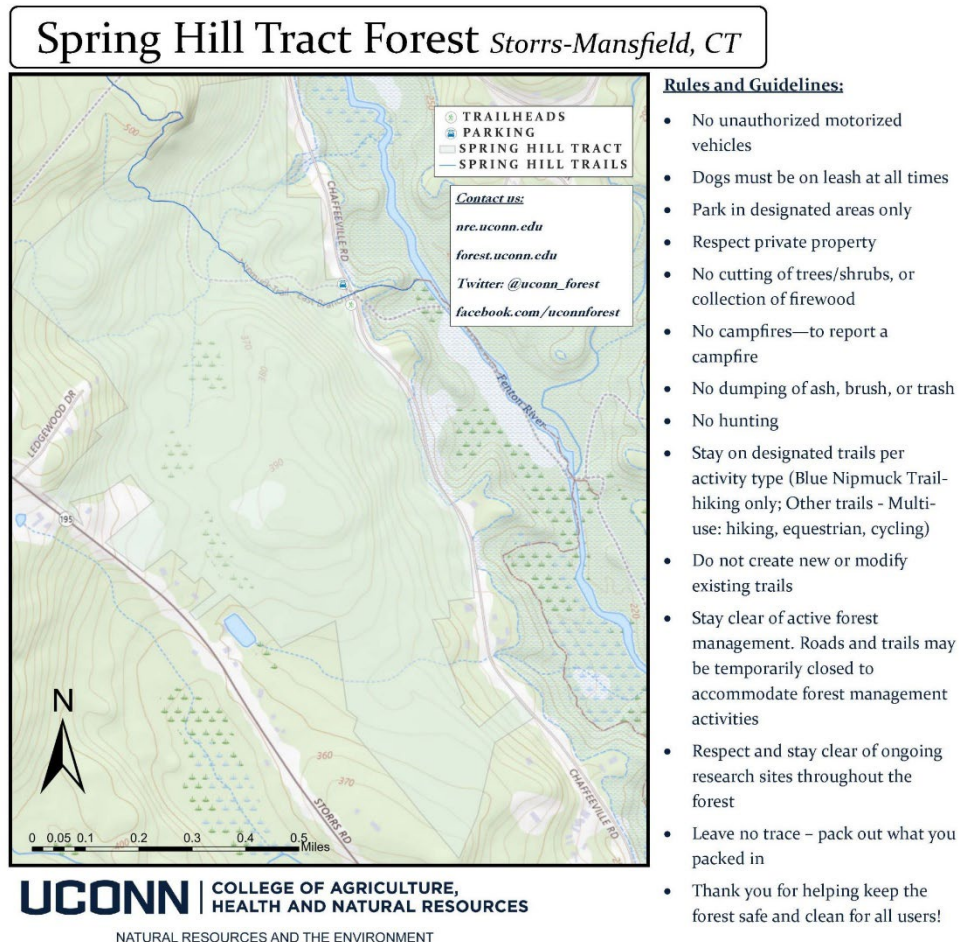


Figure A3. Spring Hill Tract property and trail map.

Lee Farm Tract

The 63-acre Lee Farm Tract is located in Coventry on Route 44 and is a core research site of the UConn Forest, including as a part of the international [Adaptive Silviculture for Climate Change](#) network and regionally focused [Southern New England Affiliate](#) site. The tract has also been utilized for air pollution and forest micrometeorology field research such as measuring mercury deposition from the atmosphere to the forest and to measure aerosol dispersion processes in the air over Connecticut forests.

There are no dedicated trails and recreational use is relatively low, there has been substantial illegal dumping in the past. The forested part of the property directly abuts the actively farmed section used to grow corn.

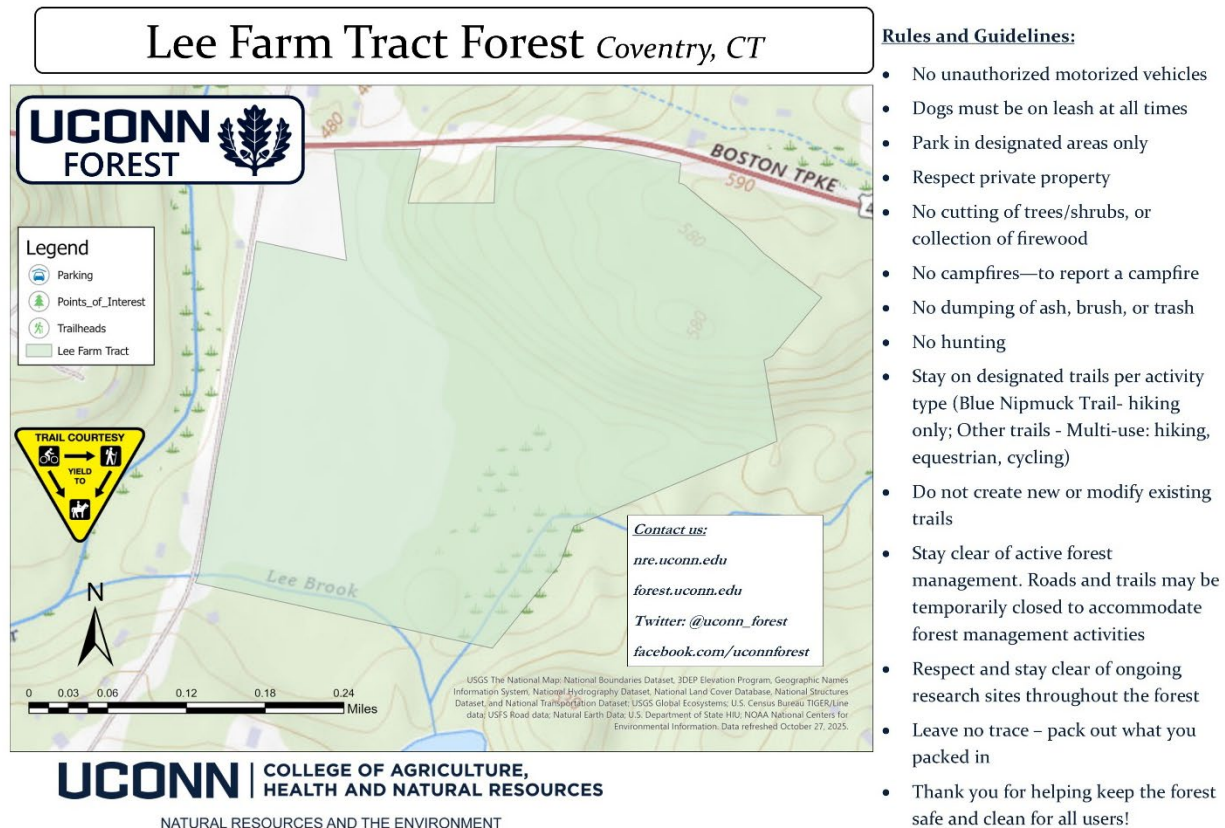


Figure A4. Lee Farm Tract property map.

North Eagleville Tract

This tract of approximately 130 acres is predominately occupied by mixed hardwoods and former red-pine plantations. The parcel surrounds Cedar Swamp Brook which runs through a steep-sided deep valley and forms a wetland complex that feeds a pond located along Bone Mill Rd. This tract is a popular recreation site because of its close proximity to Northwood Apartments and the fact that the Mansfield park, Shelter Falls, borders it on the north. A trail starting in Pink Ravine heads north and joins a trail in Shelter Falls Park.

This property is used in the Dendrology, Forest Management and Forest Ecology classes. One of the replicates of the long-term Canopy Structural Complexity Manipulation Experiment is located on this property.

Red pine plantations were salvaged on the North Eagleville Tract in the late 1900s and a first-stage shelterwood harvest of hardwoods in the southern portion of the property was conducted around the same time. In 2017 and 2018, approximately 50 sugar maple trees were tapped for syrup production along North Eagleville Rd. in the southernmost portion of the parcel, to test whether the site is suitable for sugarbush expansion.

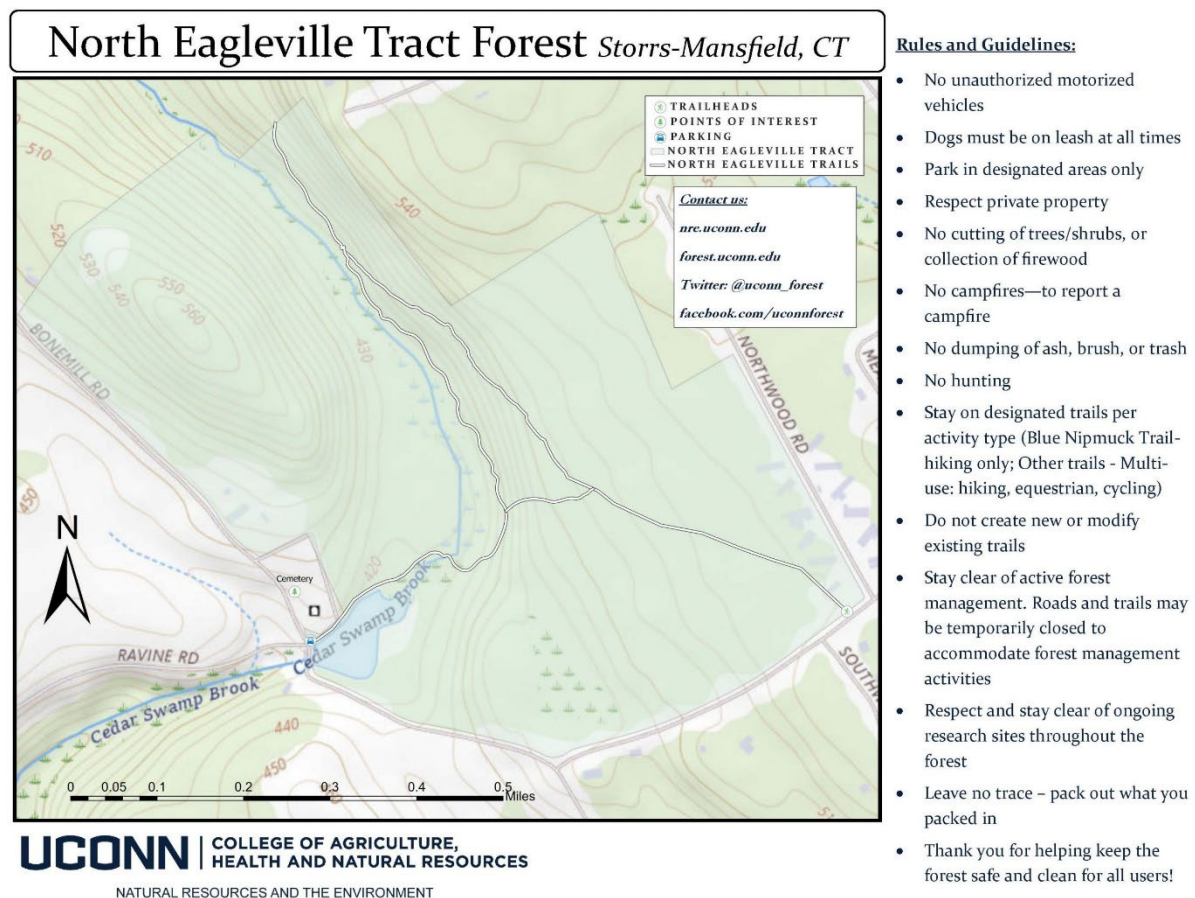


Figure A5. North Eagleville Tract property and trail map.

Industrial/North Woods at Hillside Environmental Education Park

The woodland area in the North Campus area underwent dramatic changes when the construction of Discovery Drive and the Tech Park was initiated. The parcel was essentially cut in two by Discovery Drive and the remaining woodland is protected under a conservation easement held by the State of Connecticut. Approximately 110 acres of protected woodland is west of Discovery Drive and north of the Hillside Environmental Educational Park (HEEP). A wooded wetland and stream complex originates in the northern portion of the parcel and flows southerly to the wetland areas near the HEEP. Forest cover is 90 to 110 year-old mixed hardwoods and oak. White ash is abundant on approximately 20 acres and will be a resource concern in the near future with respect to emerald ash borer.

Management in the area is limited to non-commercial forest health and biodiversity activities, teaching and research projects, recreation access and other actions in keeping with the mission of the University.

Approximately 25 acres of woodland that is also formerly part of the Industrial Tract lies to the east of Discovery Drive. Prior to construction of the road, two silvicultural treatments were implemented to demonstrate even-aged hardwood regeneration methods. South of the corn field approximately eight acres underwent a shelterwood harvest and north of the field a seed-tree treatment was implemented.

These areas are visited regularly by wildlife, ecology and forest management students as well as Extension and professional audiences.

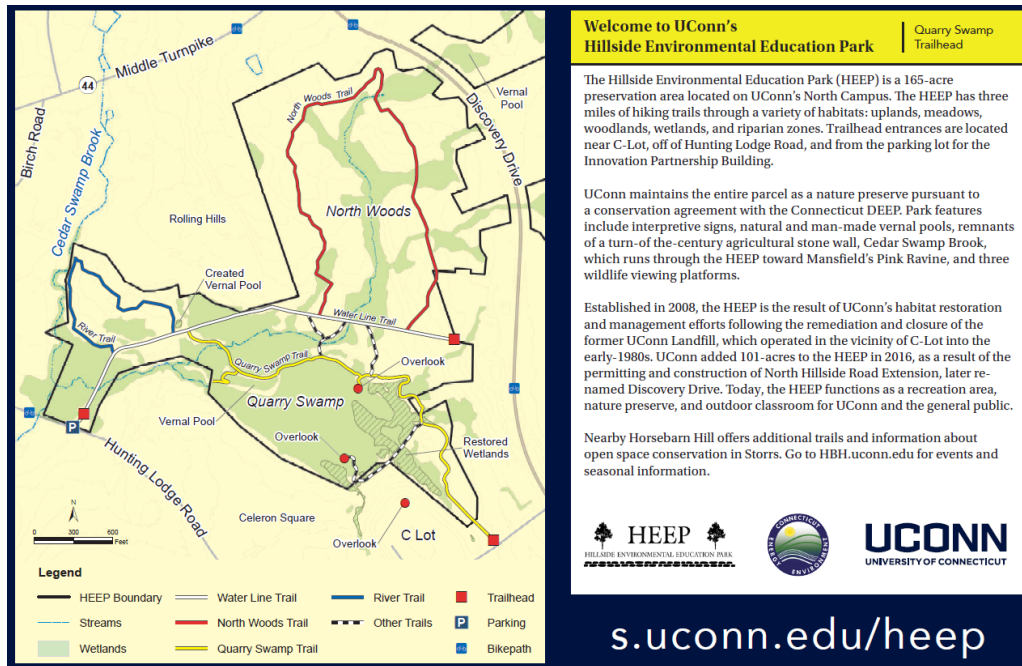


Figure A6. Hillside Environmental Education Park property and trail map.

Other properties:

Hanks Hill Tract

Several small parcels (4-11 acres) adjacent to the Agronomy Farm and surrounded by residential housing. Has been used for research into forest meteorology and phenology.

Separatist Tract

A collection of small parcels adjacent to campus and surrounding moderate density residential areas. Individual parcels are each less than 30 acres in area, but could be useful in studying the effects of exurban landscape context in highly fragmented forest parcels.

Spring Manor Tract

A collection of parcels adjacent to the Spring Manor UConn Student Farm, includes a 16-acre pine plantation that is used in Exurban Silviculture and Forest Management classes and two small floodplain forest areas along the Willimantic River.

Willimantic Tract

A 69-acre tract on a steep hillside adjacent to Route 32. Primarily oak and mixed hardwood forest, with a hemlock understory close to Route 32. Has been used in Forest Management classes.