Hopkins Memorial Forest

The Year in Review 2024-2025

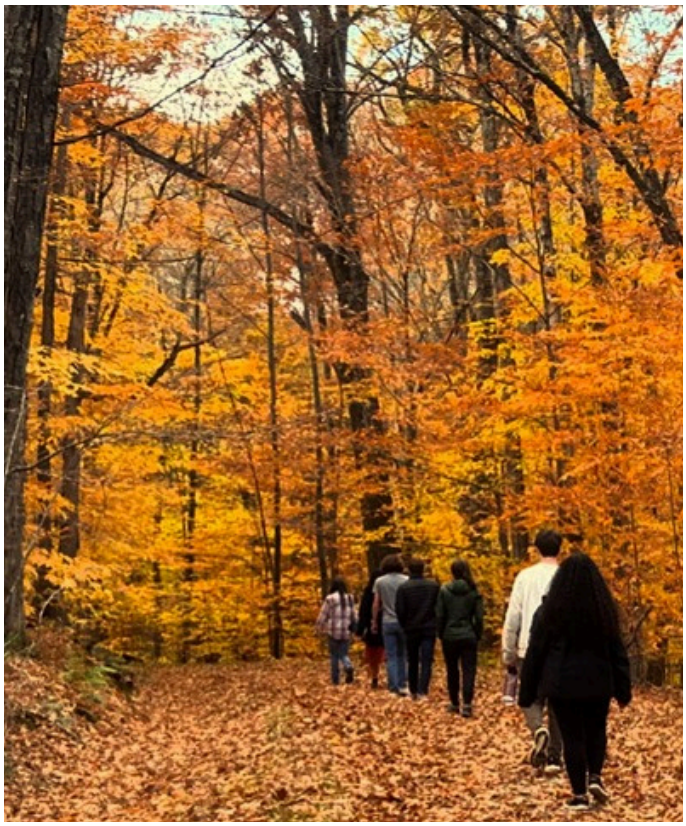


TABLE OF CONTENTS

Top: Participants enjoying the fall foliage during one of the many Forest Fridays events.
Bottom: HMF caretaker Liv Chambers '25 (right) overseeing the cross-cut saw competition during Fall Fest (Oct 2024).
Cover photo: Montserrat Hidalgo '28 (left) and Grace Carter '25 (right) teach an elementary stream geology session.

HOPKINS MEMORIAL FOREST

June 2023 - May 2024

This report summarizes the activities from the summer 2024, as well as the '24-'25 academic year.

LETTER FROM THE MANAGER

Some transitions are quick, like the burst of leaves in early May. Others, like the leadership transition at Hopkins Memorial Forest (HMF), take longer to settle into place. The past two years at HMF have focused on a thoughtful leadership transition. For me, returning to Williamstown last July to manage the forest that had been so impactful to me as an undergraduate, was an unexpected full circle moment; I graduated from Williams in 2006 and have fond memories of biology labs, trail runs, and completing my senior thesis in the forest. Nature is full of circles, cycles, and change. After a full year's cycle in the role of forest manager, I have a deeper appreciation for the forest's seasonal rhythms and the nuances of this role.

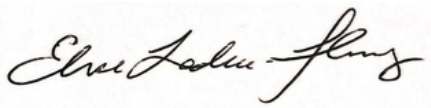
This new chapter in leadership at HMF coincides with its inclusion under the newly formed Zilkha Center for the Environment. While this changes our administrative home, HMF's core mission remains steadfast: to provide an exceptional setting for research and hands-on education.

HMF continues to be a hub for field research and hands-on education, with Williams students and faculty immersing themselves in a wide range of field-based work. Biology students tracked grasshopper populations, Environmental Studies students analyzed soil pits, and Geoscience students built their own weather stations. Five seniors completed theses based on HMF field research. We also hosted an external researcher from Yale, who initiated a new study on beech leaf disease, with HMF serving as the study's only pre-symptomatic site. And the list goes on.

Much of the work at HMF is powered by our students. As the only staff member at HMF, I rely on our enthusiastic student caretakers, who extend my capacity immeasurably. This year, they rebuilt the upper bridge on the North Branch of Birch Brook, trimmed overgrown trails, ran two amazing (and amazingly well attended!) seasonal festivals, and much more. Added to their efforts were the HMF educators from the Center for Learning in Action (CLiA), who hosted 451 elementary students for field trips on topics ranging from geology to evolution, fostering a love of nature in the next generation.

Despite the uncertainty that transitions can bring, change can also bring new vision, energy, and growth. In addition to successfully continuing long-standing HMF traditions, we launched Forest Fridays, a program that provides weekly opportunities for students to enjoy the outdoors. And for the first time, HMF also participated in the campus-wide Claiming Williams event. Looking ahead, we are excited to build on this momentum. A new Winter Study course, "The Wonder of the Winter Woods," is planned for 2026. The College is also working to acquire a classic kettle bog in Pownal, VT – an invaluable resource for teaching about climate change and biodiversity that has been a staple of the Botany course for decades. Its acquisition would protect this unique natural area for generations to come.

I am grateful to the many staff, faculty, students, and community members who have contributed to HMF's success. As my first year as HMF manager comes to a close, I am excited to see what the next turn of the wheel will bring.



ELISE LEDUC-FLEMING

RESEARCH

FACULTY RESEARCH HIGHLIGHTS

Gill Lab: Ecosystem-Level Nitrogen Fertilization Experiment

Northern forests are a major global carbon (C) store and an important reservoir of plant, animal, and microbial biodiversity. Human activities have also increased the amount of biologically-active nitrogen (N) in the environment, a nutrient that often constrains plant and microbial activity in terrestrial ecosystems, and can influence their ability to store soil C, the largest terrestrial C pool. The Gill Lab investigates how soil N inputs influence plant community composition, ecosystem biogeochemistry, and the formation and protection of soil C across two distinct sites in Hopkins Memorial Forest (HMF).

In 2024-2025, the Gill Lab continued work on their N fertilization experiment, located at two sites in Hopkins Forest, which differ in soil pH and mineralogy. Parker Harnett '25 (honors thesis), Diya Pandey '25 (honors thesis), and Avi Kahn '26 worked on projects evaluating microbial community responses to N treatments. The Gill Lab also welcomed technician Peter Manos, who has led field work and long-term data collection of tree growth and soil respiration over the academic year and generally kept the lab going! In collaboration with Amita Khurana '27, Alden May '27, and Rosie Pelosky '26, the lab deployed a stable-isotope tracing experiment to track the formation of soil organic matter across the plots. The Gill Lab was also supported by the HMF student caretakers who helped with litter addition treatments in the fall and soil harvests in the spring!

In collaboration with José Constantine, the group also explored the landscape controls on debris dam distribution across the Birch Brook watershed (Javier Jekins-Sorensen '25, honors thesis) and their control on stream carbon cycling (Grace Carter '25, honors thesis). Both Javi and Grace presented posters on their HMF field research at the American Geophysical Union meeting in December 2024.

Alden May ‘27 (left) and Rosie Pelosky '26 (right) taking soil respiration measurements with an infrared gas analyzer that measures carbon dioxide coming out of the soil.

Edwards Lab

The Edwards Lab continued with two long-term studies and started a pilot study comparing insect visitors to closely related native and non-native flowers. Maya Goldstein ‘25 and Michael Keegan ’25 did much of the work over the summer. A team of students including Talia Sanders ’25, David Luongo ’25, Al Lake ’25, Michael Keegan ’25 , and many of the HMF caretakers helped with sampling the flowering stems in the mowing experiment.

Garlic Mustard Population Dynamics in Early, Mid & Late Successional Forest

The garlic mustard study is a long-term study of an invasive biennial, which was started in 1998, shortly after the plant’s arrival in HMF. Each summer the population dynamics of three populations are monitored – one in an early successional forest plot, one in the red oak stand, and one in the old growth Bieneke stand. Three results are clear to date. First, the red oak stand with its dense shade and deep leaf litter accumulation, has a very low garlic mustard density with very few rosettes surviving to reproduce the following year. Second, the three sites appear to be coordinated with the same years having populations which are mostly rosettes alternating with years with high reproductives. Third, the old growth stand, which was hypothesized would have low populations, is regularly disturbed by heavy rains and washed out due to its steep slope,allow colonization by garlic mustard and other invasive species.

Lysimachia vulgaris (common garden loosestrife), part of Professor Edwards native/invasive plant pollinator comparison study.

Paired Native/Invasive Plant Pollinator Visits

This study monitored pollinator visitors to pairs of closely related species where one is native and one is introduced. One focus was on visitors to species of Lysimachia. The two native species are *Lysimachia ciliata* (fringed yellow loosestrife) and *Lysimachia borealis* (starflower). The two introduced species are *Lysimachia nummularia* (creeping yellow-loostrife) and *Lysimachia vulgaris* (common garden loosestrife). Both of the non-native species were monitored and filmed at HMF. The Edwards Lab has not completed the analyses of these flowers yet, but notably both native species have a diversity of visitors while *L. nummularia*, hardly had any visitors. In contrast, *L. vulgaris*, filmed in the HMF garden, had many visitors, but those videos have not been scored yet.

HMF student caretakers, Liv Chambers '25 (front) and Greta Vaughn '26 (back right) assist Professor Joan Edwards (left) with flowering stem counts.

Impacts of Mowing Patterns on Flower Production and Pollinator Activity

This study, started in 2012, tests for best mowing practices to maximize flower production for pollinators. Plots are mowed early (July) or late (October) and every year or every other year resulting in four treatments: early annual, early every other year, late annual or late every other year. Each fall the number of flowering stems in sixteen 12m x 12m plots are counted. The focus is on the fall blooming flowers, which are dominated by goldenrods (e.g., *Solidago gigantea*, *S. rugosa*, and *Euthamia graminifolia*). Results to date show a consistent pattern of significantly higher flower production in the late mow plots (both every year and every other year plots). The long-term data are also showing trends including, increasing biodiversity with new species added each year, the colonization and increasing population sizes of milkweed (*Asclepias syriaca*), stunted and lower flower production in drought years, and the colonization and increasing population sizes of invasive species.

Students, faculty and staff work together during the July 2024 "Weir Day" to shovel accumulated sediment.

Environmental Analysis Lab and Hydro-Meteorological Monitoring

Long-term weather, precipitation, stream flow and chemistry monitoring continued this year in HMF at 4 weather stations and 2 weirs through the Environmental Analysis Lab (Envi Lab). The Envi Lab continued to monitor radio-tagged birds using the MCLA-Williams MOTUS station, and installed a new time-lapse camera at the Main Stem Birch Brook weir.

The Envi Lab also assisted Grace Carter '25, Noah Phipps '25, and Javi Jenkins-Sorensen '25 on their honors research theses in HMF's Birch Brook. Grace and Javi worked separately with naturally formed large woody debris dams and Noah continued his 2023 work, which expanded upon bedload transport studies started by Jordan Fields '17. Grace's work illustrated that the dissolved carbon species were not significantly different above versus below debris dams, while Javi researched the volume, orientation and mobility effects of debris dams in HMF. Using RFID rocks as tracers, Noah's work clearly demonstrated a difference in bedload transport between Middle and South branches of Birch Brook.

Over the summer of 2024 Molly Blakslee '25 and Ava Rust '25 worked as summer research assistants in the Envi Lab, investigating the geochemical characteristics of all three Birch Brook branches. They determined that pH and bicarbonate levels were lowest at the headwaters of each of the Birch Brook tributaries. In addition, the North Branch illustrated a strong correlation between calcium, pH and bicarbonate.

Finally, the accumulated sediment upstream of the Birch Brook South Branch weir was shoveled and weighed in an effort to track the amount of sediment moved and deposited, as it is every year. The 2024 summer group included 22 participants who shoveled approximately 11.2 metric tonnes of sediment, well above the long-term average of ~6.3 tonnes. This was the 4th highest amount shoveled in 39 years of records.

STUDENT RESEARCH

HMF continued to be a valuable resource for field-based student theses. During the summer of 2024, five rising seniors completed fieldwork and research in HMF as part of their theses.

Senior Thesis Completed in HMF During the 2024-2025 Academic Year		
Student	**Supervisor**	**Senior Thesis Title**
Noah Phipps	José Constantine	Bedload Transport Dynamics in Birch Brook: The Influence of Large Wood, Local Slope, and Sediment Supply on Channel Evolution
Javier Jenkins-Sorensen	José Constantine and Allison Gill	Log volume, orientation, and mobility as controls on debris dams in upland catchments in the American Northeast
Grace Carter	José Constantine and Allison Gill	The Influence of Debris Dams on Carbon Cycling in Birch Brook
Diya Pandey	Allison Gill	Evaluating The Effect of Nitrogen Fertilization on the Measured and Modeled Functional Profiles of Soil Bacterial Communities at Hopkins Memorial Forest
Parker Harnett	Allison Gill	Shifting Underground: The Effects of Anthropogenic Nitrogen on Forest Fungal Community Composition at Hopkins Memorial Forest

Noah Phipps '25 surveying the South Branch of Birch Brook.

Noah Phipps '25

Noah writes: "Hopkins Forest was one of the most impactful parts of my experience at Williams. I spent two summers doing fieldwork in Birch Brook; collecting data less than a mile from campus and then coming back to the lab to analyze the data gives me experience in all parts of the geoscience research process. I learn so much from the hands-on fieldwork I do in the Forest."

Javier Jenkins-Sorensen '25

Javier writes: "My thesis project has been both the most challenging and illuminating project I have worked on while at Williams. Organizing and running a field campaign tested my organizational abilities, my attention to detail, and my academic endurance. It also provided me with a completely original and unique data set. As a dedicated research forest, Hopkins was the place where I could pursue a direction of empirical research that was important to me."

NORTHERN SAW-WHET OWL BANDING PROGRAM

This year, Hopkins Memorial Forest continued its northern saw-whet owl banding program, an important project that furthers both scientific research and education, coordinated by Professor Dan Shustack of MCLA. On 15 nights from early October to early November, we banded 47 new owls and recaptured two from other regions (one from southern Berkshire County and another from Ontario, Canada) highlighting the broad migratory paths of these small owls. We also learned that an owl banded here last year was later found in West Virginia, providing more clues about their movements. We also ran a short banding season during the spring; on 8 nights from early March to early April we banded 5 new owls, and had one local recapture. Beyond the valuable data contributed to the Bird Banding Laboratory database, the program offered hands-on learning experiences for multiple Williams College and MCLA classes, the Williams Birding Club, and many community members, fostering a deeper understanding of these otherwise rarely seen birds. Additionally, 12 owls were fitted with Motus nanotags, allowing us to track their movements across a global network of receiving stations, even if they are never recaptured.

Professor Dan Shustack of MCLA (at right) teaches students how to collect key data from each owl (e.g., weight, wing length, eye color, etc.).

A recently captured northern saw-whet owl, ready to be banded.

Early symptoms of beech leaf disease include dark bands between the leaf veins.

OUTSIDE RESEARCHERS

Beech Leaf Disease Study

Hopkins Memorial Forest is now a key site in an interstate study by Professor Craig Brodersen's lab at the Yale School of the Environment, investigating the impact of Beech Leaf Disease (BLD) on American Beech trees. This research builds on their recent findings that BLD significantly reduces a tree's ability to photosynthesize, which in turn impacts its growth. Unlike most other study sites in the Northeast, where beech trees were already showing symptoms, last summer the majority of the beech trees at HMF appeared healthy. This makes HMF an ideal location to monitor how an asymptomatic population changes over time if exposed to BLD. Initial sampling began on asymptomatic trees in late 2024, with follow-up in spring 2025 confirming early signs of BLD. Brodersen's team will continue to monitor HMF's beech trees for the next 3-5 years, providing important comparative data to understand the progression of this disease.

Hemlock Woolly Adelgid Surveys

Williamstown Rural Lands (WRL) began a monitoring program in the summer of 2024 across multiple sites in Williamstown, including HMF, to survey for the presence of hemlock woolly adelgid (HWA), an invasive, destructive insect impacted eastern hemlocks. As part of this effort, a WRL volunteer surveyed the southern half of the Upper Loop in late July 2024 and found no evidence of hemlock woolly adelgid. WRL intends to repeat the summer during July 2025.

EDUCATION AND OUTREACH

UNDERGRADUATE CLASSES

Classes using HMF during the 2024-2025 academic year			
Class	**Professor**	**Sem.**	**Extent of Use**
BIOL/ENVI 203: Ecology	Morales/Gill	F	Lab topics included grasshopper population dynamics, stream macroinvertebrate sampling, visiting the old growth Beinecke Stand, and saw-whet owl banding.
GEOS/ENVI 255: Environmental Observation	Bradley	F	Lab topics included building weather stations, retrieving the weather station data for comparative exercises, and a field exercise on GPS accuracy.
ENVI 101: Introduction to Environmental Studies	Ramprasad	F	HMF tour and discussion of the shift from farms to forest and how that impacts current forest management.
WS BIOL 013: Animal Tracking course	Yacobellis	WS	Utilized the Rosenburg Center as their main classroom and held all field sessions within HMF.
WS GEOS 14: Drawing Science Studio Lab	Levato-Coyne	WS	Used the Rosenburg Center and nearby grounds for nature journaling exercises.
WS ENGL 12: D.I.Y. Publications: Paper, Print, and Power	Murphy	WS	Used the Rosenburg Center and nearby grounds for nature journaling exercises.
BIOL 102: The Organism		S	Lab topics included wood frogs and vernal pools, and plant life cycles.
BIOL 202: Botany	Edwards	S	Lab topics included lycopods and deciduous trees.
ENVI 102: Introduction to Environmental Science	Carrasquillo/ Racela	S	Lab topics included soils analysis (note: the tree lab was canceled due to weather).
ECON/ENVI 21: Envi. & Natural Resource Economics	Jacobson	S	Observed the maple sugaring process in connection with resource extraction.
GEOS 301: Geomorphology	Halsted	S	Hiked the trails to the Birch Brook crossing, observing glacial and river landforms.

ELEMENTARY EDUCATION

In the fall, HMF hosted 216 elementary students from 14 classes across four schools (Hancock Elementary, Lanesborough Elementary, Pownal Elementary and Williamstown Elementary) for outdoor education programs at HMF. Topics included Ecosystems, Cycles and Food Webs for 5th Grade groups and Geology and Erosion for 4th Grade groups.

In the spring there were 235 elementary students from 17 classes across five schools (Hancock Elementary, Lanesborough Elementary, Pownal Elementary, Pine Cobble Elementary, and Williamstown Elementary) for outdoor education programs at HMF. Topics included Habitats and Adaptations for Kindergarten groups, and Evolution for 6th Grade groups.

The Center for Learning in Action (CLIA) at Williams hired a team of student educators to plan and lead the field trips (see table below); we thank our partners at CLIA -- namely Renee Sheik and Jennifer Swoap – for their roles in making this happen. Williams student educators were assisted by Elise Leduc-Fleming and Sarah Gardner, in facilitating these programs.

Jacob Fanto '25 displays a red-backed salamander to a kindergarten class, April 2025.

Student Educators 2024-2025		
Fall 4th & 5th Grade Programs	**Spring Kindergarten Program**	**Spring 6th Grade Program**
Grace Carter '25	Catherine Elison '28	Maxine George '27
Jacob Fanto '25	Jacob Fanto '25	Rosie Pelosky '26
Montse Hidalgo '28	Montse Hidalgo '28	Jacob Hertz '28
Naomi Ross '25	Eliza Rubel '28	Emery McHugh '28
Jeff Sousa '226	Brodie Leo '25	Isa Healey '27
Bradley St. Laurent '26	Clarissa Louis '27	Maya Thompson '28
Elsa Martin '25		

Music performers at Fall Festival, 2024.

COMMUNITY EVENTS

Hopkins Memorial Forest hosted events:

Alumni Day – June 8, 2024
Forest Fridays (fall 2024: Sept 13 – Nov 1; spring 2025: Apr 11 - May 16)
Fall Festival – October 5, 2024 (407 attendees)
Christmas Bird Count – December 28, 2024
Wildlife Tracking Workshops – January 26, 2025
Claiming Williams – February 6, 2025
Maple Fest – March 15, 2025 (476 attendees)

Other outside groups hosting events in HMF include:

Williamstown Rural Lands - Shepherd's Well Hike – July 27, 2024
Pine Cobble School - Mountain Day Hikes - September 27, 2024
Buxton School - Spring Wildflowers Walk - April 30, 2025

Attendees at Maple Fest, 2025.

Students enjoying a walk in Hopkins Forest during a Forest Fridays event.

FOREST FRIDAYS

Forest Fridays was a newly-minted ZCE program this year to encourage students to get out into nature to relax at the end of the school week and introduce them to Hopkins Memorial Forest (HMF). Forest Fridays are not about intense hiking but for refreshment and nature enjoyment. A range of faculty and staff were invited to lead the walks and set their own themes. Attendance became stronger as the year progressed and the program was successful at bringing lots of first time visitors to HMF. It will continue next year with some new and some repeat themes and leaders.

FALL '24

Sept 13: Nature Walk, Sarah Gardner
Sept 20: Nature Walk, Elise Leduc-Fleming
Sept 27: Forest Bathing, Scott Lewis, Outing Club Director, Emeritus
Oct. 4: Meteorological Research, Jay Racela, Envi Studies Program & Envi Analysis Lab
Oct. 11: Sacred Seclusion Walk, Sidra Mahmoud, Muslim Chaplain
Oct. 25: Contemplative Prayer Walk, Bridget Power, Catholic Chaplain
Nov. 1: Trees, Hank Art, Prof. of Biology and Environmental Studies, Emeritus

SPRING '25

April 11: Forest Exploration, Brodie Leo '25 & Al Lake '25
April 18: The Songs of the Trees, Seth Wax, College Rabbi
April 25: Listening if for the Birds, Heather Williams, Dwight Whitney Professor of Biology
May 2: Phenology and the Forest, Felicity Purzycki, Landscape Ecology Coordinator & Elise Leduc-Fleming
May 3: Wildflower Walk, Joan Edwards, Samuel Fessenden Clarke Prof. of Biology

RECREATION

Recreational activity of various kinds continued to be very popular in the forest, with hiking, dog-walking, jogging and cross-country skiing among the most popular pursuits. Horseback riding also occurs along select trails within HMF.

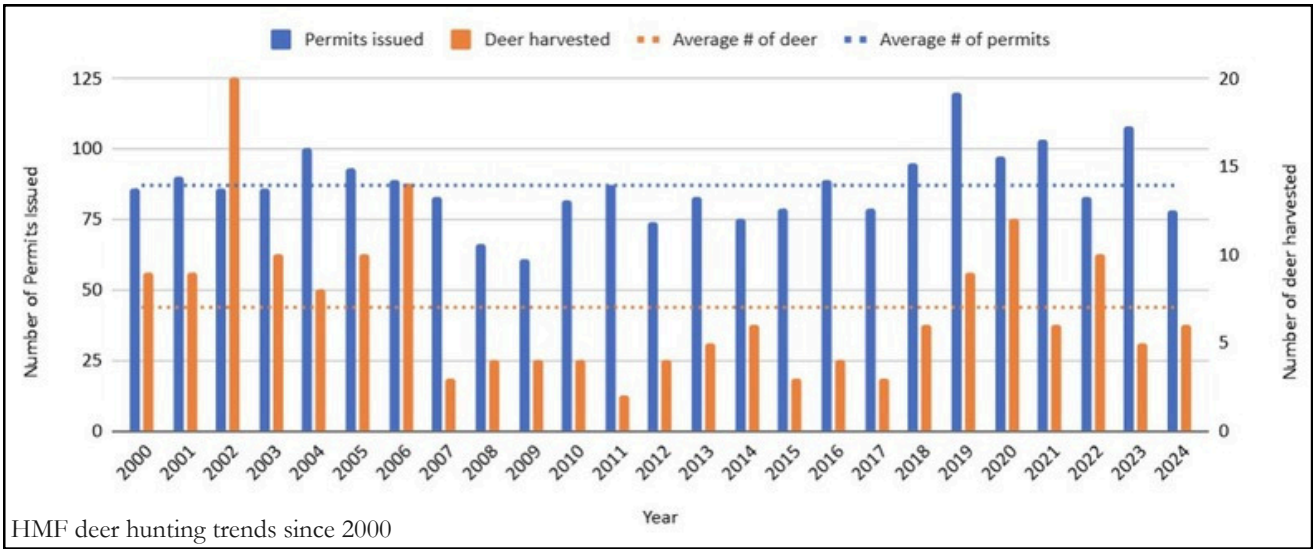
Williams Outing and Bird Clubs

The Williams Outing Club (WOC) sponsored occasional classes and activities in the forest. WOC used the HMF trails, Dorland Cabin, and lean-to during its First Days WOOLF trips. Fall semester events included a botany/plant ID walk, forest bathing, and a geocaching hike. During winter study, the WOC hosted two snowshoeing PE classes at HMF. Spring semester events included a hiking PE class, and a Mountain Marathon event.

The Williams Bird Club, a student organization, visited the forest for occasional bird watching outings and training sessions.

Hunting

The special permit shotgun hunt for deer was held again in the fall of 2024; we issued permits to 78 hunters, who harvested 6 deer (unofficial tally board) from the property. The permit total was the lowest since 2014. Although this is anecdotal, a number of older hunters present this year noted that younger folks are not interested in getting into hunting, resulting in a lower overall number of hunters as older hunters begin to retire. Fortunately, there were no reported issues of hunters entering neighboring properties, which had been a problem in recent years. Once again Williams College safety officers were on duty during the busiest days of the hunt to help patrol the parking areas and maintain a presence at the main entrance.



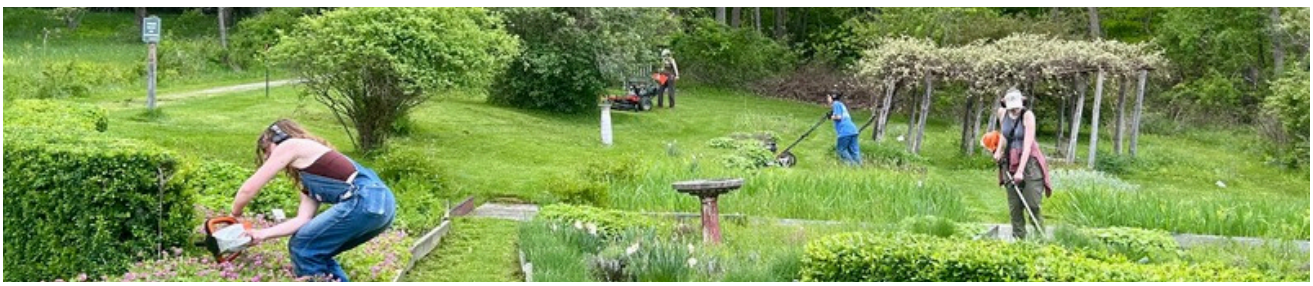
HMF deer hunting trends since 2000

HMF 2024 summer caretakers, Myla Dougherty ’26 (left) and Nathan Welsh ‘26 (right) by a newly repaired fence.

LAND MANAGEMENT, CARETAKING & FACILITIES

CARETAKER PROGRAM

Caretaking proved to be immensely popular employment with students again this year as robust crews enlisted for both semesters. A total of 975 hours were logged during the academic year (475 in the fall and 500 in the spring). Retention between semesters and years, a sign of sustained interest, was high. The return of knowledgeable caretakers was extremely helpful during the transition from a long-standing HMF Manager to the new Manager. Student work focused on maintaining trails, gardening, maple sugaring, vegetation management, and hosting public events. A pair of student caretakers – Myla Dougherty ’26 and Nathan Welsh ‘26 –worked for 10 weeks during the summer of 2024. Major tasks included equipment maintenance, trail clearing, Rosenburg Center cleaning and inventory, new Carriage Road Trail signs, and the addition of a “sightings” white board to the main HMF entrance kiosk. They were joined by long-serving, part-time gardener Debra Rogers-Gillig, whose work and mentorship in Buxton Garden has been invaluable.



Spring 2025 HMF caretakers maintaining Buxton Garden.

2024-2025 HMF Student Caretakers				
Student Name	**Year**	**Summer '24**	**Fall '24**	**Spring '25**
Madeline Birknes	'25		X	
Anya Buchovecky	'25		X	X
Jessie Burdette	'25			X
Grace Carter	'25		X	X
Liv Chambers	'25		X	X
Sohani Curtis	'27			X
Myla Dougherty	'26	X	X	
Maya Goldstein	'25		X	
Elodie Griffin-Schmidt	'26		X	
Helen Hurden	'27			X
Grace Irish	'26		X	
Javier Jenkins-Sorensen	'25		X	X
Tebin Kim	'28			X
Eden Murphy	'27		X	X
Emma Neuhauser	'25		X	
Will Schnall	'25		X	X
Greta Vaughn	'26		X	X
Edan Zinn	'27			X
Nate Walsh	'26	X		
Lauren Ryan	'25		X	X
Eika Longstreth	'25		X	X
Al Lake	'25		X	X

Lauren Ryan '25 (left) and Grace Carter '25 (right) testing out the new bog boards, September 2024.

A few of the '24-'25 HMF caretakers provided reflections on their time in the forest:

Javier Jenkins-Sorensen '25

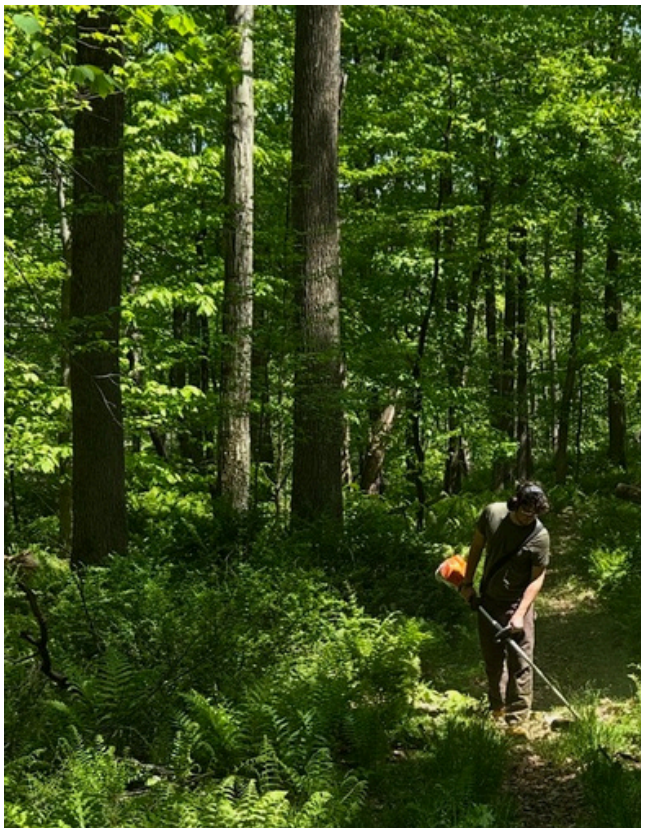
Javier writes: "Having come to caretaking relatively late in my Williams career I've tried to learn as much about all the various aspects of the job as I can in only three semesters of work. This position helps you meet new people, gets you outside for 3 hours a week or at least off campus for that time, teaches you hands on skills you would otherwise never practice, and for me at least made me more aware of the seasonal changes happening around me. The best thing about it though I think is to participate in something that will last longer than your 4 years here at Williams. HMF is small enough that your work feels impactful, but large enough that you know it will continue once you are gone. Improvements and changes and maintenance are all in the service of the continuation of something that I believe in and will continue long after I graduate."

Elka Longstreth '25

Elka writes: "Over the course of my four years here, my caretaker job at the Hopkins forest has been a constant source of grounding, growth, and joy. It felt so meaningful to put in labor and see the results, whether that was clearing trails and watching people enjoy the openness, tapping maple trees, boiling the sap, and getting to taste the syrup, or planting bulbs one spring and watching them grow the next. I loved the relationships formed on the crew, both with my peers and my supervisors, as we tackled challenging projects together. My work at the forest helped integrate what I was thinking about in my classes with the world around my as I saw the plants I had learned about in my biology classes and could think about the problems I had learned about in environmental studies classes as they appeared in front of me."

Grace Carter '25

Grace writes: "Much of my Williams academic career has been gaining an understanding of how the natural world works. Through classes, labs, papers, and exams, I've learned about why a forest looks like it does, how plants grow, the development and flow of streams. Working as a caretaker, though, has really been the first time that I've learned to foster stewardship to both humans and the forest. To make the forest a well cared-for research facility, enjoyable afternoon for community members, and extra large classroom for elementary school students. I've so enjoyed taking the facts I've learned in class and having them confirmed and challenged in the real world application of Williamstown and HMF."



HMF caretaker Javier Jenkins-Sorensen '25 maintaining the Hoosic River Trail, May 2025.

MAPLE SUGARING

The 2025 maple season yielded a small but delicious batch of maple syrup. Low yields were due to two factors. The first was intentional. The new HMF Manager decided maple sugaring at HMF should prioritize introducing students and community members to the process and experience, rather than on producing the highest volume of syrup possible. A deliberate decision was made to tap only 75 trees (compared to the traditional 125), with the goal of getting introduced to the maple sugaring process at a manageable scale.

The second factor was the weather. Constant sub-freezing temperatures until late February meant that the first tap date wasn't until February 28 - one of the latest first tap dates in decades. There were also extremely warm days in March, with temperature in the 70s, resulting in some spoiled sap that needed to be dumped. Finally, while sap collection typically extends through spring break, by the end of March, there were no more cold nights in the extended forecast, sap flow had ceased, and all the taps were pulled out mid way through the first week of Spring Break. These conditions resulted in one of the shortest HMF sugaring seasons on record.

HMF student caretakers were instrumental in every step of the process, from setting up the evaporator and tapping trees to collecting and boiling sap to end of season cleaning. Even with the intentional and weather-induced reductions in production, student caretakers still gathered 540 gallons (2.25 tons) of sap from 75 trees that was boiled into 6 gallons of finished syrup.

Maya Goldstein ‘25 taps a sugar maple tree.

HMF caretakers Helen Hurden ‘27 (left) and Lauren Ryan ‘25 (right) pump maple sap from a collection tank to the sugarhouse.

ROSENBERG CENTER

This year the Rosenburg Center continued to serve as a focal point for classes and lab set-ups, caretaker and educator activities, and was open to public visitation. There have been a number of key improvements this year:

- The exterior of the building was repainted (August 26-30, 2024)
- A new drinking fountain and water bottle filling station was installed (December 11, 2024)
- Four outdoor WiFi hubs were put online (April 2025)

However, there are some larger issues with the maintenance of the building that will need to be addressed. Mina Amundsen, the Associate Vice President for Campus Planning and Operations, completed a site walk of the whole building on September 20, 2024 to discuss potential ways forward to address the deferred maintenance on the Rosenburg Center. Capital Improvement Requests (CIRs) were submitted for the 2026 fiscal year (FY 26) for a number of key building components; ultimately it was determined that while the request to update the building's heating system would be approved for FY26, the remainder of the issues would be more fully evaluated through a full Facilities Conditions Assessment (FCA). The FCA will help prioritize needed projects and help develop a manageable timeline for implementation.

UPPER NORTH BRANCH BRIDGE

The upper bridge on the North Branch of Birch Brook sustained major structural damage during the summer of 2024. The HMF Manager moved to quickly address this issue after her arrival, including going through the design and permit process with the Town, and the bridge was completely disassembled, removed and rebuilt between November 18 and 25, 2024. The demolition of the old, damaged bridge and the construction of the new bridge was made possible through the help of many of the fall student caretakers, as well as the men's crew team, who volunteered their time to maneuver the heavy stream-crossing beams into place.

The men's crew team was instrumental in placing the large stream-spanning beams when rebuilding the bridge, November 2024.

NOTABLE LAND MANAGEMENT ACTIONS

Forest Management - Vermont Parcel

No commercial or pre-commercial work was performed on the remote Pownal, Vermont tract this year. For the past 20 years, the 380-acre parcel has been enrolled in the Vermont Use Value Appraisal (UVA) program. Unfortunately, the timeframe to update the forest inventory and forest management plan coincided with the transition in the forest manager position, and ultimately the enrollment in this program has lapsed. There are, however, plans to complete the required field work and planning necessary to re-enroll the parcel in the fall of 2025. The goal for our future application will be to enroll in the UVA Reserve Forestland program, indicating that the land will be managed to advance old growth forest conditions rather than long-term production of forest products (e.g., logging).

View along the Taconic Crest Trail through the Vermont portion of HMF, August 2024.

Wire Bridge Farm

This parcel continued to be used sparingly for recreation and wildlife viewing. It was determined during the fall of 2024 that the farmer who had grown and harvested hay on the parcel for years, had not done so since 2021. While the field continues to be dominated by herbaceous species (e.g., goldenrods, Queen Anne's lace, asters, etc.), it is important to plan for semi-regular mowing of this area to maintain it as a meadow. As such, budget was requested and approved for FY26 to hire an outside contractor to mow the entire 19 acre meadow within the HMF-owned portion of the field this coming fall.

ADMINISTRATION

HMF USERS COMMITTEE

The Hopkins Forest Users Committee – charged with oversight and planning responsibilities for the Forest – is composed of faculty and staff who have interests in research or teaching in the Forest. Under the guidance of Manuel Morales, the Committee collaborated with the Provost and Dean of Faculty to update the HMF Users Committee charge and the HMF Policies and Procedures, which were formally recognized by the College in August 2024.

2024-2025 HMF Users Committee			
Faculty	**Department**	**Ex-officio**	**Affiliation**
Manuel Morales, Chair	Biology	Elise Leduc-Fleming	HMF Manager, ZCE
Joan Edwards	Biology	Tanja Srebotnjak	ZCE Director
Allison Gill	Biology	Jay Racela	Envi. Analysis Lab
José Constantine	Geosciences	Ben Oliver	WOC Director
		Jen Swoap	CLiA
		Cory Campbell	OIT/Data management
		Sarah Gardner	Co-Curricular Programs and Community Engagement, ZCE

A main focus of the HMF Users Committee during the '24-'25 academic year was the undertaking of a Self Study. This exercise started as a deeper investigation into the future possibilities for the long-term permanent plot monitoring, but ultimately involved into a full evaluation of HMF operations as a whole.

FUTURE

In the coming year, the HMF Users Committee will work towards not only completely our Self Study, but also developing recommendations regarding the future of the permanent plots. In addition, the Committee will undergo a leadership change, as the Chair position will pass from Manuel Morales to Allison Gill.

A major goal for the HMF Manager is to increase use and awareness of HMF by and among the student body. To this end, a number of new programs are proposed. One example is incorporating HMF into First Days programming for incoming first year students. HMF will host two nature journaling workshops as part of the Williams College Museum of Art's (WCMA) Exploring the Arts program. In addition, HMF will host a hike for incoming students during First Days. Another example is the addition of a second HMF-based Winter Study course. In addition to the long-running Animal Tracking course, HMF will also serve as the main classroom for a new course, The Wonder of the Winter Woods. Finally, it is expected that a number of HMF programs could easily be incorporated into the campus's "On the Log" initiative, increasing the visibility of HMF as a Williams resource even further. These programs, in addition to continuing the Forest Fridays program started last year, will hopefully provide ample opportunities for all students to visit and engage with HMF.

As noted in the body of the report, there are some large deferred maintenance issues with the Rosenburg Center that will need to be addressed. The entire building will be evaluated through a full Facilities Conditions Assessment (FCA), which will inform a larger plan for renovations. It is hoped that a major renovation project of the building will not only address the deferred maintenance, but also provide some programmatic upgrades to the space. Because it is expected that any major work on the building will be years away, a temporary replacement heating system was approved for FY26 and will be installed before "heating season" begins in October 2024.

A licensed Vermont forester will be contracted in FY26 to complete a forest inventory and management plan for the Vermont parcel of HMF to re-enroll in Vermont's Use Value Assessment (UVA) program. The goal will be to enroll in the UVA Reserve Forestland program, indicating that the land will be managed to advance old growth forest conditions rather than long-term production of forest products (e.g., logging). This may lead to recommended actions such as invasive species management, water bar creation, and/or tree planting.

Finally, it is hoped that the purchase of the Pownal bog, a 41-acre parcel containing a classic 10,000+ year-old kettle bog, will be finalized in FY26. In the past 45 years, the bog has been visited by over 1600 Williams students and is an invaluable resource for fostering education about global climate change and biodiversity loss. Though plans are not finalized, it is anticipated that this property would be managed as a discontinuous part of HMF.