



Learning Outdoors at Lincoln

Resources for Teachers and Students

Lincoln School PTO Landscape Committee
2004 - 05

Lincoln School PTO Landscape Committee
19 Kennard Road
Brookline MA 02445

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Introduction

The landscape around Lincoln is an extraordinary asset for the school, the neighborhood and for all of Brookline. Few places offer so rich a variety of open spaces within walking distance or through a short ride on public transport. The opportunities for children to learn from these places are very great.

Right in our neighborhood we have:

- The Emerald Necklace parks along the Muddy River, a masterpiece of landscape architecture designed by Frederick Law Olmsted in the late 1900's
- Olmsted's own house and office on Warren St., now a National Historic Site
- The historic Old Burying Ground, across Walnut St.
- A one-acre "urban wild" nature area at the end of Hedge Road
- Our own beautiful school grounds, a 1992 re-design of a property dating to the early 1800's
- A schoolyard garden for Lincoln students

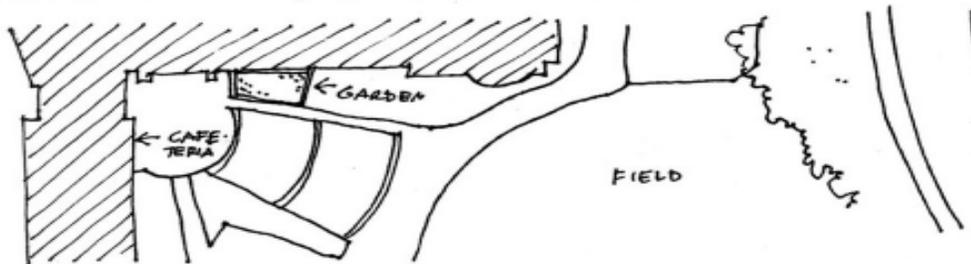
Slightly farther afield but still in Brookline or in nearby parts of Boston:

- Three nature sanctuaries with wetlands, forests and wildlife; one accessible by the T
- Allandale Farm, the last working farm in Boston
- Many other interesting places such as Larz Anderson Park, Longwood Mall, and our own Clark Park (once a glass-greenhouse nursery) and Robinson Playground (once a car barn for the neighborhood streetcars)
- The Arnold Arboretum
- The Mass. Audubon Center, in Boston



In our mission to serve teachers and students at Lincoln, the PTO Landscape Committee focuses on making the most of the outdoor resources closest to school. Over the past four years we have worked on finding learning opportunities in the landscape of this neighborhood, and we've also learned about what it takes to make outdoor projects happen during the course of the school day. We know that there is already much for teachers and students to accomplish during the year, so that anything we propose to add ought to be easy for teachers, interesting for students and good for the neighborhood and the town.

The following pages are an album of some of our recent projects and current ideas, and we offer them to the school community as a resource book for the school year. We hope that what you find here will make it easier to get outdoors and to find interesting things to learn when you get there.



Schoolyard Garden

The garden is located in a sunny spot along the side of the 6th grade wing. It was created in August 2003, by removing an area of grass and stony subsoil and replacing it with about a foot of loam. There were two planting projects in 2003 - 2004, shown on the following pages.

Our garden is a trapezoid measuring about 24 feet by 11 feet, or roughly 250 square feet. It has a stepping-stone path down the middle and a water tap at the building wall. There is usually a hose at the tap during warm weather.

To keep track of who has planted what in the garden, the Landscape Committee maintains a garden map on the wall of the school office; each class or group that plants should locate and mark its work on the map so that the next group will know to plant somewhere else.



Fall 2003: Bulb planting by the entire 4th grade. Students planted tulip and daffodil bulbs along the ramp railing, and garlic cloves in a patch along the wall. The flower bulbs will come up each spring; the

garlic came up in spring 2004 and was harvested in August. Each garlic clove produced an entire plant with a full bulb, which can then be re-divided for re-planting in the fall.

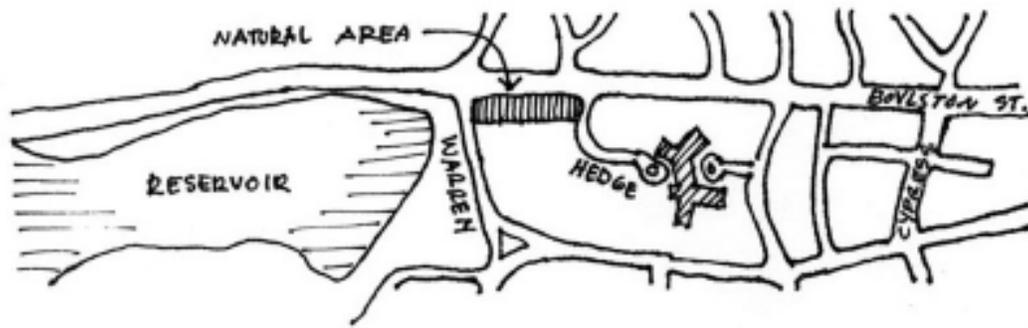


Tools: The school now has a good variety of gardening tools, in a range of sizes. They are stored in the closet at the left entrance vestibule to the theater (behind the elevator). There are also some baskets, a large barrel, and more hoses. Hose keys for the outdoor hose taps are available through the

Landscape Committee and the school custodian. There are many of the small hand trowels since these can be useful for work with potted plants or for any outdoor project or field trip that involves digging, such as trips to the beach.



Ms. Dungan's 2nd graders planted a Wampanoag vegetable patch in June 2004, with corn, beans and squash in traditional circle patterns. This spring project helped the students recall what they had learned about native American agriculture the previous fall, and will now serve this year's second graders when they study the same topic. Some ears of corn were eaten by squirrels, but the rest was saved, and students will harvest the squash and beans in October.



Hedge Road Natural Area

This “urban wild” natural area is a one-acre property owned by the Massachusetts Highway Department. Lincoln School has an exclusive use permit, granted in the fall of 2003. MHD seems to have bought the property long ago for the purpose of straightening out Route 9, but has not done so. The land is forested and contains a seasonal wetland, which is a fragment of the stream

that once flowed from a wetland (now the Reservoir) through the Lincoln grounds and down to the Muddy River in Brookline Village. There are both native and non-native “invasive” or exotic plants to be found. There is also some trash and debris throughout. A chain link fence encloses the property along the entire Route 9 edge, and along parts of Warren St. and Hedge Road.



The Landscape Committee sought the use permit for this land in response to teacher inquiries about nearby areas suitable for outdoor study or field trips. Brookline has many parks and open spaces, but getting a group of students to them requires transportation planning, and time. The MHD property has the advantage of being less than 500 feet from the school building. Perhaps more important, students may do things there that they could not do in a nature sanctuary or a maintained landscape (like a park or a school playground).



Within reasonable limits and with teacher supervision, students may dig in the soil, take small plant samples, pick apart old decaying logs, or do other similar investigations. Because the area is not cultivated or maintained, a great variety of plants can be observed throughout their entire annual cycles. Teachers are invited to meet with the Landscape Committee and Mrs. Shea to review other proposed activities, to make sure they conform to the terms of the permit. Students must be accompanied by a teacher when visiting the property.



The MHD property abuts two residential lots on the south, including the purple house on Warren St.; both are currently owned by Ms. Anne Burns. Ms. Burns' undeveloped lot then adjoins the Jensens' lot, which is the first house on the south side of Hedge Road. The Landscape Committee has advised both neighbors of the possibility of teachers and students being present on the MHD land from time to time. Ms. Burns has kindly offered Lincoln student groups access to her undeveloped lot as well, since it is in a

similar natural state. The Jensens have asked visitors to enter the area via their driveway, rather than by stepping over the low stone wall which runs along Hedge Road to the chain link fence near the highway. Visitors entering from this driveway will briefly cross the undeveloped Burns lot, whose boundary with the MHD land approximately follows the stream valley that runs parallel to Route 9 and is one of the major features of the area.

Town of Brookline
Board of Assessors



Map Scale 1" = 120'





Trees at Lincoln School

Trees are among the most notable features of the landscape around Lincoln. They form a constantly changing backdrop to outdoor activities throughout the school year, and their great variety of species and sizes offers many opportunities for learning. Over the longer term, the trees are constantly growing, and some die or become damaged, so that over the eight or ten years of a student's time at Lincoln this part of the landscape changes measurably. We hope to stimulate thinking about how local stewardship can manage this kind of change, by supporting projects where students observe, plant and care for trees.



In fall 2002 the Landscape Committee decided to try to stir up interest in our trees by adding a display of leaf samples to the Pumpkifest pumpkin-sales area. We took leaves from about twenty Lincoln trees and, with the help of two primary-grade students, laminated them onto some scraps of corrugated cardboard with the names and

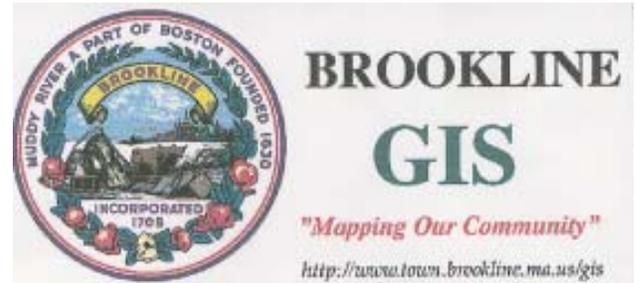
locations of the trees written on the back. Titled "Turn Over a Lincoln Leaf", this home-made guessing game has proved surprisingly durable and helped initiate a tree-data collection project conducted over the next two years, shown on the following pages.



Tree Inventory Project

From 2002 through 2004, 7th and 8th grade science students observed and mapped all of the trees on the school grounds, classifying them by species, size, condition and other characteristics. Temporary ceramic-tile number tags, created in 7th grade art classes, established a unique number code for each tree and helped control the data collection work during the two years. The

town Tree Warden coordinated the project from the Town Hall end and met with students in the classroom. The data has now been incorporated into the Town of Brookline Geographic Information Systems database, which is used by the Parks & Open Space Division to manage the thousands of public trees in our streets and parks.



**Lincoln School Trees
Species Code**

● AH	● CJ	● PF
● AM	● CK	● PS
● AP	● FA	● QA
● AR	● FG	● QR
● AS	● GT	● SA
● BE	● I	● SH
● BL	● LT	● TC
● BN	● MA	● TS
● CF	● PC	● UA



Arbor Day

The 8th grade class of 2001 launched Arbor Day by donating a tree for the school grounds, and after four years it is now a Lincoln tradition. Arbor Day is an annual school-wide outdoor gathering accompanied by art and music, readings, or other student

presentations. The program of spontaneous student offerings in 2004 was so extensive that it may be time to expand the observance of Arbor Day beyond the end-of-the-school-day gathering, perhaps to include community-oriented environmental projects.



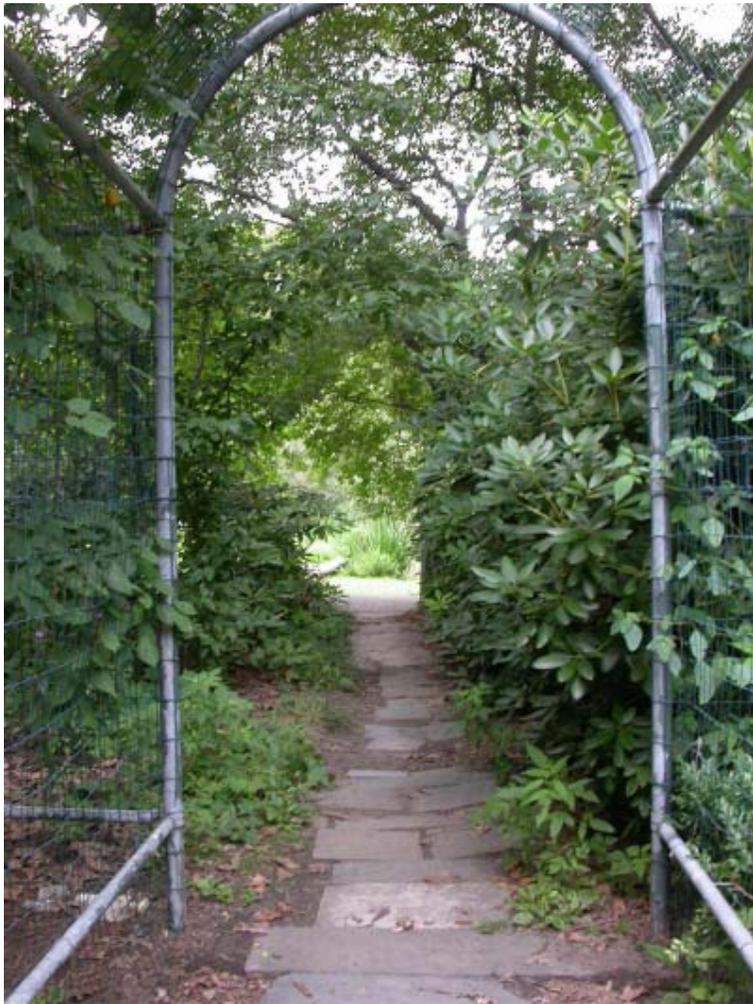
The Arbor Day trees have now been labelled to identify their common names, botanical names and date of planting. To date, they include:

2001: Red maple (*Acer rubrum*), inside brick wall along Kennard Road

2002: Tulip (*Liriodendron tulipifera*), in circle at west side of school (teachers' parking)

2003: American elm (*Ulmus americana*), inside brick wall at little doorway on Walnut St.

2004: Sugar maple (*Acer saccharum*), at front entry circle outside music room windows



Community Service

Brookline has many open spaces beyond the Lincoln School grounds, and some of them provide opportunities for community service by 7th and 8th grade students. Most common are the seasonal park clean-ups, which are usually sponsored by the “Friends” groups affiliated with individual parks or nature sanctuaries.

As a member organization of the Brookline Greenspace Alliance, the PTO Landscape Committee has many connections to the park Friends groups and to other local advocates for open space; this helps keep us aware of community projects that can provide service opportunities for students.



Contact the Lincoln Landscape Committee

The Lincoln School Landscape Committee is a PTO committee with a focus on the school grounds, outdoor learning and the environment. In addition to the learning programs and resources shown in this booklet, we work on outdoor construction and maintenance projects, and on creating partnerships between the Lincoln community and the professional staff at Town Hall who are responsible for the school grounds.

To teachers: Please contact us if you would like assistance bringing your classroom into the outdoors at school, through any of the ideas on the preceding pages or anything else you would like to try. We will be happy to meet with you and with your teaching aides and room parents. You can leave us a note in the Landscape Committee mailbox in the school office, or call us at the phone numbers below.

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co-chairs for 2004-05