

***HOPKINS MEMORIAL FOREST***

***Activities Report***

***2007-2008***



Drew Jones, HMF Manager

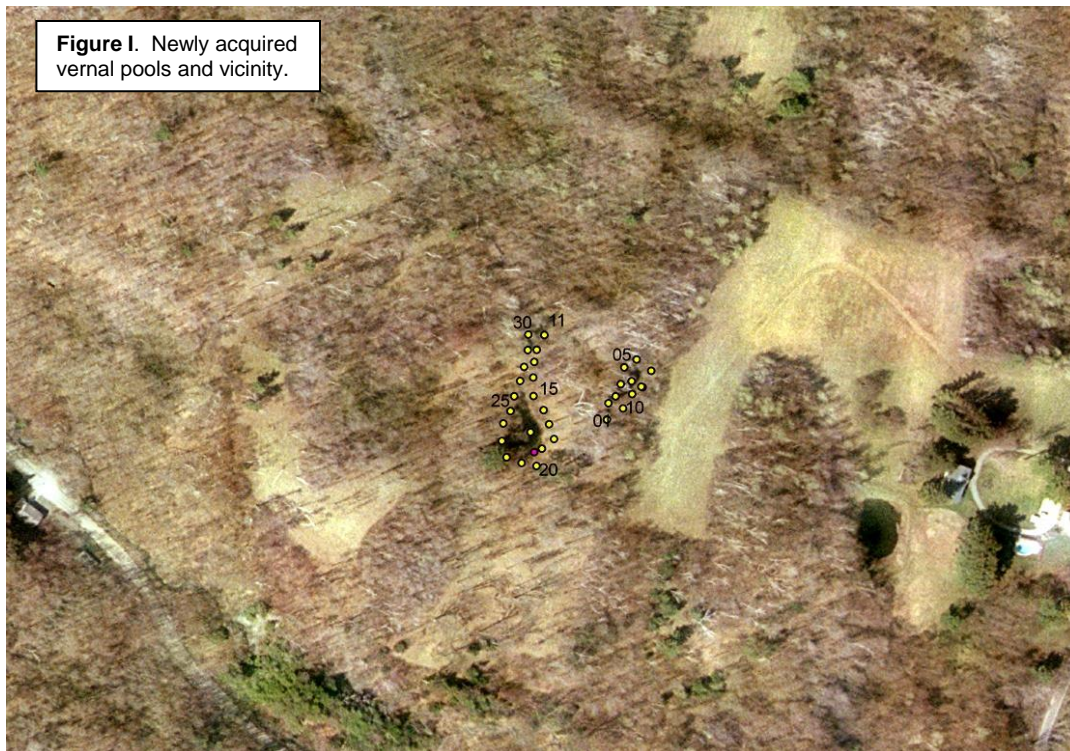
Williams College--Center for Environmental Studies

December 2008

## SUMMARY—the Year 2007-08

In fall 2007 Williams completed the acquisition of nine acres of the former Buxton Lane parcel. This parcel, which includes two vernal pools, other wetlands, some woodlands and fields, was annexed onto the Forest's southeastern corner (Figure I). Much of the remainder of the former Buxton Lane parcel was acquired by a neighboring family, while some was donated to the Williamstown Rural Lands Foundation. All of the original 66-acre parcel will thus be kept in an undeveloped condition.

The consolidation of the vernal pool parcel into Hopkins Forest enabled research on the amphibian communities in the two vernal pools to continue under the guidance of Hank Art. Williams faculty and students—with the help of collaborators from nearby colleges and community volunteers--continued to monitor a pitfall trap array surrounding the ponds in the fall of 2007 and again in the spring and summer of 2008.



In new research, Elena Traister, Assistant Professor of Environmental Studies at MCLA, undertook her dissertation research on carbon cycling in aquatic ecosystems—using four streams in and around Hopkins Forest, including Ford Glen Brook.

Summer 2008 was a sampling year for the three stand-level vegetation monitoring studies of the Birch Strips, led by Hank Art and Abby Martin '10. Many of the Forest's other established research projects continued as well, including those on ant/leaf hopper mutualism, garlic mustard growth dynamics, and meteorological and geochemical monitoring. The northern saw-whet owl banding station was again open regularly during the fall 2007. In addition, Minda Berbeco of Tufts University returned to resume field sampling for her study of carbon sequestration in the Beinecke Stand. And finally, Eric Kramer of Simon's Rock College of Bard concluded his study of the role in auxin in grain orientation in poplar trees with a June 2008 article in *Science*.

The weather station was reconfigured in fall 2007, resulting in the anemometer, rain gauge and other instruments being moved to a more central location in the field, approximately 20 meters west of their previous positions. In summer 2008 faculty and staff surveyed and established a grid of 20x20 meter

plots in the weather station field. These plots were intended to be used in succession studies, though the ultimate design of the study was still being discussed as the summer wound to a close.

Educational programs continued at the Forest: Biology classes made regular visits, while programs and workshops—including a late winter vernal pool workshop--were conducted for schools and the general public. The Forest also hosted a weekly after-school program run by the Berkshire Science Camp during the fall and spring semesters. As usual, with its crew of student caretakers, the Forest hosted an array of public events, including the annual Fall Festival, Maplefest and Alumni Day.

In the summer 2008 the boundaries were posted for one full week with a legal posting that asserted our ownership of the land. Each sign was checked daily by a Berkshire County Deputy Sheriff. This is a routine procedure that is recommended every twenty years to ensure against adverse possession claims. In addition, the Hopkins Forest map saw its first revision since 2003.

**RESEARCH and MONITORING  
Summer 2008 and Ongoing**

Several scientific studies were underway during the past year (Table I).

**TABLE I.** HMF Student Researchers—Summer 2008.

<u>Student</u>	<u>Supervisor</u>	<u>Project</u>	<u>Funding</u>
Will Harron '11	Art	Vernal Pool Amphibian Monitoring	Biology
Katerina Belkin '11	Art	Vernal Pool Amphibian Monitoring	Biology
Regina Rancotti, MCLA	Art/Traister	Vernal Pools/Stream Metabolism	HHH
Abby Martin '11	Art	Vegetation Monitoring	Biology
Jeffery Stenzel '10	Edwards	Garlic Mustard	Biology
Nora Mitchell '10	Edwards	Garlic Mustard	Biology
Ben Swimm '09	Morales	Mutualism	Biology
Jessica Walthew '09	Morales	Mutualism	Biology
Sarah Sedney '10	Morales	Mutualism	Biology
Erik Tillman '10	Morales	Mutualism	Biology
Brian Bistolfo '09	Racela	Hydro/Meteorology; Lab assistant	CES
David Roth '11	Racela	Hydro/Meteorology; Lab assistant	CES

New Research – Stream Metabolism

In new research, Elena Traister, Assistant Professor of Environmental Studies at MCLA, undertook a study on respiration in streams using four brooks in and around Hopkins Forest during the summer 2008. Her dissertation research examines the individual and combined effects of substrate size, substrate stability, and turbidity on carbon cycling and macroinvertebrate communities. Professor Traister used both branches of Ford Glen Brook as well as two streams just off the property in Vermont to run these experiments, which involved removing and agitating substrate, adding a clay solution and using propane tracers to simulate gas dynamics. Regina Rancotti served as Professor Traister's primary assistant during the summer 2008.

Vernal Pool Amphibian Communities

Spring 2008 saw the continuation of a study begun the previous year on amphibian use of two vernal pools on the Buxton Lane (former Alden) property. This study, originally designed to provide information for an environmental review, was broadened this year to ascertain more about movement of *Ambystoma* salamanders and breeding phenology of a variety of amphibian species. To this end, both pools were again encircled by a drift-fence pitfall trap array; the traps were monitored twice daily during the spring and once daily by summer and fall crews. William Harron '11 and Katerina Belkin '11, along with Regina Rancotti of MCLA, carried out the summer monitoring activities. Their focus was to document the phenology and growth of the summer metamorphs throughout the summer. Interestingly,



Figure II. Spring Peeper.

their work demonstrated a significant difference in the timing of the departure of wood frog (*Rana sylvatica*) metamorphs from the two pools: metamorphs departed the larger Pool 2 earlier than they did the smaller, more ephemeral Pool 1. The data for the 2008 season were still being entered and compiled at the time of reporting; Table II lists the twelve species of amphibians encountered. Students under the guidance of Andrea Danyluk, Professor of Computer Science, continued to work on developing a spot recognition program during the summer of 2008.

**TABLE II.** Amphibians captured in pitfall traps during 2008.

Common Name	Scientific Name	Relative Abundance
Spotted Salamander	<i>Ambystoma maculatum</i>	Abundant
Eastern Newt	<i>Notophthalmus viridescens</i>	Abundant
Red-backed Salamander	<i>Plethodon cinereus</i>	Common
Northern Dusky Salamander	<i>Desmognathus fuscus</i>	Occasional
Two-lined Salamander	<i>Eurycea bislineata</i>	Occasional
Jefferson Salamander	<i>Ambystoma jeffersonianum</i>	Rare
Wood Frog	<i>Rana sylvatica</i>	Abundant
Spring Peeper (Figure II)	<i>Hyla crucifer</i>	Common
Green Frog	<i>Rana clamitans</i>	Common
American Toad	<i>Bufo americana</i>	Common
Pickerel Frog	<i>Rana pipiens</i>	Occasional
Bull Frog	<i>Rana catesbeiana</i>	Occasional

The vernal pool study received a significant contribution from other institutions and community organizations, including Berkshire Community College (BCC), Massachusetts College of Liberal Arts (MCLA) and the Community Wetlands Group. These entities provided students and volunteers to help with the collection and processing of data, especially during the busy spring migration period. This study may be continued on some level in 2009.

### Vegetation Monitoring

The Hopkins Forest Birch Strips were sampled during the summer of 2008. Professor Hank Art, along with student Abby Martin and the Hopkins Forest caretaking crew, carried out the sampling of these plots, which is done every five years.

### Ant/Leaf Hopper Mutualism

During the summer of 2007, Professor Manuel Morales continued his research on the role of inter-specific communications in the mutualism between ants (*Myrmica*) and leaf hoppers (*Publilia*) on goldenrod plants. Morales and his crew of Ben Swimm '09, Jessica Walthew '09, Sarah Sedney '10 and Erik Tillman '10 used the goldenrod fields along Northwest Hill Road for these investigations.

In 2008 Professor Morales published the following paper based, in part, on his Hopkins Forest research:

Morales, M.A., J.L. Barone, and C.S. Henry. *Acoustic alarm signaling facilitates predator protection of treehoppers by mutualist bodyguards*. Proceeding of the Royal Society B., 2008 Aug 22;275 (1645):1935-41.

### Garlic Mustard--Population Dynamics in Forested Ecosystems

Professor Joan Edwards' study of the population dynamics of the invasive garlic mustard plant (*Alliaria petiolata*) continued for the twelfth year in 2008. Jeffery Stenzel '10 and Nora Mitchell '10 provided the field assistance with this study, collecting data on established plots in three different areas of Hopkins Forest: the Beinecke stand, the former mansion site, and the red oak stand.

### Aster Pollination

In summer 2008, Jacob Blessing '09 and Joan Edwards began a study of pollination in asters. They surveyed the various fields around Hopkins Forest for significant populations of asters to observe. Mowing regimens were deferred in the south field to allow for the observation of pollinators on the asters into the fall of 2008.

### Carbon Sequestration—Tufts University

Tufts University graduate researcher Minda Berbeco continued her study of carbon storage in the Beinecke stand that she had begun in 2006. A major thrust of this study is to ascertain differential sequestration and respiration rates among tree species.

### Carbon Storage in Soils—University of Pennsylvania

A team of scientists from the University of Pennsylvania, led by Dr. Art Johnson, did not continue field work on their study of soil carbon in HMF during 2007-2008. They may revisit their investigation of how soil types and landscape legacies may influence soil carbon storage in HMF in the future.

### Sugar Maple Genetics

A lack of funding has forced Tom Baribault, a Research Associate at the University of Vermont Proctor Maple Research Center, to suspend his research in Hopkins Forest indefinitely.

### Wood Grain Development in Quaking Aspen

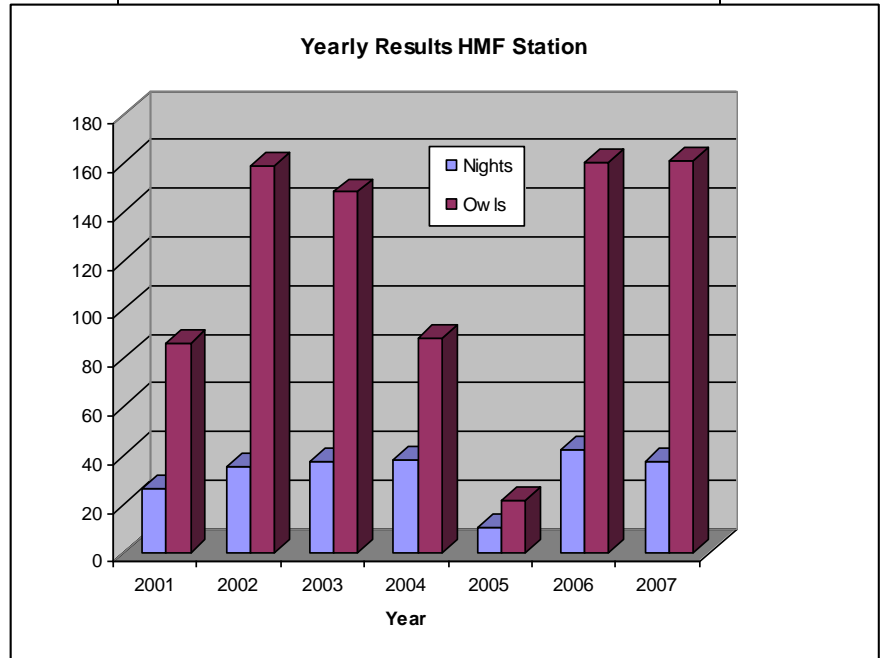
Autumn 2007 saw Dr. Eric Kramer of Simon's College of Bard complete his initial study of the role of Indoleacetic Acid (IAA) in the orientation of wood fibers in quaking aspen (*Populus tremuloides*). Dr. Kramer completed the lab work on the samples of damaged tissue that he had removed early that fall. His analysis of the wood grain orientation subsequent to the wounding episode led to the following publication in spring 2008:

E.M. Kramer, et al. *Auxin Gradients Are Associated with Polarity Changes in Trees*. *Science* 20 June 2008: Vol. 320. no. 5883, p. 1610.

### Northern Saw-whet Owl Migration Banding

With the assistance of Dr. Ken Schmidt of Texas Tech University, the Northern saw-whet owl (*Aegolius acadicus*) banding station was open once again in 2007. A single-tier array of four, 12-meter nets along a trail south of the Rosenberg Center, and an audio lure was used to attract the migrating owls into the nets. The station was open on dry, calm nights from dark until around midnight between September 29<sup>th</sup> and November 11<sup>th</sup> (for a total of 37 nights of operation). During this period, 161 saw-whets were captured and banded (Figure III). This was the highest raw total and capture rate in the six year

Figure III. Northern saw-whet owl captures at HMF station



history of this station; however, our station did not experience the substantially higher numbers recorded at many other regional saw-whet banding stations in what was considered by many to be an irruption year for this species. The HMF station served as the basis for lab activities for two Williams Biology classes as well as two Environmental Science classes from MCLA and students and faculty from Union College and Berkshire Community College.

### Hay-scented Fern Allelopathy

There were no field trials for the study of the allelopathic mechanisms of hay-scented fern (*Dennstaedtia punctilobula*) during 2007-08.

### Habitat Use by Wood Turtles

This past year we continued to study the movements and habitat use of wood turtles (*Glyptemys insculpta*), a Massachusetts 'Species of Special Concern,' in the Hoosic River Valley. Three turtles were equipped with radio transmitters and tracked during the spring and summer months. Nate Joyner, a student from Berkshire Community College developed a data set of GPS positions for the turtles in the fall 2007.

### **Watershed/Meteorological Monitoring (Environmental Analysis Lab)**

Once again, the Center for Environmental Studies' Environmental Analysis Lab--under the guidance of David Dethier and Technical Assistant Jay Racela--continued the process of gathering and analyzing meteorologic, hydrologic and biogeochemical data in the Forest. Four weather stations and two stream gauging stations, using digital data loggers, ran continuously throughout the year. Data from the main weather station continued to be electronically connected to the campus information network, making real time data downloads possible via the internet. The Lab also oversaw the operation and data transmission from the 50-meter meteorological monitoring (MET) tower that stands atop the Taconic Range on the western flank of Hopkins Forest.

During the fall 2007, contractors were hired to move the instrumentation in the main weather station to a more central position in the 3-acre field. A crew of excavators and electricians transferred the wind tower, weather gauges, equipment shed and corresponding wiring and conduit approximately twenty meters to the west. Now there is no longer any threat of interference with the wind and other atmospheric readings by the trees that surround the station.

In late July and early August of 2008, the weirs along the South Branch and Main Stem of Birch Brook were dredged and the sediment load weighed by HMF and lab personnel and volunteers. The sediment load removed from the South Branch weir was significantly higher than the past few years. David Roth '11 and Brian Bistolfo '09 were employed by CES to assist Jay Racela in running the lab during the past summer.

#### Breeding Bird Point Surveys

During June 2008, Drew surveyed the 44 points that were established throughout the Forest in 2001 to monitor breeding bird populations. There was a decline from the previous two years in the number of individual birds 441 and number of species (47) counted. This year the ovenbird overtook the red-eyed vireo as the most abundant species; they were followed by the veery, American redstart and chestnut sided-warbler (Table III). These points will continue to be surveyed on an annual basis.

**TABLE III.** Most abundant species on HMF point counts, 2008.

<u>Rank</u>	<u>Species</u>	<u>Total</u>
1	Ovenbird	83
2	Red-eyed Vireo	74
3	Veery	39
4	American Redstart	27
5	Chestnut-sided Warbler	17
6	Hermit Thrush	16
7	Wood Thrush	15
8	American Robin	12
9	Eastern Wood-pewee	11
10	Black-throated Blue Warbler	10
11	Black-throated Green Warbler	10
12	Least Flycatcher	9
13	Scarlet Tanager	8
14	Song Sparrow	8

#### **Rare Species**

The population of crooked-stem asters (*Symphiotrichum prenanthoides*) along the Hoosic River Trail was surveyed for the third year. No other rare plant monitoring was conducted during this period.

Other rare species that have been monitored in the past include:

- Wild Ginseng (*Panax quincifolia*)
- Glade fern (*Diplazium pycnocarpon*)
- Appalachian Brook Crayfish (*Cambarus bartonii*) – since de-listed
- Spring Salamander (*Gyrinophilus porphyriticus*) – since de-listed
- Wood turtle (*Glyptemys insculpta*)

#### **Information Management**

Chris Warren of the Office of Informational Technology (OIT) continued to work with HMF researchers to improve the accessibility of HMF data via the internet. Both long-term vegetation and meteorologic data can be accessed via the web; the weather data can be viewed in real time. Todd Gould of OIT continued to provide network system support at the Rosenberg Center.

#### **EDUCATION and OUTREACH**

##### **Classes**

During the fall semester, BIOL/ENVI 203—*Ecology* (Morales) and BIOL 225—*Natural History of the Berkshires* (Art) held several lab sessions at the Forest. The spring saw some use of the Forest by classes including BIOL 302/ENVI 312--*Communities and Ecosystems* (David Smith), ENVI 102--*Introduction to Environmental Science* (Thoman) and BIOL 102--*The Organism*. The Forest also hosted

field trips and lab sessions by classes from Massachusetts College of Liberal Arts and Berkshire Community College. These colleges took part in field activities ranging from saw-whet owl banding, to wood turtle tracking to amphibian/vernal pool monitoring (Appendix I).

## **Public Outreach**

### Community Events

Once again HMF hosted several events for the public and college communities. Events were generally well attended and well received by visitors. The following events were held the past year:

- **Fall Festival**—The Fall Festival was held on Sunday, September 23<sup>rd</sup> and, on a pleasant afternoon, drew 240 visitors. Traditional forest and harvest activities—beam hewing, shake-splitting, cross-cut sawing, apple butter and cider production, canopy walkway visits and live fiddle music--were featured.
- **Fall Family Days**--This was the eighth year that events were planned for the fall family weekend with a guided trail hike held on Saturday, October 28th.
- **Animal Tracking Workshop with Vince Walsh**—was conducted on Saturday January 19<sup>th</sup>, 2008. This program was capped at 20 participants, mostly Williams students.
- **Vernal Pool Workshop with Elizabeth Colburn**—Hopkins Forest hosted an afternoon workshop on February 29<sup>th</sup> 2008. Betsy Colburn, Research Associate at Harvard Forest, conducted the program, which drew approximately 30 participants.
- **Maple Festival**— “Maplefest” was celebrated on Saturday, March 8<sup>th</sup> and drew a good crowd of 200 on a seasonable late winter afternoon. People came to see sugaring exhibits and demonstrations and to taste HMF produced syrup served over pancakes and 'on snow'.
- **Spring Family Days**—This annual event was held on April 26<sup>th</sup>. An afternoon hike attracted a number of participants.
- **Wildflower Walk** – with Hank Art was held on Saturday, May 3<sup>rd</sup>.
- **Alumni Day**—HMF again offered a variety of activities, including a bird walk, hikes, trips up the canopy walkway, and children’s activities, during this year’s Alumni Weekend (June 7<sup>th</sup>). As usual, a good crowd of approximately 150 took advantage of a pleasant spring day to partake of the activities; the Taconic Crest Trail hike, however, was cancelled due to a lack of interest.

### Berkshire Science Camp

A weekly after school science camp was run out of Hopkins Forest in during the school year of 2007-08. This camp was run by Steven Stroud of Pine Cobble School who used the facilities and grounds for his weekly sessions, each on a different natural history theme. It is unclear whether the Berkshire Science Camp will continue into the future as Mr. Stroud has left the area.

### Schools

School groups from Williamstown made several visits to the Forest for forest and aquatic based programs. Once again, participants from the Urban Scholars program visited HMF, this time for a canopy walkway program in July.

### Publicity

The local press published articles announcing the hunting season and community events in the Forest. In addition, the North Adams Transcript ran a story on the vernal pool study and WAMC—Northeast Public Radio also highlighted the study for a piece on its Mid-day Magazine program during the spring 2008.



## RECREATION

This year numerous hikers, horse-back riders, skiers, and nature observers took to the trails of the Forest in their recreational pursuits. During the winter, the HMF cross-country trails were groomed occasionally by Williams Facilities personnel and got some use by local skiers. Fortunately, the year was a quiet one insofar as trespassing and public use problems were concerned. We have been cooperating with enforcement officials from the New York Department of Forestry in an effort to reduce the incidences of trespass by all-terrain vehicles on the Taconic Crest Trail.

Once again, local Cartographer Pat Dunlavey was commissioned to update the map and produce a .pdf file of the document to be reproduced for the map/brochure. Printing of the updated map was slated for autumn 2008.

### Williams Outing Club

The Outing Club cabin accommodated hostellers regularly during 2007-08. The cabin was also used during *Maplefest* in March. The Outing Club lean-to was used sparingly by the Williams Community; use by unauthorized persons was not noted this year, although the remoteness of the facility prevents us from monitoring it closely. The low-ropes course also continued to be very popular, getting used by community and college members on approximately ten occasions.

### Hunting

Again in fall 2007, HMF hosted its annual special permit deer hunt during the Massachusetts shotgun season. As usual, no hunting was permitted in Vermont, New York or east of Northwest Hill Road, nor was archery hunting allowed. Eighty-three hunters, overwhelmingly from Massachusetts, harvested only three deer during the twelve day season according to our unofficial sign-in (Table IV). This success rate was the lowest in many seasons of hunting in HMF.

**TABLE IV.** Hunting effort and deer harvested at HMF since 1999.

Year	1999	2000	2001	2002	2003	2004	2005	2006	2007	Mean
Permits Issued	110	86	90	86	86	100	93	89	83	<b>91.4</b>
Total Deer Harvested	13	9	9	20	10	8	10	14	3	<b>10.7</b>
Success Rate (percent)	11.8	10.5	10.0	23.3	11.6	8.0	10.8	15.7	3.6	<b>11.7</b>

As in the past, the HMF hunting program was subsidized by the Forest's operating budget (Appendix I). We feel that this expense is necessary to maintain both the level of hunters and security needed to achieve our goals of managing the Forest's deer population in a safe and effective manner.

## MAPLE SUGARING

The spring of 2008 was a very good one in the sugarbush--with sap and finished syrup production well exceeding any of the preceding nine years. The totals of 2760 gallons of sap gathered and 58 gallons of bottled syrup both represent records for the HMF sugaring operation and more than doubled the totals of the previous year (Table V). A good run of "classic" sap producing weather was certainly a contributor to the bounty. Moreover, the trees appear to have fully recovered from the lingering effects of the forest tent caterpillar outbreaks of 2005 and 2006. During the sugaring season, we again hosted the 'Maplefest' celebration, which attracted a good crowd.

**TABLE V.** Summary of 2008 sugaring activities and departure from previous years.

Parameter	2008 Season	Percent Difference from 2000-07 mean
Trees tapped (taps used)	125*	-3.5
Tapping Period (days)	43	8.9
Tap Nights	5235	6.9
Gallons of Sap	2760	48.1
Days (sessions) Boiled	12	15.7
Hours (boiling)	116.5	34.2
Gallons Syrup (approx.)		
Raw Syrup Drawn Off	63	66.1
Finished Syrup	58	

*\*Most figures are approximate*

## **FACILITIES/MANAGEMENT**

### Wire Bridge Farm

Joel Burrington of Pownal, VT continued to cultivate corn and hay on the Wire Bridge Farm parcel. He did some minor work on the road in the spring to enable continuing easy access to the site.

### Timber Management--Vermont Parcel

No management activities were conducted on the Vermont parcel that we enrolled in the Vermont Use Value Appraisal Program in 2004. That parcel is due for some silvicultural improvement in the next few years as set out in its management plan.

### Weather Station Field

During 2007-08 the expanded three-plus-acre weather station field was mowed once and monitored. In addition to moving the core of the weather station several meters to the west, the remainder of the field was surveyed into 20x20 meter plots. These plots were marked at each corner by re-bar stakes, with aluminum caps. In May 2008, the Hopkins Forest Committee agreed to a plan for releasing a set of randomized plots every 5 years to monitor successional trends. This plan was revisited later in the summer, however, and as of the onset of fall, no final plan had been set; these discussions will doubtless continue into the coming fiscal year.

### Permanent Plots

During the summer 2008, student workers finished painting the final two cruise-lines (0 and 1), virtually completing the task of re-blazing the entire grid of 400 permanent vegetation plots that was begun in 2005.

### Rosenburg Center/Moon Barn

The Rosenburg Center was again used for classes, lab set-ups, public events, workshops, and as an exhibit space for visitors. The information technology network, including the two year-old 'WiFi' installation, generally functioned well; the Williams Information Technology Department helped troubleshoot minor problems and outages. Once again, the Moon Barn was used for public exhibit space only for special events such as the annual Fall Festival. Due to an increased demand for storage space, we have had to use this historic building primarily for storage the past few years.

### Entry Kiosk

In spring 2008 the Williams Carpentry Shop installed a new tri-paneled main kiosk to replace the aging one across from the Rosenburg Center. In addition to a mounted map box, the new version features space to post temporary notices as well as a white board to enable forest users to leave temporary messages. The design and lettering of the new kiosk was done by Williams College students.

### Canopy Walkway

This past year the canopy walkway was open for public visitation several times, although rainy weather curtailed its use somewhat. Several community groups, in addition to Williams programs, used the facility, which passed its annual safety inspection in the spring.

### Roads/Trails

This past year we continued to monitor soil and botanical resources along the Hoosic River Trail as part of a conditional agreement that permits horseback riding on that trail. Nine transects along the trail were surveyed—through quantitative measurements and photography—for the fourth year to detect possible soil erosion. In addition, we sampled six, one square meter plots along the trail to monitor a population of crooked-stemmed aster (*Symphiotrichum prenanthoides*). These plots will be surveyed again next year to detect possible impacts from increased traffic on the trail.

The Hoosic River Trail was the subject of some restoration work during summer 2008. Student workers, using local timbers and rock/gravel, worked to stabilize the southern end of the trail which had become eroded in the past few years.

Once again, the entry road to the Rosenburg Center was resurfaced in the spring of 2008 with funding from the Facilities Department.

### Bridges

The Middle Branch of Birch Brook lower bridge was slated for replacement in the fall of 2008. The required Request for Determination of Applicability was submitted and approved by the Williamstown Conservation Commission in July 2008. Planning is currently underway for the replacement of the North Branch upper bridge in 2009.

### **Caretaking**

As in the past, HMF relied on student caretakers for a major part of its maintenance, upkeep and outreach activities (Table VI). The fall and spring semesters had a regular crew of eight to ten students, each working about 3 to 6 hours per week under the leadership of head caretaker Henry Burton '08.

The fall crew kept busy preparing for and hosting the Fall Festival, keeping up with trail maintenance, and decommissioning the pitfall/drift-fence array for the amphibian study. In the spring, a major effort was the redeployment of this trap array as well as the maple sugaring campaign. The spring crew was also instrumental in hosting *Maplefest*.

**TABLE VI.** Student caretakers academic year 2007-08.

Liz Gleason '08	Adam Banasiak '08
Kim Taylor '08	Henry Burton '08
Ariel Heyman '08	Chip Knight '08
Ben Swimm '09	Caroline Goodbody '08
Rebecca Kane '10	Samantha Demby '09
Trevor Lynch '10	Daniel Gura '10
Jacob Levin '10	Daniel Walsh '11
Daniel Perez '10	

A summer caretaking crew consisting of Patrick Chaney '10 and Gabriel Nelson '09, with part-time help from Cullen Roberts '10, labored throughout the summer. The crew worked on many of the regular summer tasks—mowing, gardening, equipment maintenance, hosting programs, trail and water-bar maintenance—in addition to repainting the permanent plot cruise lines. In addition, Hopkins Forest hired Cullen Roberts '10 to work as a Regional Trail Steward along with students hired by the Williams Outing Club and Williamstown Rural Lands Foundation. This crew spent some time working on Hopkins Forest Trails as well those farther a field.

## MEETINGS/COORDINATION

### Affiliations

#### National Ecological Observatory Network (NEON):

In 2007-08 we continued to hold a seat on the NEON governing board and we are awaiting a decision on Hopkins Forest's candidacy to be a "gradient" site for the Northeast Region (with headquarters at Harvard Forest).

Taconic Crest Trail Consortium: This consortium--which works to promote sustainable recreational use of the 35 mile trail and coordinate its management and maintenance activities—met in June 2006 to discuss protection and security issues.

Hoosic River Watershed Association (HooRWA): HooRWA, and its Monitoring Director, Kelly Nolan, used the Rosenberg Center wet lab as its base for monitoring operations in 2007-08.

Bird Clubs: HMF continued to collaborate with North Berkshire Audubon on bird counts and bird walks. In addition, the Forest continued to be a destination for regional bird-watchers during the fall owl banding season.

### Conferences/Meetings

In March 2008, Drew attended the Annual Birders Meeting of the Massachusetts Audubon Society and participated in a session on the Northern Saw-whet Owl banding in the state.

## ADMINISTRATIVE

### HMF Users Committee

The Hopkins Forest Users Committee--charged with oversight of the management and planning activities for the Forest--is composed of College faculty, staff and students who have vested research or teaching interests in the Forest (Table VII). Under the direction of David Dethier, the committee met and corresponded occasionally to decide matters of forest management and policy.

**TABLE VII. HMF Users Committee--2007-08.**

Faculty	Department	Ex-officio	Affiliation
David Dethier, Chair	Geosciences	Doug Gollin	CES Director
Hank Art	Biology	Scott Lewis	WOC Director
Joan Edwards	Biology	Jay Racela	CES, Envi. Analysis Lab
David Smith	Biology	Drew Jones	HMF Manager
Manuel Morales	Biology		

### FUTURE --What is in store for 2008-09?

A major focus of the upcoming fiscal year will be to fashion the weather station field into a viable site for research and education with some sort of experimental design, perhaps focusing on early old-field succession. The Hopkins Forest Committee will need to meet to devise such a plan. We will also continue to work with Senior Staff to purchase the remainder of the Wire Bridge Farm, whose purchase and sale agreement expires in the summer 2009. Once this is completed, we will develop a plan to fully integrate this facility into our programs at Hopkins Forest.

**Appendix I – Non-Williams Institutional Users of HMF 2007-08.**

<b>Organization</b>	<b>Location</b>	<b>Department/Program</b>	<b>Type of Use</b>
Berkshire Community College	Pittsfield	Environmental Science	Vernal pools, owl banding, turtle tracking
Massachusetts College of Liberal Arts	North Adams	Environmental Science	Class field trips: vernal pools, owl banding, turtle tracking
Massachusetts College of Liberal Arts	North Adams	Biology	Class Field Trip
University of New Hampshire	Durham, NH	Biology	Stream Metabolism
Tufts University	Boston, MA	Biology	Carbon sequestration
Simon's Rock College of Bard	Great Barrington	Physics	Tree Research
Union College	Schenectady, NY	General	Owl Banding
Conway School of Landscape Design	Conway, MA	Graduate Program	Tours with Hank
Hoosic River Watershed Association	Williamstown	Monitoring	Monitoring lab
Williamstown Elementary School	Williamstown	Various grades	Outreach Programs
Urban Scholars	New York	Sponsored by Williams	Canopy Walkway
Clarksburg Elementary	Clarksburg	School Classes	Outreach Programs
Berkshire Science Camp	Williamstown	After School program	Weekly Theme
Williamstown Preschool	Williamstown	General	Outreach Program