

# **FYS Reading the Earth**

**Fall 2008**

## **Journals**



Photograph taken by Phoebe Camilletti



## **Acknowledgements**

The entries in this journal were written and compiled by members of the First-Year Seminar, Reading the Earth, in the fall of 2008. Students in this class came from California, Connecticut, the District of Columbia, Massachusetts, Nebraska, and New Jersey. Sometimes alone and sometimes together, they struck out across the Smith College campus, and explored the woods and hills of western Massachusetts, keeping thrice-weekly journals of what they saw, from the warm days of late summer to the snows of early December. These entries were chosen from among the best submitted by members of the group, and represent the range of places they visited and the variety of interests and styles of observation. In learning how and what to see we had the help of John Brady, Elizabeth Farnsworth, Nancy Rich, Madelaine Zadik, Laurie Sanders, Nanci Young, Martin Antonetti, Dano Weisbord, and Rocco Piccinino. Photographs were taken by Gabriela Acosta, Katy Butler, Phoebe Camilletti, Emily Fuller, and Sharon Seelig. Thanks for final editing are due to Clare Landefeld.

---Sharon Seelig

I didn't even notice the different noises until I listened to them. A constant hum of crickets and an ever-changing melody from various birds sound from above me. I was wondering where all the branches on the ground come from when I heard the snap of one dropping through the trees. That must be the squirrels. The wind sometimes rustles above me. I see it first on the opposite bank, see the leaves floating to rest in the river then hear it above me, then feel it.

The opposite bank looks imposing, impossible to pass through. Layers of leaves cover huge mounds taller than I. There are long stringy branches with no leaves hanging from a place unseen. As I look across, my eyes focus on a single strand of cobweb stretching from the ground up out of view. How does it stretch so far? And form overnight? As I sit, I hear numerous things drop around me. I look up and in the high branches a squirrel jumps from branch to branch. A piece of acorn hits my notebook.

I wouldn't guess the river is actually moving at a constant pace downstream except the leaves resting on it float together as if connected. I see a series of bubbles disturb the glass surface. A fish?

The water seems like a black mirror. The bird flying along in front of the trees looks so small! One tree tilts over the bank. Its trunk is completely straight and bare; it just leans over the water. The two images put together create a crossbow:



Did I not notice it before or have more leaves actually started to fall? Some leaves are actually red! The grayness of the day adds to its mystique. There are leaves with seven parts and some with none:



I wonder if the river is ever invisible because so many leaves rest on it? One whole cluster of leaves landed in my hood!

On the way back I see a great tree with delicate leaves overhanging the water. The leaves are tear-shaped but long, graceful and elegant. I was struck at first because at least half the leaves are already pink. The pink fits the delicate shape of the leaves perfectly!

*Sept. 14, 2008, 1:08 PM – Alumnae House Garden*

*EF*

It rained last night. The grass is wet and the air smells clean. The wind and rain has caused more leaves to fall from the trees and the moisture has drawn out the mosquitoes, who circle anxiously in the air around my skin and buzz at such a frequency that I hear them only when they come too close to my ear. In the garden, droplets of water remain on the flowers and leaves, forming small, perfect circles on the plants' slick surfaces. On one white flower, the beads of moisture appear iridescent, a trick caused by the crystal clear water's rounded shape over the pristine white petals. More drops of water cling to the bottom of the flower, whose delicate head bows with the weight. They look as if they could drop off at any moment, but in fact remain quite still, suspended somehow from the flower's underside in a gravity-defying feat. The plants are for the most part green and alive, well-fed by last night's rain and basking in the hazy sun (it's a cloudy afternoon, but the air is warm). The soil beneath them is wet still; it is dark, rich brown and earthy smelling. I myself want to plant my feet in it, feel the dampness of its rocks and stick and dirt between my toes and be nourished through my roots by it.

*Sept. 15, 2008, 8:05AM– At the Botanic Gardens*

*BP*

A wind came up some time during the night, mild now, but hinting at fall. The fog, the clouds of yesterday, are gone- the sky is pure blue and the sun warm. At an outcropping of the rock garden I sit in the still-wet grass. In front of me, small black signs with white lettering tell me the names of the strange little plants that creep over and under the moss-laden stones.

Some, such as the 'Greystone Gold' by my knee, are still blooming; others, like the bluets beyond them, already seem to be fading for the year. Most- the tiny mosses and lichens and grass-like plants that are unnamed on the rocks- do not flower at all, that I can see. Plants in a rock garden, the informational sign at the end of the path tells me, are fragile and low-growing,

suiting to the harsh and of course rocky alpine and tundra environments. These are plants such as I have never seen before, plants with stiff, serrated leaves; with tiny star-like clusters around their stems; branches and needles that look just like miniature fir trees; pinkish leaves fat and sticky with stored water; pointed silvery leaves arranged in perfect spirals around their stem; cactuses that seemed normal in every way except for an odd lack of spines, having only pale knobs in their place; even grass from Japan that has perfectly black leaves (how does such a plant, lacking green pigment, photosynthesize?).

Among the plants that I have never seen before I am surprised to spot two that are very familiar: the daffodil and the English Ivy. Are these tundra or alpine plants? I doubt it.

One of my favorite plants is the *sempervivum marmoratum*. It grows in clusters directly on the stone itself, among the mosses and lichens. The stiff leaves, no wider than my fingernail, if so wide as that, though still wider than they are tall, are pointed at the tips with strength enough to threaten my finger when I gently touch them. They are pale sage green, the larger leaves touched with pinkish-red at their tips and edges. The plants grow in circular formation around their centers, much like roses arrange their petals, opening up and out on the outer edges, and tightly pressed together in the center. Most are quite small, less than an inch across, but some that I can see across the path in the shadier areas exceed an inch by quite a bit. The larger ones have thicker, heavier leaves with more red on them. All of them, small or large, remind me of nothing so much as a clump of tiny artichokes resting on the stone. Tells me that they are commonly called houseleeks or hens-and-chicks, and are in Crassulaceae family; they are succulents from Europe and North Africa alpine, better able to resist frost than most succulents.

*Sept. 17, 2008, 8:20 PM – Sitting on the dock, feet dangling over Paradise Pond* *KB*

As my eyes adjust more and more to the darkness I can make out the trees on the island in the middle of Paradise Pond. On either side of the Island, vivid blue lights cast their mirror images onto the waters' surface. These artificial lights take away from the beauty of the stars in the sky. I can easily find the big dipper.



The big dipper is made up of the seven brightest stars of a constellation visible year round in the Northern Hemisphere, called Ursa Major. The big dipper rotates around the North Star every twenty four hours, and it can sometimes be perceived as upside down or “full of water”. Native Americans used to see this as the cause for the changing of the leaves in autumn. (<http://homepage.mac.com/kvmagruder/bcp/aster/general/dipper.htm>)

The water appears calm and steady – it is only by staring fixedly at a group of floating leaves that I can observe the slow, gentle motion of the current. Everything is mirrored in the lake – the beauty of the landscape doubles.

Light catches on a small strand of a spiders’ web – as I follow the string with my eyes I can barely make out the intricate knots, connections and circular shapes that make up the web. Even in the darkness of the navy sky, laced with sparse stars, it remains a stunning creation.

*Sept. 18, 2008, 11:39 AM – In front of the Tea Hut, overlooking “Paradise Pond”*      *OG*

Granite boulders lead down to the glistening pond. They are speckled with black and gray, and one boulder has green blended into the solid stone. Crystals, sparkling as the sun hits them, are also embedded in the granite. The rock’s color originates from many different minerals. The granite boulders were formed underneath the earth’s surface by slowly cooling magma. Crystals in the granite indicate that the rock cooled gradually over a long period of time, therefore the more crystals in the rock, the longer the granite slab has existed (Amethyst Galleries, Rock—Granite). These granite rocks are most likely one or two hundred years old because the crystals are not completely covering the rocks. Since granite boulders are resistant to all seasons they will never deteriorate or lose their color.

The shallow end of the pond is still, and the ground is caked with mud. The sun is directly shining on the window of water that I look through. There are twigs decomposing under the water and there are currently no fish swimming in this region that is heated intensely by the sun. There is a bush with wild red and yellow berries, small, smooth leaves, woody stems and long, slim thorns sticking out from around the berries. This bush could either be an elderberry, a winterberry holly, or a huckleberry bush, for they all have small, round fruit. Dried up brown leaves have fallen and lie crumpled on the surface of the boulders. They are scattered and clumped beneath a Goldenrod weed that is bent, heavy from the yellow pollen that is bunched together. The bumblebees, fuzzy on their yellow part, and sleek and shiny on their black tail,

collect the pollen that is as fine as dust. I observe how the yellow pollen is collected into balls on the bumblebee's legs. There are stumps of wood straight in a row that have been staked into the soil so boats may anchor there.

When the sun shines upon the leaves, which reach up towards the sky, they become translucent. The leaves are lit up, warmed by the sun, and through a leaf I can see the shadow of another leaf nestling on the leaf's back. The veins on the large leaves by the pond are like the cracks in dry mud. The wind is not so strong today, so the leaves on the bushes that surround the pond are not flapping around wildly, but instead drift in the rhythmic power of the wind. A sycamore tree has a white and gray trunk that is smooth, except for patches of scaly bark. The wing of the tree—a long tree branch-- extends horizontally over the edge of the pond. The ripples of the water are reflected on the stretched out branch. The movement of the water is so peaceful, as its reflection sweeps up the surface of the branch, fluttering up the tree. The water is also reflected in the tree's leaves—bouncing off with short, glimmering light. It seems like each leaf has its own entity of sparkling, electrical light.

*Sept. 19, 2008, 1:30 PM – Mill River Trail*

*CL*

As I walked off the main trail onto a more secluded path, I knew my current path did not have as much pedestrian traffic when I felt the lines of a spider web crisscross my face.

At first glance, everything seems still, even the water. There is little wind, noticeably less than last week, so that the environment's overall movement appears minimal. Of course, as I have noticed on many of my observations, the area is not still at all. Curiously, the leaves suspended on the water appear to be moving in one large circle. I watch the movement carefully, wondering how the same river can flow two different directions. But I watch the leaves move backwards then forwards – the movement ironically demonstrates the overall stillness of the water. The lack of current allows the wind to influence the movement of the water: the wind blows the water close to shore upstream and when the water reaches the stronger current in the center of the river, it flows back downstream. This pattern occurs because the slight curve of the river bank – the water that started out close to shore, if it follows a straight path, ends up catching the current.

A moderate wind gathers strength and blows down the river. The leaves start to flow much faster – I never realized how much the wind affects the river.

I can see the river bottom clearly and I realize once again there is more movement than meets the eye! Odd creatures swim around the bottom. They seem to have a central head or body and a long tail or fin:



They swim along quickly near the bottom then they suddenly stop and lay on the bottom. These are algae-eating tadpoles.<sup>1</sup> They are remarkable because their mouth, beak-like and surrounded by many tiny teeth, has to change completely during tadpole metamorphosis.<sup>1</sup> The tadpole sticks its mouth on the riverbed and cleans the surface of algae (these are the sudden stops I notice).<sup>1</sup>

I have been sitting here, studying the fish for quite some time, evidently very still when the most amazing thing happens! I am sitting on a log buried in sand and jutting out over a ledge, underneath which is a small dark cavernous space. I look down and from behind my foot, centimeters from my skin, slithers a SNAKE! About a foot and a half long, it is black with yellow stripes across its back marking it as a common Garter snake. It is slowly making its way, silently, to the nearby hedge. It has not noticed me until I lean slightly forward to get a closer look. It immediately races away leaving a small ridge of sand displaced by its quick movement – the only evidence it was ever there.

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<sup>1</sup> Beltz, Ellin. Frogs Inside their Remarkable World. Buffalo, New York: Firefly Books, 2005. p65

*Sept. 22, 2008 – Fieldtrip along the Mill River with Elizabeth Farnsworth*



*Sept. 25, 2008, 5:30 PM – The trail left of the bridge and near the gym*

*OG*

The sky is mostly gray, and in some areas, light blue. The sky looks like it will rain. I walk past the human-made waterfall, and to the left before the bridge, I follow a path that has trees on the right and rocks that have been stacked on my left-hand side. Once I have walked through the trees, I reach the stream. White foam that has fallen from the waterfall sweeps along the current of the river. Tree branches hang over the stream, caving around the flowing water. Bunches of jewel weed line the stream, for they prefer growing in moist surroundings. Their stems are full of juice that is said to protect against a poison ivy rash. There is a steeper slope across the stream, where an oak tree's roots are right near the water, showing their roots to the outside world, uncovered from the earth. A piece of a cherry tree's trunk lies on the edge of the stream in the water. I can tell it is a cherry because its remaining bark is horizontally striped,

with an orange undertone beneath. The majority of the bark must have striped off gradually, and floated down the stream.

I see birds hopping under bushes and hear their feathers brush against the leaves. I hear leaves crashing and branches crackling up above. I look up to see squirrels leaping from one branch to another. Leaves drop, rustling through the trees and then fall to the ground. Some crickets in the grass sing tunes that are higher and lower than others. Crickets in the same area tend to have a slow rhythm, beating at the same time. Leaves slowly slide side to side in the air, like a salsa dancer's hips swaying from one side to the other, and settle on the surface of the water. Water spiders glide on the water, creating rippling spirals. They are able to float on the water because the water has high surface tension due to water molecules bonding together. There are bright red leaves on the top of a maple tree. Wind blows from behind me. A tree leaning vertical on a bank has yellow and brown leaves that drop in to the water. The yellow daisies beside me no longer have petals; they all have dropped off, leaving behind only brown heads.

The next day at 1:55 pm I go to the same spot to observe how the rainfall from the past two days has changed and affected the stream. The stream's current is hurrying much faster, the ripples circle and the surface is choppy with waves. The tree branches hanging over the stream are closer to the water because the level of the stream has risen. The leaves on the ground have become damp instead of crisp. The air is humid, for moisture is evaporating off the earth as the sun hits or warms its surface. The once visible roots of the trees are now covered with water. The bushes are low, because the branches have absorbed the rain, thus weighing down the plant. The bark of the trees is dark, soaked with water. As a breeze passes by, I can smell the wet earth, the foliage, the rotting biomass, for the moisture in the air intensifies the earth's rich smell.

*Sept.28, 2008, 3:00 PM – Throughout the Smith Campus*

*CL*

Today I have with me the Manual of the Trees of North America by Charles Sargent and I am going to try to identify some of the trees around the campus. I often walk past these trees marveling at their size and beauty but I never really observe anything about them, especially any details that could help me determine their identity and properties.

Walking back from the Science Quad, I pass through the line of Oak trees in front of Neilson library. Most of these Oak trees do not have branches near the ground – they shoot

straight up and then branch out. However, towards the end of the path, I notice one Oak whose trunk immediately splits into many different trunks. Perhaps this growth is due to an increase in space the tree has – it does can shoot out and still have access to sunlight.

Two trees outside of Wright Hall have similar properties: both have some red leaves already and both types of leaves have five main wings. I find a leaf of each of the trees and start to compare them. The main difference I notice is the larger leaf has more serrated edges whereas the smaller leaf's edges are smooth and continuous. The smaller leaf also feels thicker and oilier than the larger, and, possibly due to different rates of color change, the smaller leaf's stem is red while the larger leaf's stem remains green. I consult the manual, and I am fairly convinced the smaller leaf is a sugar maple. There are three different types of sugar maples and I cannot tell which specific type this tree is, but the smooth edges and number and description of the "lobes" (the wings) matches up. The other leaf looks like a Red maple due to the serrated edges of the lobes. Checking the labels on the trees confirms my deductions; the larger leaf is a Red Maple and the smaller leaf is a Sugar Maple.

I make my way down to the Mill River and, on my way, pass many more Maple trees. A particular Sugar Maple just past Wesley House is a bright red against a backdrop of green and brown. As I walk down the Mill River path, I am struck by the size difference between the trees here and the trees in the various quads on campus. The trees here are just as tall, but because they are crowded in with many other trees and shrubs, they do not grow wide as much.

I take out the manual to identify a particular tree whose leaves have not started to change. This tree caught my eye because the leaves seemed different from what I think of as "tree leaves," leaves with multiple lobes. This leaf has no lobes, but it has many tiny points pointing in parallel directions. This leaf looks much more orderly than the leaves of the maples, sycamores or oaks. Its veins run straight from the stem to the center of each little point on the edge of the leaf, forming parallel lines along the surface. I think this leaf belongs to a Beech tree, because the description in the manual fits what I observe.<sup>2</sup> Also, the bark of the tree resembles what I used to start fires on my backpacking trip. However, it also resembles an Elm tree, either a White Elm or a Red Elm.<sup>2</sup> Both types of trees have leaves with parallel lines and multiple tiny points along the edge.<sup>2</sup> This time, there is no label to tell me what the correct answer is!

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<sup>2</sup> Sargent, Charles. Manual of the Trees of North America. New York: Dover Publications, 1965.

Walking around, my eye immediately recognizes a red maple, which is becoming increasingly easy to identify. The leaves are in mid transition into the beautiful blazing red leaves. As our reading had mentioned, the last part of its leaves to change was the area around the veins. (See image, top left) I now see how different plants are from one another. Leaves in particular have always had a single shape in my mind, but I now notice just how unique each plant is. Later I noticed a flower with concave leaves as to cup rain water inside (see image, top center). The leaves are much rounder than that of the maple and a complete green color. The leaves have thick veins that connect, for the most part, at the base of the plant and then reach above the bright orange flower, which I could not identify further than within the buttercup family. Another interesting leaf shape that I found was that of an almost heart shape, with curly stems that lead to the branches of the tree ( see image, top right). The leaf was mid transition, turning a light yellow color, starting from the edges. Once I noticed this particular leaf I began to notice the same heart shape recurrent in the natural world. A very different leaf shape was seen on the ginkgo biloba (maiden hair tree) with its fan-shaped leaves(see image, bottom center). There are no obvious veins in this particular leaf, however there are very distinct lines leading into the center from the outside. This set of leaves grows out of the thin branches in clusters making it even more curious. Even more curious however is the Yuca Angustissima (See image, bottom left), which has very long, narrow leaf shape that appear almost sharp about a foot and a half in length. The plant has a thick mass in the middle and the leaves shoot in all directions similar to the rays of the sun. Finally one last leaf shape that I would like to mention is that of the Globe Amaranth. This purple flowered plant has long and thin leaves, however these leaves are different for their consistency. When I felt this leaf it had hair follicles that made the leaf fuzzy. The appearance of hair continued down the stem, making the plant seem spongy. All of the different leaf shape has made me wonder, does the shape have a particular purpose?



*Oct. 3, 2008, 10:00 AM – Wandering Northampton*

*GA*

One of the most interesting features of the trees that I notice while I am walking around Northampton is the details in the tree bark and how unique each tree really is. I adopted the Maidenhair tree, which is changing but very slightly however my focus this particular visit was not on the fan shaped leaves, but on the bark. When I touched the bark it was very rough and hard. The bark grows on the outside in a knotted pattern as shown in the image on the top left. It looks like snakes, crawling all over the tree. However, the tree is not completely covered by the same pattern. As I look further up on the tree the bark sections itself in much thicker pieces, appearing to weave less and lie flat. What a curious feature of this tree! Why would the bark change depending on the distance from the ground? The trunk of the tree also has several places in which it seems to fold into itself as if creating a nook. Within these nooks live several bugs. It seemed like a prime spot for the spiders to weave their webs. Surrounding some of the nooks appears to be moss. It may be several kinds because it is of many shades as shown in the top, center image. The moss closer to the ground is a deep forest green, as it leads up the bark it turns a brighter green and within the moist nook it is almost a moldy blue tone. Other trees have completely different looks to them such as the spectacular red wood. It has thin diagonal thin lines, adding to the grandeur of the tall tree. From the name one notes the distinct red tone of the redwood. Its bark appears to be long, thin hairs falling down the tree. This bark is less rough than the last, and much splinterier. Rather than have a single circumference, the trunk appears to be several tubes of wood grown together as one almost like pipes. On the branches, the red tone is

hidden behind a brown bark, but it still shows through where the bark is less thick. One of my favorite trees is the London Plane tree ( see image, bottom left). I think its grey tones are a beautiful feature of this tree. The bark on this tree is peels in a pattern of different grey shades. The deeper grey slowly peels off in layers, revealing its multi tonal wood from grey to white, but the wood has a surprising honey tone underneath. Another interesting tree with great history is the Paperbark Maple, which has a thin trunk, with a smooth texture. The bark is thin and peels off in ringlets. The bark is paper-thin and quite soft. The indigenous people living in this particular area used to use this bark as paper (giving it its name).



*Oct. 3, 2008, 12:43 PM- at the marsh behind the Rail-trail (can't remember the name). Cloudy and cool today.* *BP*

Beneath the ever-present rumble of cars and a circling airplane, I hear the constantly varying song of dozens of red-winged blackbirds marking their territories from the tops of reeds.

All around me cattails rustle dryly with the cool autumn breeze. Most of the cattails, and the various grasses and weeds that grow among them, are brown and curling at the top, a sign of the lateness of the year, I suppose, unless it's a sign of the unhealthiness of the plants- the water here is oily and stained with rust. Crickets sing quietly and now and then I hear some sharp peeps from a mysterious bird that I can never quite locate. Is there more than one, or does the sound just travel oddly in the five-foot grasses?

The cattail heads are mostly seeded, losing the shreds of cottony white fluff that my sister and I used to collect in winter from our childhood pond. I remember it always clung to our mittens, and from there to our noses and mouths and eyes; but forgetting this, we would be back to collect more every year, loving the silky texture.

The trees on this section of the rail-trail have turned color earlier than the Mill River trees. Most are more than half-way turned, and some are completely red-orange or yellow, their upper branches stripping bare. The majority of the trees I can see are maples, all more or less the same young age, with a few still green oaks, of about the same age as the maples growing within. Perhaps the area was cleared during a mast year for the maple? All of the oaks are growing in the same area, so maybe an oak was growing there when they cleared the area.

*Oct. 4, 2008, 1:20 PM – Harvard Forest*

*WP*

The forest is a fascinating place, demonstrating many of the things we've been learning about, such as forest succession. Trees here demonstrate how different species grow in different areas. Fire damage, lightning strikes, blights, fungi, the multi-branched pines eaten by the pine weevil – all are in evidence. Stone walls criss-cross the landscape. In one place, young hardwoods, the same size and age, mark where until recently a pasture was kept mown. Next to it, large pines show an earlier return to forest, though even this area was clear-cut at one point.

Along the trail the forest changes from dark stands of pine and old maples and oaks, where only a few smaller trees and plants can grow, to areas where the ground is invisible beneath enthusiastic growths of plants and seedlings, where the sunlight dapples the leaves. Conifers are rare here, and those that do occur are young, white pine and hemlock. The white pine has long soft needles, each with a single white line down the center. Hemlock has smaller stiffer needles of a dark green.

The poison ivy that climbs the larger beeches and oaks has turned a lovely yellow. Many of the trees are turning as well, particularly the maples. Along with the red maples and sugar maples, I see another kind, that doesn't grow at Smith: the small striped maple, or moosewood, with its huge leaves. They are delicate and almost silky soft, a pale glowing green.

If I listen rather than look, I hear leaves rustling, an occasional bird, but mostly the forest is relatively silent. There is never complete silence, for even if the air is still, leaves fall with a delicate sound like raindrops.

In most areas, ferns dominate the undergrowth, but where the sunlight is scarce and the ground damp a moss covers the ground with soft greenery. I'm pretty sure it's sphagnum moss. The ground itself is lumpy, dips formed where trees have fallen, tearing their roots from the earth, while their trunks and branches are covered with dirt and moss to form rounded lumps. Rocks abound as well, grey mossy stones half-buried in the earth, except for those areas that were once plowed.

Hardwoods will sprout from the old stumps, forming multi-trunked saplings. As they get older they compete for sunlight and space and eventually only the strongest one or two is left. Conifers, though, must reseed. The old stumps decay, providing rich beds of nutrients for the seedling to grow on.

*Oct. 9, 2008, 11:24 AM – State St. to the Barrett St. Marsh*

*KB*

I am on State St, exploring a part of Northampton I have never seen before. The trees are so striking, the color contrasts are amazing. I found a maple that has shed so many leaves it has left a blanket of pastel yellows, oranges and pinks, concealing the green lawn. The colors remind me of rainbow sherbert, or the colors of crayons I would pick to draw a magnificent sunset. I have never seen so many leaves.

The walk is longer than I expected. I've found some more Common heart-leaved aster, it's like when you learn something new in class and suddenly you hear about it in the news, on the radio, and then catch a glimpse of it on TV. I'm now seeing it everywhere, and it is so easy to recognize.

The marsh looks just like the swampy area behind my grandparents' house in Connecticut. The path is lined with tall skinny trees, many white birches, and several varieties of fern.

I found the boardwalk! Wow, it leads to a breathtaking view. I am surrounded by beautifully colored trees, tall grasses and cattails. I can't believe just a few minutes ago I was behind a commercial strip mall and now I am standing in the middle of a marsh. One plant has leaves that are spotted with little water droplets that look like little sparkling jewels. It is amazing that the leaves stay steady enough so they don't roll off onto the boardwalk. They reflect the bright, clear blue sky, and hold within them history of a light rain.

As I walk down the boardwalk, I hear a symphony of bird calls, and I catch glimpses of their features as they fly by. They seem to be mostly medium sized birds with dark bodies and small orange patches. The field guide identifies these as either Redstarts or Blackburnian Warblers.



Redstart

[auvergnelife.blogspot.com/2008\\_03\\_01\\_archive.html](http://auvergnelife.blogspot.com/2008_03_01_archive.html)



Blackburnian Warbler

[stokesbirdingblog.blogspot.com/2007\\_05\\_01\\_arc...](http://stokesbirdingblog.blogspot.com/2007_05_01_arc...)

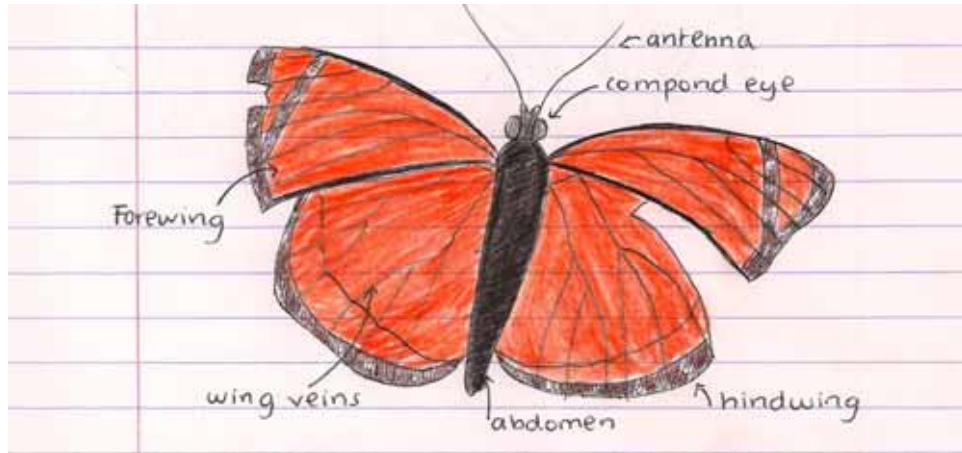
I'm not sure either is correct, the bird was really much darker, but it was too far away to tell for sure.

A monarch has just flown by, and landed on a nearby plant! I am so happy to see something I can recognize right away, something I am accustomed to from home. The butterfly remains still, only fluttering its wings momentarily as if posing for my camera.



It is about two inches wide, with the characteristic black and orange patterns along its wings. The tips are brown with small, organized white spots, although it seems to have lost a bit of its forewing on the left side, and a portion of its hindwing on the right side. When I attempt to look up an explanation, I get millions of links for a current pop song called “Wings of a butterfly”. Carefully research on their lifecycles proves more rewarding. Monarch eggs are laid on milkweed and turn into caterpillars that eat the leaves of the milkweed. The caterpillar then forms its chrysalis which is typically green with gold speckles, and in about 14 days it comes out as a monarch who can live for up to nine months. The butterflies migrate in cold weather, and return to the north in the spring, hatching more eggs on the milkweed.

(<http://www.thewildones.org/Animals/monarch.html>). I am mesmerized by the butterfly, and stand watching it until it flies away.



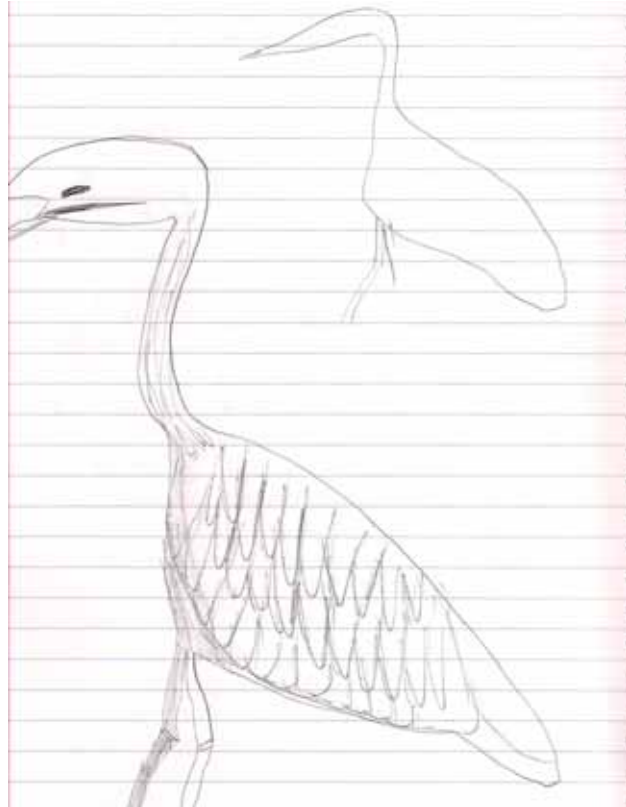
*Oct. 12, 2008, 12:07 PM – Small pond outside the plant house*

*KB*

The campus is quiet as I walk home from brunch during October break. I see a friend taking pictures by the small enclosed pond outside the plant house. I stop to see what she is photographing, and there, across the pond from the statue of a heron, is a heron (a real one this time). I stand mesmerized at how close I am to the bird. I don't even need a guide to identify it, it looks just like the statue.



I stood watching the bird for over 20 minutes. People walked by and I would point it out each time. It barely moved the whole time I was there. There was once when it poked its' head forwards and I thought it was going to lunge for a fish, but it quickly retracted its' neck. I eventually walked away, leaving the heron in the exact same position in which I had first seen it.



*Oct 12, 2008, 5:30 PM – Long rail, Vermont*

*WP*

We walked through a few areas where orchards had once grown. The trail is more open there, the sun shining down, and apple tree laden with large spotted apples grow among the grass. Lots of beeches, too, as they love the sunlight, and a few cherries. The ground, so liberally covered with rocks elsewhere, is smoother here.

On one hilltop, as we sat on the rocks, I saw a small bird, almost perfectly round, its feathers smooth grey but for the white of its belly, as though it had been dipped in vanilla ice cream. Its beak was bright yellow. A blue jay calls from the bushes, but mostly the forest is silent. Our feet rustling in the leaves is the loudest sound.

We stop by a pond formed by a beaver dam, walk out onto logs and crouch by the water, eyeing small spotted salamanders and even smaller fish. The salamanders are cool and moist and one sits easily in my hand, but then suddenly jumps off, into the water, where it hangs, head down, tail waving lazily back and forth. Something swims past, perhaps a tadpole despite the season. It's not spotted like the salamanders. Many of the trees around here were girdled by the beavers, some of them used for the dam and others left to fall and rot away. I wonder if the beavers still live there. The pond is large and lovely, sparkling in the sunlight; it is amazing that we didn't see it until we were only a few feet away, even though we knew it was there.

*Oct. 16, 2008, 12:20 PM – Trail past Quad*

*OG*

When I first start down the trail, I notice the abundant amount of yellow, red and orange birch, aspen, maple, sycamore and oak leaves layering the ground like a thick blanket. As I walk further, the path is coated with dry white pine needles. The atmosphere is moist, chilly, and humid; there is a light hazy fog. It is drizzling. I come across two great white pines. I estimate the largest trunk's circumference to be about 9 feet. Among their roots there are small openings, and pine needles stuffed in the holes, suggesting that squirrels or chipmunks have furrowed inside the hollow part of the tree and have made nests. A bush below the pines has collected pine needles that had fallen on its small, delicate branches. This demonstrates the intertwined relationship nature exemplifies with its components. The rain begins to pour. Luckily, I have brought an umbrella and that the canopies of the trees block most of the rain.

A fallen tree trunk partially hangs over the river. The base of the trunk lies next to the trail, but there are no visible roots, for the roots have fused with the soil and moss. The part of the trunk that is touching the earth is halfway embedded in the soil. Its bark has peeled, revealing its soft, wet epidermis. I look underneath the pile of biomass and moss, which is supported by the tree's root structure, and see small dark holes. Aligning the tunnels, there are tan colored mushrooms with long stalks.

I intently observe a large dying tree with only a few small, red leaves that are left on its canopy. The size of the remaining leaves, seem too small for such a large tree. This possibly could be due to the tree's lack of nutrients. A slice down its trunk reveals that it is hollow in the inside. Tiny holes are in its bark, possibly from termites or woodpeckers. The top branches are charcoal black and the largest branch looks as if it was struck by lightning for its edges are jagged

and its bark splintered. On the largest branch that goes straight up, there are dark brown planar mushrooms lying on top of one another, stacked like pancakes.

*Oct. 18, 2008, 11:00 AM – Under the weeping birch outside Haven House*

*AK*

There is an Ethernet cord wrapped around the trunk and one of the branches and an Arizona Iced Tea bottle sitting on the ground. Those two things really hurt the sheltered, amazing, beautiful feel this place is capable of holding.

There are so many names and shapes carved into the trunk; mostly initials, or a name, with a date next to it. Assumedly this is the year the person graduated. There is a heart with “08” in it along with nine names. There are also some initials in pairs with hearts, presumably put there by couples.

When the wind blows, the entire hanging wall behind me waves, but the one in front of me stays still. It’s odd being in a structure so directly affected by the wind and the direction it is blowing, yet feeling so separate from the wind because I feel like I’m “inside”.

The branches come down from the tree towards the ground. The ones that come down inside the wall of leaves snake along the floor of this little shelter. They look more like roots than branches.

A lot of the branches have little twigs on them with bits sticking off that look like thorns from far away. When close up I can see they’re actually buds.

*Oct. 24, 2008, 2:15 PM – Elwell Island*

*CL*

Leaves of the Silver Maple covered the rail trail immediately in front of the bridge. Although these leaves share a similar shape to those of other maples, the silver maple’s leaves have deep sinuses creating five distinct lobes. In addition, unlike the brilliant reds of the sugar and red maples, the silver maple’s leaves are yellow, and some remain mostly green.

Walking over the railroad bridge to Elwell Island, we first crossed a small diversion of the Connecticut River. Recently, in this break off of the river, a log got stuck at the leg of the bridge and sediment began to build up. When I first began crew two months ago, we went out on the dock immediately downstream of the stopped log. The island was just popping above the water; it was more of a sandbar. Now a large portion of the sandbar was above water. I would

predict that island will soon reach its peak size; as the river gets narrower (with both this brand new land and Elwell Island closing in) the water flows faster and with more force, taking sediment and possibly the log with it. The water to the left of the small island is shallow; I could see the yellow outlines of leaves on the bottom. However, the right side is deeper and the current is stronger, less sediment will build up there.

My first impression of the island was that it was fairly dry. However, I think it seemed dry because the trees and shrubs had already lost their leaves and all that was left were the various browns and beiges of the trunks. According to Laurie Sander's *Rediscovering Northampton*, Elwell Island has a meadow in the center surrounded by floodplain forest. We identified the meadow, but it seemed to me that the floodplain forest was overtaking it. In Laurie Sander's map, the meadow extends to the edge of the south side of the island, but I noticed many trees lining the small beach instead. As we walked inland more, the meadow became apparent because of the lack of trees. I previously associated inviting, open grasses with "meadow," but, this meadow, overgrown with deciduous ferns and nettles, did not look too welcoming. On the east bank, there was a small beach that led up to a line of trees, and I noticed a willow that was probably planted by Elwell himself.<sup>3</sup>

Even the piers of the bridge provide a home for plants, demonstrating the versatility and diversity of the surrounding fauna.

*Oct. 31, 2008, 1:43 PM – Rock Garden*

*EF*

It is another unseasonably warm day and I am overjoyed—I thought we had seen the last of "Indian Summer," but even though it snowed a couple days ago it is now 56 degrees and sunny; I am comfortable in jeans and a light sweatshirt. The sky is a massive expanse of clear, solid, bright blue. It looks more like a painted wall or a pool liner than the sky. The brightly colored orange and red trees against it are striking.

This garden is full of captivating and exotic plants. Directly in front of me is a "Yucca Angustissima." Its center is a brown ball out of which grow long, straight green leaves that resemble spikes, in all directions. It does not look natural, but like a sculpture created by an artist. It's something about the perfect roundness of it, and the way the leaves seem to radiate from the center. Between the leaves are thin, stringy white curls that appear to have split off from

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<sup>3</sup> Sanders, Laurie. *Rediscovering Northampton*. 1993, Massachusetts.

the sides of the leaves. In trying to get closer to examine the center of the plant, I was pricked by a leaf and alarmed by its sharpness. I recoiled at the touch, and it has drawn one tiny dot of blood from my hand. The plant could be a weapon; I can imagine it attached to the end of a stick in some fantastic or medieval story.

Despite my injury, I eventually made it close enough to examine the circular orb at the center of this curious plant. I cannot tell what originally composed the center, because it has apparently acted as a trap for varying types of debris. Making up the outer layer of the ball from which these sharp leaves grow are many small twigs and leaves from at least 3 types of trees that I can distinguish. I wonder how these objects made their way to the center of this plant, and how they are held there.

*Nov. 1, 2008, 12:32 PM – Near waterfall and underneath bridge*

*OG*

I sit in front of a sycamore tree that has almost shed all of its leaves. Its curling, crinkling brown and green leaves coat the earth. When a strong wind blows, the leaves are lifted off of the ground and tumble through the air to another patch of grass. Two scaly trees near the Mill River, no longer have any leaves. They have vines that twirl around their trunks. A thinner vine has wrapped around another vine, creating a spiral pattern. I remember from our class walk along the Mill River, that vines and ivy are drawn to shade because a tree gives off shade, and they need something to climb on. There are many thin vines that hang from the top branches and dangle downwards, swaying in the breeze. The vines are white-gray with black spots. A bird's nest is at the top branch of one tree. Near the sycamore tree, I spot a river birch with paper bark that is peeling.

I walk over to the waterfall. The wind sweeps up drops of water that cascade down the waterfall, and blows the water in my direction. Water speckles my face. The waves are choppy. Twigs and tennis balls float before a tunnel that is in stonewall.

I leap over a fallen tree branch that has bright green moss on the under layer of the bark. I pass briar bushes with black thorns, huckleberries and winterberries. Their red berries are wrinkly and shriveled. I stand directly underneath the bridge and notice on the right side that the water is deeper than the left. There is sand underneath the bridge, as well as piled sticks and fallen trees. Small roots are visible on the edge of the eroded bank, and hang close to the water. Underneath the water, there are many rocks and a glass bottle that has a hazy, unclear glass like

that of beach glass. Across the bank, on the left side, there are green and yellow leaves, and on the right of the bridge, there are not as many leaves on the trees.

As I walk through the wooded area on the slanted bank, I find a thick vine that has grown from the ground. It is almost as thick as a tree trunk. Another vine has sprouted from this vine and wraps around its flaky body—coiling around it like a snake. This image strikes me as violent—as though each vine strives to dominate one another, when in actuality, each vine is working together to become strong enough to twist around trees. Further up the vine, the vines morph into each other. One vine branch has crossed over, and wrapped around a small birch tree. The tree that is being constricted has marks on its bark, which show where the vines have tightened. A part of the vine horizontally extends and entangles around the next close-by birch tree.

As I walk through campus I discover a tree I have not seen before. It is called the California Incense Cedar. It has dark, hard bark with soft, and dark, evergreen pine needles. I can see holes where branches once were. They are now scars, indicating where the branches used to be. They look like rounded eyes. I can see a spider web inside one hole. Layers of thin bark circle around the holes. In the inside of where one branch fell off, I can see tiny spirals. I count ten dark and tan rings, which reveal the age of the once existent branch.

*Nov. 3-10, 2008 - The Fall Chrysanthemum Show*

*KB*

This week I went to the Lyman plant house each day and spent about 30 minutes observing, mostly sketching using my hand lens. The journal entries don't have specific dates because I would rework certain sketches or add information throughout the week.

*Nov. 3, 2008*

*KB*

I was surprised by the set up when I walked into the show - large pieces of red painted wood outline the central bed - I remember seeing them painting these pieces the first time I visited the plant house. The wood structure is modeled after a "Torii Gate", according to a small sign at the back of the room that states that these gates are "commonly found at the entry to a Shinto shrine. It marks the passage from the normal (profane) world, to the sacred (natural) world."

The room is bordered by colorful cascade chrysanthemums, growing out of walls like vines on one side, and growing out of pots on the other.

The colors are so impressive - especially after seeing everything outside - barren trees and dull, brown grass.

The main colors are vivid yellow, deep reds, purples and oranges with whites intermixed. The outer walls are surrounded by bamboo while the inner island base is covered by a vine. There are bumble bees hovering around, inside, and above the plants. The room is relatively dry and cool, with only the hum of the fans and small bees.

*Nov. 5, 2008*

*KB*

Today I am visiting the show with an entire preschool class. As I sketch, I take note of some of the things they say while looking at the exhibit:

"I wanna show you something."

"See the poofy ones guys!"

"I wanna smell this one"

"Feel it!"

The teacher interjects - "We're looking with our eyes and smelling with our noses"

"It looks like a sunflower!"

"These are beautiful."

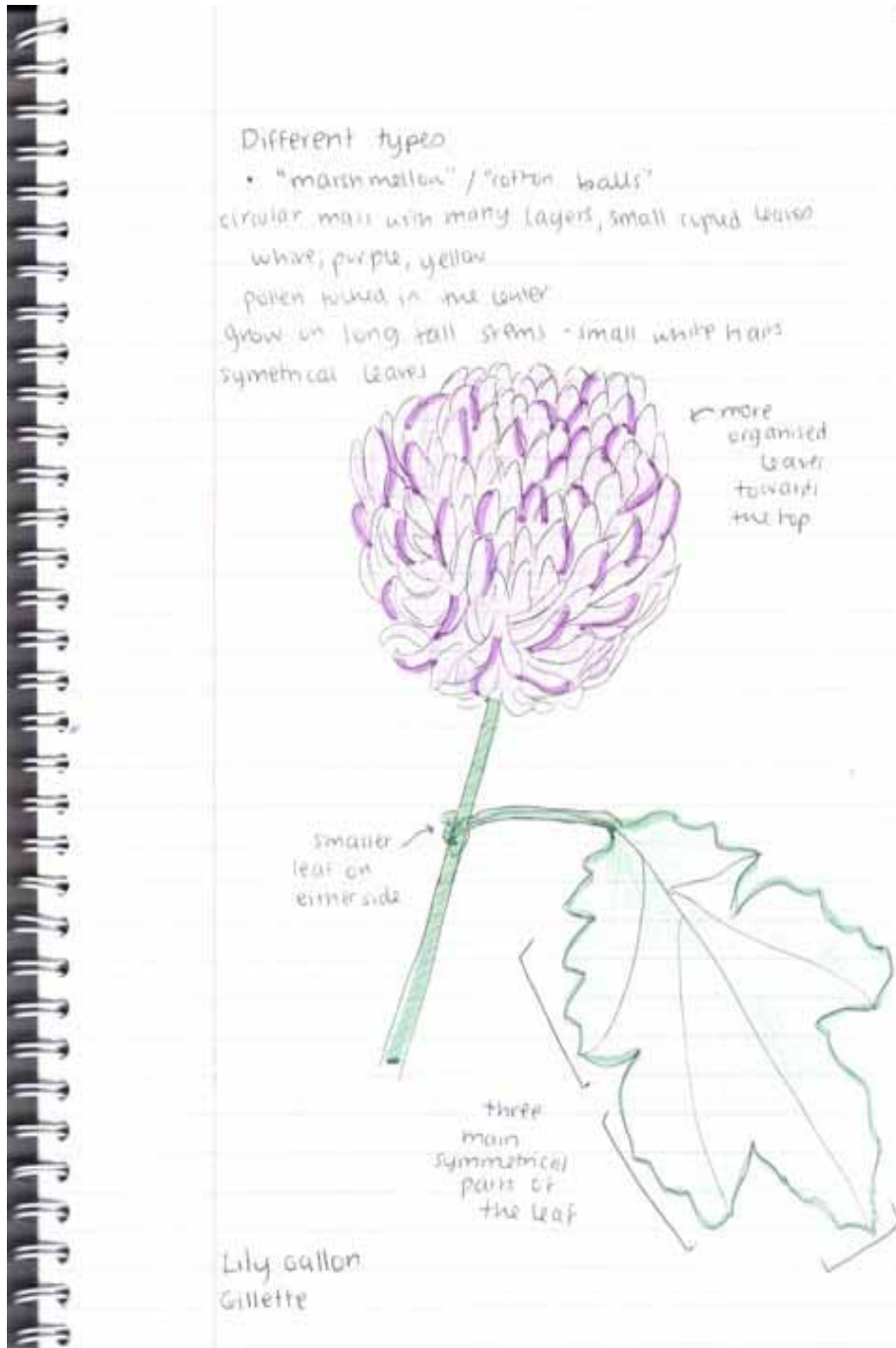
"Look at these white ones."

"This one smells a little stinky."

"I wish this was my room."

Sketches, November 3<sup>rd</sup> through 10<sup>th</sup>  
Fall Chrysanthemum Show, Lyman Plant House

KB



- hanging flowers,
- mostly large centers - ?
- each a separate flower?
- do they each hold pollen?
- center more dominant than surrounding petals. they look like wires



they grow in clusters of four from one same stem

- looks like long stems, curl in spirals at the end
- looks like fireworks, grows on long tall stems
- similar to the rounded chrysanthemum, similar leaves



\*ones that look like daisies/alter



petals  
are  
arranged  
in  
layers

Chesapeake  
Juneau

\* "flower ones" like lipstick, little mermaid



Plymouth  
Redwing

"I wanna show you something!"

"See the poofy ones guy!"

"I wanna smell this one!"

"Feel it"

"We're looking with our eyes and  
smelling with our noses"

"It looks like a sunflower!"

"These are beautiful!"

"Look at these white ones!"

\*Small parasols, they remind me of fairies  
heart shaped leaves



Cyclomen

*Nov. 3, 2008, 8:30 AM – On the Mill River, south of the trail. Cold today, though not like last night, and still.* *BP*

The river here looks very shallow, so that I imagine I could wade across to the far bank never getting wet above my knees, though in fact I remember from our canoeing trip that it is quite deep further out- this is where we saw the giant submerged tree. The water has slowed and cleared from the last storm. Across from me, a pipe opens into the hillside far above the water, stones set there by people what looks to be years and years ago creating uneven steps below it to the shore. I can hear the steady gurgle of water running over there, surprisingly loud, as if maybe it is echoing in the pipe, but try as I might, I can't see where it is coming down. The rocks appear dry, and no movement catches my eye.

The crows are out (I can hear them cawing), and the songbirds sing around me, not the loud exuberant calls of spring or summer, but muted, thoughtful chirps and whistles from hiding places in the trees. There is hardly any green left save for the deep, cool shades of the conifers, and a few smaller bushes, well protected by the sheltering trees. The reds and golds of the remaining maples and beeches, and the deep bronze of the oaks, are dull and shadowed by the bare, silvery-brown trunks and branches. Most of the color that remains now is on the ground as slowly fading fallen leaves.

It is so unbelievably still. Not a leaf stirs against the grey sky, and but for the slowly drifting leaves on the river, even the water could be motionless. I hear birds, but do not see them. The insects are gone. There is no stillness, no endless patient waiting like this in Nebraska, where the restless fall wind always whispers, however faintly, in the tall dry grass.

*Nov. 4, 2008, 12:30 PM – Center Campus side-walk* *GA*

As I was walking around center campus I found a monarch butterfly wing on the path which had ripped off the base of the butterfly's body. Unfortunately it is unlikely that the butterfly survived much longer because a butterfly would be incapable of gathering nutrients without flying. At first glance, it was clear that it is a beautiful and intricate wing. The patterns are unique with complex lines, prominent orange sections, black outlines and cream dots within a black border on the edges. When held up to the light the orange segments are slightly more transparent than the black outlines and edges. The underside of the wing is quite different from the upper part. The underside has hues which are rather diluted compared to the upper side. The

orange color on one side is bright, almost fluorescent whereas the other side has a muted tone of orange. Utilizing the magnified glass I can see black and white hair-like structures, which are perhaps what connected the wing to the base of the butterfly's body. Also, I note that the black outlines are much more ragged than I originally believed. From afar it looks like a solid, thick black line, but with the magnified vision it is plain to see that the black is smudgy at the edges and fades into the orange segments. There appears to be a prominent thin skeletal structure within the wing, which must hold the wing together, much like our human creations such as kites. Nature truly inspires us in many ways. This wire-like composition begins from the center of the inner part of the wing. It also becomes much more apparent that the outer lining is white rather than black. The black edge is much thicker, so it is a much more prominent feature to the human eye than is the thin white edge. This is not a smooth edge. It has several small rips and tears most likely wear and tear caused by its flight.

*Nov. 6, 2008, 4:00 PM – Walking back from Ainsworth to Albright*

*AK*

The world is dreary but several bright trees catch my eye, particularly the red ones. One is red and yellow with lacy leaves. It's right outside College Hall. It has already lost most of its leaves and they carpet the small rotary it stands on. Some leaves are a deep red like dried blood. Others have bits of yellow and orange, particularly near the base of the leaves where they attach to the stem.

I call these leaves lacy because the leaf is not attached to itself except at the base. There is an oval about one centimeter long and half that wide at the stem that is all attached. Then the leaf branches into eight strips, each with what looks like even tares along the tips and edges.

There is another red tree outside the Alumni House. It's a Japanese maple and I've been watching it change all fall. Some Japanese maples, like the one down on State Street, are very yellow with only hints of red and orange. This Japanese maple is a deep red like a raspberry. Some of the leaves are lighter with yellow and orange near the tip, but mostly they're red. They have dots of lighter red, which appear strange because they don't seem to be in any sort of pattern. The leaves have seven points which come off from a connected area at the stem about one inch square. The edges of the pints are ridged but only very small ridges. The stems match the color of the leaves.

*Nov. 7, 2008, 2:00 PM – Above the Mill River.*

*BP*

I am sitting on a stone slab in the hillside above a tiny stream that runs down to the Mill River from the hospital grounds. Above me grow hemlocks, most of them young. Some older trees, I suspect, are oaks and beeches, judging by the leaves that cover the ground around me. To my left, upstream, four trees that I think might be hemlocks have fallen from my bank over the stream to the far bank, all in the same general area, apparently because of erosion in the hillside, for the bank is undercut beneath their torn up roots. Ferns grow where the trees are sparse and more light comes through. A few branches on the ground have pale, horizontal, peeling bark: I suspect they are from birches. One lies half in the stream, wet all over, and on it grow small brown shelf mushrooms. There are many rocks on the banks, but few visible elsewhere: the water probably eroded away the dirt that had covered them. The one I am sitting on appears to have been cut by man: it is too smooth, too rectangular to be natural, and is as large as my bed in my dorm (which is to say, not very). The flat top surface is covered with moss, thickest where the sun is strongest, but where the edge of the stone is chipped away less moss grows. Granite, perhaps?

The bed of the stream is sand beneath the fallen leaves, and the water is clear and swift running. About three feet wide, the stream is basically a series of rock-created pools connected by miniature waterfalls. In front of me in the water lies a mysterious lone piece of broken rusting pipe. I see no other sign of human intervention, besides of course my seat, though farther downstream there is a pair of man-made stone tunnels, the smaller about a foot across and high, the larger about two feet across and the in height. Engraved on the larger one is the date 1878. The water runs through this one and empties out on the other side of the path into the river.

The ceaseless gurgle of the water blocks out other sounds, save for the occasional yap of a far-off dog and a passing airplane. It varies enough to be interesting but has a soothing rhythm that quickly lulls me into a very lazy, contemplative state. It is almost too much work to bother describing it. I would rather lie back on the cushion of moss and stare at the dove-grey sky and enjoy the beautifully mild temperature, thinking of nothing at all.

I was so fascinated by the variety of plants here that I have returned to the rock garden to examine some more closely. It is another unseasonably warm day. It rained yesterday, and the air is humid and mild. Though the temperature is deceiving, the plants and trees and grass display signs of the time of year. The view of the thick forest of trees over paradise pond looks significantly different than it did from this same location only a week ago. Many more trees are bare, or very close. I can see patches of sky and even patches of forest ground through what was once a thick and solid expanse of foliage, reminding me of a painting in which the forest's leafy dome, through which patches of sky were visible, was compared to a cathedral. The only colors that remain over the pond now are green, from the evergreens, and a burnt reddish orange. There is no longer a spectrum of autumnal shades.

A light wind just blew, and I heard a crackling sound. I looked up to see small leaves raining down from the Chinese Dogwood to my left. The leaves were brown and dry; they fell slowly, dancing in the air. They fell continuously from the tree for about 12 seconds, continuing to make a crackling sound as they dropped through the branches.

Today my attention has been drawn to the cacti growing in the rock garden. I wonder how they are kept alive in a climate like Northampton's, where they are not typically found. However, I remember reading about the rock formations in the garden that create "micro-environments" to allow different plants to thrive. I am impressed that this is possible simply using rocks.

The lace cactus grows like two small stumps in the ground. One is taller than the other and they grow right next to each other, almost as if fused together. Their needles are small and thin; they grow out of small circles on the surface of the cactus. The circles are arranged in straight lines down the sides, with about 8 needles extending from the center of each, in directions parallel to the sides of the cactus as well as outwards. The needles cover the cactus like hair, leaving no area exposed. There are four different types of cacti that I can see, and all resemble each other with slight differences. The "brittle cactus" has much more smooth area exposed, with more widely spaced small circles that have about 4 needles growing out of each. The prickly pear's needles cover most of the cactus as well, but extend much further out than those of the lace cactus. The prickly pear is also flatter and less rounded in shape.

*Nov. 14, 2008, 12:30 PM – Systematics Garden*

*GA*

I paid a visit to my adopted Maidenhair tree and to my disbelief it has finally dropped all of its leaves. In observing the tree over the past few months I have noticed a peculiar pattern. Based on the information found on eNature.com's field guide, the Maidenhair tree is predicted to turn all its leaves a bright yellow over night and drop them in unison. In my observation however it has gone quite differently. The leaves changed very slowly. There were small bunches of leaves which had begun to change each week and fall individually. This however was not the most interesting thing I noticed. Over the course of three weeks the tree had begun to drop large amounts of green leaves. So much so that the green leaves carpeted the ground surrounded the trunk. Several more days of observation lead me to believe that the tree would drop all of its leaves systematically still green. However, I found today that the tree was completely bare and the ground was carpeted with yellow leaves. They were less yellow than I would have hoped. The leaves seemed tinted green with yellow highlights rather than fully turned yellow leaves. Very few of the leaves were the bright yellow that was described in the field guide. Now, the question in my mind is could the leaves have turned after they were dropped or over night right before they dropped? Also, Could it be that the tree was reacting to global warming by dropping its leaves in different stages?

*Nov 15, 2008, 9:30 AM –Child's Park, a misty but warm morning.*

*CL*

I am sitting by a pond surrounded by trees deep in the park. Although no rain falls from the sky, the water droplets caught by the trees during the night patter constantly on the ground. I think the dark green of the conifers looks best against this white, misty sky. Or perhaps it is just what I am most accustomed to; at home the fog always weaves through the trees. I am sitting on a damp rock on which grows lichen and moss. The lichen is a light, mint green and it seems to be made up of little spots that peel off.

At first, the dark pond appears to host no life. I am hesitant about saying this because I usually turn out to be mistaken, but after many minutes of waiting, I feel confident I will find no life here. However, while watching the droplets fall from the bare branches above and creating ripples in the water below, I finally notice a tiny black fish about an inch long, meandering just under the surface. It blends in with the black reflections of the towering trees above. When this

small pond freezes in the winter, will this little fish survive? I do know that some fish can survive under the ice. Sitting on this rock, I swat away a fly. It was slow moving, like a mosquito. Is it possible that the warm weather has allowed mosquitoes to survive farther into the winter?

Walking along the path, I notice an odd tree. It is a tree skeleton, just the bare branches, but the branches are not, in fact, completely bare. There seem to be extra growths of bark on the outer branches. They are not left over from trees, but they resemble cork. These corky wings are, in fact, common on certain types of elm trees, for example, the Winged Elm.<sup>4</sup>

*Nov. 16, 2008, 10:30-3:30 – Mount Monadnock*

*WP*

Monadnock: an isolated rocky hill or mountain rising above a peneplain in an area with a temperate climate. (Webster's New College Dictionary)

We can see the mountain through the trees as we drive up, a low hump of green with a bare summit just peeking up, absurdly reminding me of a bald swimmer in a pond covered with algae, nervously poking his head over the surface to look around.

Close up, the mountain is basically a pile of boulders, some larger than the van, most smaller, all half-covered with dirt and overgrown with trees: pines, beeches, oaks, maples. The lower parts, the skirt of the mountain, is covered with deciduous trees' as we climb higher these trees phase out in favor of pines and spruce. The last ten minutes are treeless. We scramble over bare rock, cold and wet, with tiny plants such as moss and lichen and battered shrubs growing in the cracks. Thoreau, in his journal on Sept. 7, mentions numerous plants growing on the summit, including blueberries, choke-cherries, bunch-berries, and red cherries, but there is no sign of them this late in the year.

The wind is horrendous and the cold eats into my hands and face, finding every crack in my jacket. We stay on the summit just long enough to get out picture taken, holding on to each other to keep from being blown over, then retreat. The pines provide marvelous protection.

Due to the rains the night before, the trail is swampy, and large puddle shiver in the low spots on the rocks – at the summit I am surprised not to see ice. Lower down, the pine needles and leaves cover the puddles completely, and more one once we step onto what we confidently assume to be solid ground, only to sink ankle-deep into mud and frigid water.

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<sup>4</sup> Will Cook, "Winged Elm," 2008. <http://www.duke.edu/~cwcook/trees/ulal.html>

The hike down, more of a slide/scramble, is hard on knees and ankles and seems to take forever. There are no animals, no signs of life other than us, the other hikers, and the patient bare trees. Once I see a crow wheeling in the air above, but it quickly disappears. We are glad to return to the warm van and our lunches; but still a sense of wonder grips me as we bump along the awful road: we have walked the same ground as Thoreau, and if we saw almost none of the things he did – well, he didn't almost get blown off the mountain.

*Nov. 17, 2008, 6:00 AM – Other side of Mill River*

*WP*

Brady and I decided to get up before dawn, with a vague idea of watching the meteor shower – by six, when we meet on the athletic fields, the sky is too light to see any stars, so we walk instead. Though the sun is still under the horizon a vague directionless light makes it easy to see our path. To the east a hint of orange touches the sky over the town. The moon is still high in the sky, about three-quarters full and glowing white. Frost coats the grass and leaves and the puddles are rimmed with ice. As we walk into the forest I am struck by the clarity of the air. Though the light is still faint, there seem to be no shadows; the light comes from every direction at once. A little bit of mist curls over the river, not reaching the shore.

The crows are out in force, their harsh voices nearly the only sound as they fly from tree to tree. A few squirrels rustle the leaves under the trees – one is small and red, either a young squirrel or a species I've never seen before. We are almost the only people out walking, and the forest seems unnaturally still. As the sun rises, deepening the orange of the eastern sky and casting long rays through the tree, the shadows appear, and the normal differentiation between light and dark returns. The frost begins to melt, and the mist fades away. By the time we return to campus, the morning seems ordinary, cool and sunny, and I am ready for breakfast.

*Nov. 20, 2008*     29 degrees

*KB*

6:00 am – Skies turn a lighter blue on the horizon to the south.

6:02 am – Noticeable lighter skies, peacock blue, with bands of aquamarine.

6:03 am – The majority of the sky is still peacock blue, colors appear from the horizon, turquoise appears

6:08 am – More widespread light with dashes of gold to the south, the sky is opening up, clouds are visible

6:18 am – The sun is up, robin's egg blue sky with hazel and gold areas.

6:29 am – The sky is a light blue, with some clouds. The moon is still visible, but the sun casts light on everything

6:39 am – The sun is all the way up, the sky is light, autumn gold mixed with aquamarine and pearl grey.

*Nov. 21, 2008 - Paradise Pond*

*KB*

The pond is frozen! I know it's much deeper than the small pools of water on the trail by the Fitzgerald Lake, but I still wish I could slide across in my rain boots. I'm going down the steps to stand on the dock. There are ice skates sitting out – someone had the same idea as me! The ice is littered with broken pieces and rocks; I'm hoping that dissuaded the person from skating on it. The pond is reflecting the light so beautifully, I love seeing it frozen, all the different patterns that show up. Holding onto the dock I press my foot down onto the ice. It sinks down and water seeps up, rushing over the cold slab. The dredging boat is still in the middle of the pond. They must have to stop soon, so it can make its way out. The small frozen layer extends to the borders of the waterfall where it dissolves and cascades down the edge, rushing down the bottom half of the river. I wonder if large slabs of ice ever fall down the waterfall. Does it freeze up completely so that the water ceases to fall? Does the bottom of the river freeze as well? What about the Mill River? I'll have to wait and find out I guess.

*Nov. 21, 2008, 1:00-3:00 – Fitzgerald Lake Conservation Area*

*WP*

Tall dark hemlocks grow in dark groves, the ground bare beneath them but for a few young hemlocks. In other areas white and black birches mingle with the small striped maple, white pine, beech, and sugar maple. I am amazed at the rocks – some are enormous, rising out of the forest floor like ancient elephants. The smaller stones are everywhere, studding the ground among the trees like raisins in a loaf of bread. In some places the trees grow around or on top of the rocks, their roots enfolding the rocks in search of the earth.

The water is frozen where it doesn't run fast, and the ice forms patterns like ripples. On the path the moss hides fantastic pillars of ice, like stalactites in a cave.

Near the lake the cattails grow in profusion; the heads are fluffed out as though for protection from the cold and the lowering sun rims them in golden light.

Club mosses like miniature Christmas trees dot the ground, shoving aside the dead leaves. The moss that carpets the rocks is a brilliant green, even more beautiful this time of year, and as soft as a cat's fur.

*Nov. 21, 2008, 1:00-3:00 – Fitzgerald Lake*

*EF*

Though the woods, due to their wintry appearance, at first look dead and barren, they are in fact full of fascinating natural occurrences to be observed. The loss of leaves from the trees may even add to the observation experience; I can see much farther through the forest than I would be able to were the trees full of leaves, and some very interesting bark and branch structures are revealed.

In certain spots, hopeful green plants catch my eye. Though the ground is covered in fallen, brown leaves, small patches of green grass show through in some areas, particularly near the beginning of the trail (closer to the edge of the forest.) Certain plants are still attempting to live as well; some green ferns are visible alongside the path.

Throughout the forest are many stumps of what were once trees, still in the ground. The tops of them are not smooth and clean cut; rather, they are jagged and splintery. The sides are different shades of brown and also jagged. They look and feel as if the bark has worn off. These stumps of different heights suggest destroyed and decaying trees. I wonder if these trees simply died and fell, or if beavers may have caused some of this. In some instances, a fallen trunk can be seen on the ground with the same jagged, splintery, rotting appearance. Many have moss growing on the sides. I wonder what forces have caused these trees to die.

One tree appears healthy, but has a wide hole near its roots. The hole has a smooth, raised ridge surrounding it and looks about 6 inches deep. The inside of the hollow area appears rotten, but the rest of the tree does not. It seems as if the tree lost a branch, or perhaps one of a pair of trunks, and the bark has formed a scar around the hole.



*November 22, 2008, 1:00 PM – Trail near athletic field*

*OG*

I hear the creaking of wood bending, like a rocking chair holding a lot of weight. I look at the Mill River and see ice where the river does not flow forcefully. There, parts of the logs stick out from the ice. I ask myself, ‘Are the logs shifting underwater by the current and cracking parts of the ice?’ I then listen more closely. The sound starts again as the wind picks up, and I observe how a tree is leaning on another taller tree that has its canopy being tossed by the wind. Every time the taller tree is moved by the wind, the leaning tree creaks, because it is rubbing against the bark’s bark. I touch the surface of the large tree and feel it vibrating. The friction between the two trees causes tremors throughout the tree.

I start to follow a deer trail and use the Australian bush call—“Coo-wee!” Since I am in the valley I can hear it echo off the hills. I see Oak ferns scattered on the ground. Soft green mosses grow on the trees, as well as light green-gray lichen that tend to be crusty and flaky. A tree that had fallen has uplifted a mound of dirt. A maze of roots intertwines in the soil that has

large icicles. I spot a thin tree that has been gnawed at by a beaver. Its bark lies in chips at the base. They are light brown-yellow and smell freshly cut.

*Dec. 5, 2008, 8:45 AM – The Alumnae Garden*  
*AK*

It's chilly but sunny. The thermometer says it's 30 degrees Fahrenheit, but it doesn't feel that cold because there is very little wind and a lot of sun. The Garden looks almost bare. There are no leaves at all left on the paperbark maple. There is a pine bush near the entrance. It's a large hedge along the driveway. It smells like Christmas. The needles are about two inches long and in clusters of two. It doesn't look like any I've ever seen before so I'll take a clipping back to my room so I can look it up. I tried to look up the type but couldn't find it at first. Eventually I took my clipping down to Lyman plant house and talked to a man there who helped me identify it as Scots Pine. It is not very common around here so it is no surprise I could not identify it or find it in tree identifying books of the northeastern United States.

Two of the only bushes with any color left are the rhododendrons. There is a small Korean Rhododendron near the entrance on Albright's side of the garden. It has small, dark purple leaves. They come off in the same spiral clump as the Early Azalea I found down by the river. I believe all things of the Rhododendron genus do that. Across the garden is a much bigger bush which looks quite similar. It is an Olga Mezitt Rhododendron. It has small yellow and red buds



in the middle of its leaf clusters. Its leaves are redder than the Korean Rhododendron's are.

*December 5, 2008, 2:30 PM – In front of Bass Hall*

*OG*

It is very cold today. The buildings surrounding the area of grass cast a shadow upon the region. In the middle, a stream of sunlight shines upon the grass. I investigate the trees that circumference the grassy area. There is a large, thick tree called the European Linden, and its roots are the color of charcoal black. Thin brittle branches attached to the main branches spray out. The main branches slightly slope towards the earth.

The Honey Locust tree is scaly, and there are few loose branches or pieces of bark that lie at the tree's base. The bark is tight on the trunk, so this tree does not shed its bark often. At its canopy, there are two large branches that split from the trunk. There is one large black scar, where a branch once grew. The bark has inched towards the "wound" and will eventually cover the dark, flat surface. I guess that this tree limb was cut down.

The next tree I intently observe is the Dawn Redwood. I am first puzzled by its existence here in Massachusetts when redwoods are usually found in California. I search for its leaves and find dried, shrunken, golden-brown leaves. On one branch that has fallen from a higher branch onto lower branches, I see evergreen leaves, which indicates this tree is a part of the conifer family. I realize the dried leaves once used to be like those opposite, evergreen leaves. Because it is losing its leaves this leads me to think that this tree is also deciduous. I wonder why these leaves have not dried, and I hypothesize it is because the branch that the leaves are on is not connected to the tree so the tree cannot stop the nutrients flowing into the branch. There still must be stored up nutrients in the branch.

*Dec. 7, 2008, 4:20 AM – In front of JMG.*

*BP*

I like to think I am the first person this morning to see the first snow (I am certainly the only person in sight right now), but I suppose I am probably not. Still, it is beautiful, an inch of sparkling white powder over everything, the streets glistening darkly with snow that has melted to water. Occasionally some large soft flakes fall from a tree, though there is no wind, and the snowfall has stopped some time ago.

The snow is fine and a little damp, but not wet enough to make good packing snow. The air is not too cold, because of the clouds holding the warmth in, and everything is light enough to see easily, light enough to write by, almost like dawn in coming already, from the streetlights reflecting off the snow, which reflects off the orange clouds, and back down to the snow.

*Dec 7, 2008, 4:25 AM — In front of JMG*

*WP*

The campus is incredibly silent. Fresh snow blankets the ground, looking like frosting on a cupcake. A faint glow fills the air from light reflecting off the snow crystals, and the air, while frigid, feels warmer than it did before the snow came. This is the first real snow and for the first time it feels truly like winter. The snow is light and powdery and will probably melt by morning. When I try to pick it up it melts in my hand instead of forming snowballs. Footsteps mark where students ran outside to have snow-parties. Though it's not snowing anymore the clouds are solid and slightly orange from the reflected light. The air is still and my breath plumes before my face. Perhaps it will snow some more.



## **Participants**

(from left to right)

Gabriela Acosta

Olympia Georgeson

Emily Fuller

Katy Butler

Walker Powell

Clare Landefeld

Brady Powell

Alice Kaufman

