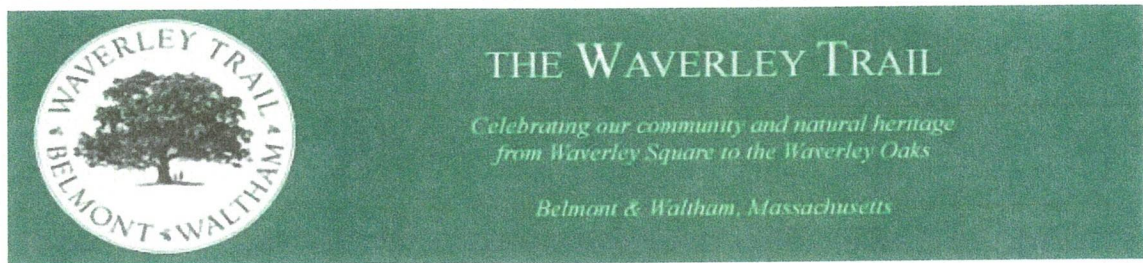


# GUIDELINES

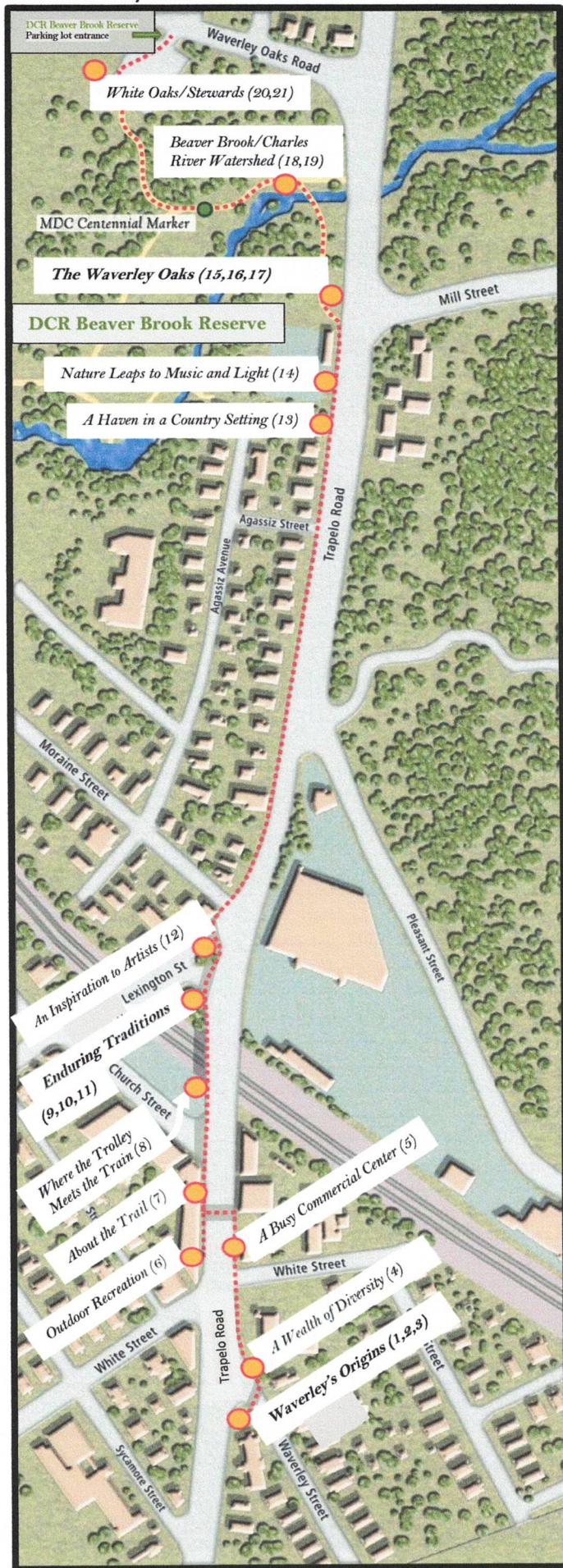
## for Waverley Trail Guides



Jim Levitt and Ron Geiger  
Waverley Trail Advisory Committee of the  
Belmont Land Trust

October 2012

# The Waverley Trail



## Legend

*In regular italics* Signposts with 1 or 2 panels  
***In bold italics*** Kiosks with 3 panels  
 (1,2,3) Panel numbers



# INTRODUCTION

## What is the Waverley Trail?

The Waverley Trail is a three-quarter mile long interpretive trail, located in Belmont and Waltham, Massachusetts, which celebrates the community life and natural history of the Waverley neighborhood, and the celebrated grove of huge oak trees that once lived here. Those magnificent oaks inspired Charles Eliot and a group of innovative associates to propose the formation in Massachusetts of the world's first

regional land trust, as well as the nation's first regional park authority. Their proposals were realized in the 1890s, and have subsequently been replicated around the globe. You can learn much more about the Waverley Trail at its website, [www.waverleytrail.org](http://www.waverleytrail.org).

Today the Waverley Trail is being used not only to inform and delight passers-by along Trapelo Road, but also to educate Belmont second graders about the internationally significant history of one of their town's neighborhood. This guide is written for the group of volunteer trail guides and teachers that lead these children along the Waverley Trail.

For more information, please contact:

*Jim Levitt*

*25 Juniper Road, Belmont, MA 02478*

[jnlevitt@outlook.com](mailto:jnlevitt@outlook.com)

*+1 617 966 1117*

## The Purpose of this Guide

We have written this guide to give you, as Belmont teachers and Waverley Trail Guides, some idea of the wide range of opportunities the Trail offers to address "curricular elements" relevant to the goals for second graders formulated by Belmont Public Schools. Please note that you are not expected to cover every element on every walk. Rather, you should be comfortable in knowing that there are so many resources for you to draw on as you take a nice walk through a neighborhood of Belmont with some curious second graders.

In the following pages, we will describe the 22 panels along the Waverley Trail one-by-one, emphasizing along the way both:

- the curricular elements that may be addressed, as noted by **WORDS IN BOLD CAPS, and**
- the people, places and ideas highlighted along the Trail that exemplify these elements – that is, featured items along the Trail that offer “teachable moments.”

For example, one of the curricular elements that Belmont Second Graders will be taught is **“GOOD LEADERS AND GOOD CITIZENS.”** The photo of DANIEL BUTLER, a member of the Belmont School Board in the 1880s, and the man after whom the Daniel Butler Elementary School is named, offers an excellent example of a good leader in Belmont history.

As an overview, the following list enumerates the curricular elements that can be addressed along the Waverley Trail. Several example of how such elements are highlighted along the Trail are also included.

## 1. Social Studies

- 1.1. Belmont history, geography, government and economy (apparent on nearly every panel)
- 1.2. Use of concepts of time (e.g., focusing on Waverley’s past, present and future)
- 1.3. Chronological order (e.g., once your grandparents were kids and went to school; then your parents; now you go to school; and, in the future, if you have kids, they will go to school)
- 1.4. Basic map skills (for example, noticing the map that reoccurs along the trail)
- 1.5. Good leaders and good citizens (for example, Daniel Butler)
- 1.6. Students rights and responsibilities (how will YOU leave the world for future generations?)

## 2. English Language Arts

- 2.1. Speaking and listening (opportunities at nearly every panel)
- 2.2. New vocabulary (for example, decade, diversity, neighborhood)
- 2.3. Grammar and usage (is the spelling Waverly or Waverley correct?)
- 2.4. Reading (shared reading of texts along the path)
- 2.5. Writing (thank you letter and homework following the Trail trip)

## 3. Math

- 3.1. Numeration and tallies (numeration and tallying of decades since the 1870s)
- 3.2. Symmetry and geometry (symmetry of a compass, and of a tree; lines and curves along the Trail)
- 3.3. Probability (is something that may happen likely or unlikely; such as the land trust idea that changes the world?)



4. Science: Seeds and Life Cycles
  - 4.1. Inquiry based-learning (where does the rain goes after it falls on your roof?)
  - 4.2. Observable properties of objects/characteristics of living things (lobed leaves of white oaks)
  - 4.3. Living things in their environment, using earth's materials (turtles living in a watershed)
  - 4.4. Periodic phenomenon (for example: trees budding in spring, leaves falling in autumn)
5. Physical Education
  - 5.1. Variety of passive and active recreation methods (i.e., people in Belmont play in a variety of active and more passive ways, from playing baseball to taking a walk)
6. Visual Arts
  - 6.1. Variety of forms of visual arts (i.e., people in Belmont can enjoy many visual art forms, including painting, sculpture, photography and architecture)
7. Technology
  - 7.1. Leveraging technology to learn about our town (i.e., before and after walking the Waverley Trail, we can learn more by going to its website at [www.waverleytrail.org](http://www.waverleytrail.org)).

We suggest that teachers and Trail Guides that will lead the children to explore the Trail take the time to read the panel-by-panel descriptions that follow, in order to prepare for what should be a very pleasant walk along city streets, and into the woods. The entire walk is along a marked route, crossing streets only at marked crosswalks that should be accessible to virtually every student in Belmont second grades and their adult friends.

# ON THE DAY BEFORE THE TOUR

## In the Classroom

### LOCATION

In the second grade classrooms of Belmont Public Schools.

### MATERIALS NEEDED

- Projector connected to the Internet to show NECN video on the Waverley Trail, accessible at [http://www.youtube.com/watch?v=-Vubp2\\_tgRI](http://www.youtube.com/watch?v=-Vubp2_tgRI), and to show copy of Waverley Trail Map on the next page. PRELOAD THE VIDEO TO AVOID WAITING FOR IT TO BUFFER WHEN YOU WANT TO SHOW IT.

### MAIN THEME

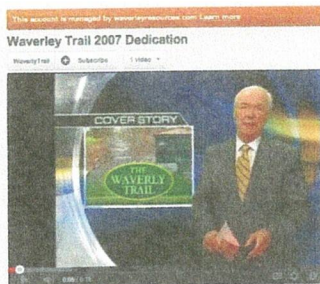
Introducing the idea of the Trail using a brief verbal introduction, a video and a map.

### METHOD

1. Explain that you are going to share with them how **HISTORY WAS MADE IN BELMONT** and Waltham.
2. Tell the kids that they need to wear sturdy shoes and an appropriate coat for the trip.
3. Show NECN video on the website ([www.waverleytrail.org/resources.html](http://www.waverleytrail.org/resources.html)); note that TV stories are one of several **MEDIA** used to share the story of the Waverley Oaks.
4. Use **the MAP** attached to the teaching guide to show the kids where the Trail is, and to recognize the *Compass Rose* showing the **CARDINAL DIRECTIONS: NORTH, SOUTH, EAST AND WEST.**
5. Give them a bit of homework. Ask them if they can figure out **WHERE THE RAIN GOES WHEN IT FALLS ON THEIR ROOF AT HOME (OR AT SCHOOL), AND ONTO THE GROUND** (this is an exercise in **INQUIRY-BASED LEARNING**)

### YOUTUBE VIDE: NECN "COVER STORY" ON THE WAVERLEY TRAIL

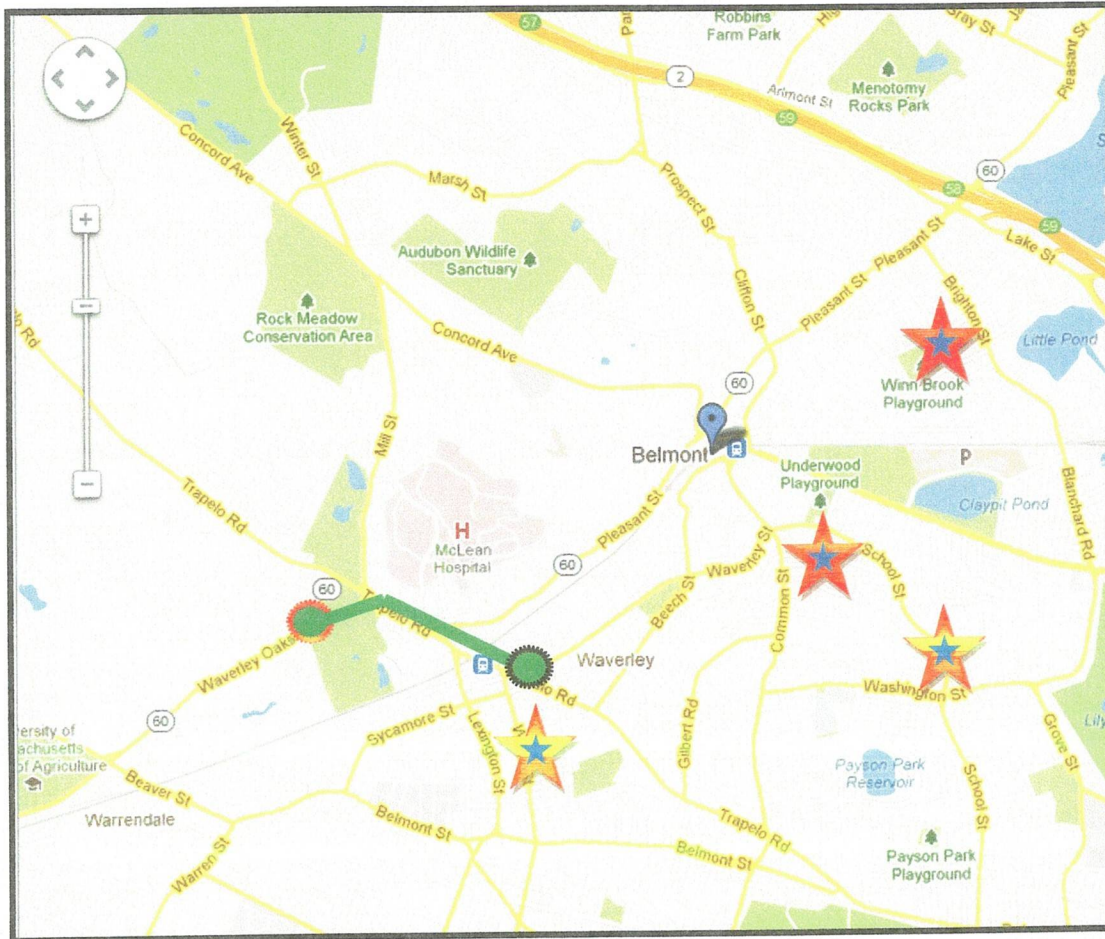
Available at [http://www.youtube.com/watch?v=-Vubp2\\_tgRI](http://www.youtube.com/watch?v=-Vubp2_tgRI).





# WAVERLEY TRAIL MAP, with BELMONT ELEMENTARY SCHOOLS

## MAP

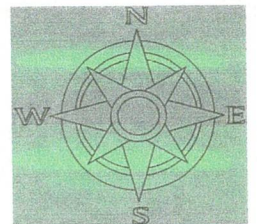


## LEGEND

Belmont  
Elementary  
Schools

Waverley  
Trail  
begins

Waverley  
Trail ends



Map composed in 2012 with Google Maps and symbols from Microsoft Word

# ON THE MORNING OF THE TOUR

## Panel 1: About the Waverley Trail - Trail Map

### LOCATION

At the kiosk on the “island” between Waverley Road and Trapelo Road in Belmont.

View at <http://waverleytrail.org/abouttrail.html> .

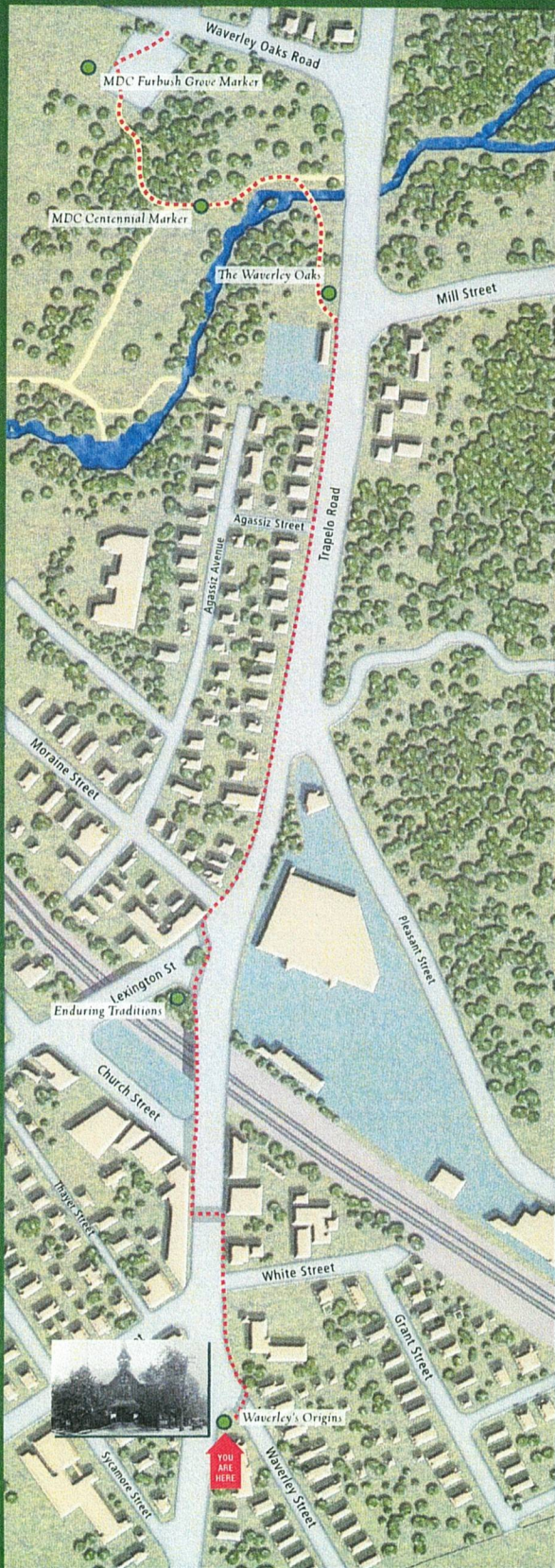
### MAIN THEME

Reintroducing the Waverley Trail and a map showing its route.

### METHOD

1. Guides can greet the kids, and introduce yourself. Ask them if they know what the Waverley Trail is and how it is related to the **HISTORY OF BELMONT**.
2. Show them the picture of the church at the bottom of the panel, and ask them if anyone knows where that church is (its right across the street, to the northwest of the kiosk).
3. Ask them to guess how old that church might be. Tell them that it was built about the year 1870. Ask them how many years ago that was? Then, with your fingers, **TALLY** the decades that have passed since then (1870 to 1880: 1; to 1890, 2; to 1900, 3 decades, and so on). The kids will eventually count 14 decades, or 140 years, since the time when the church was built. “Gee, guys, this church is pretty OLD...”
4. Try the kids knowledge of the **VOCABULARY** word “DECADE”, which of course means “10 years.



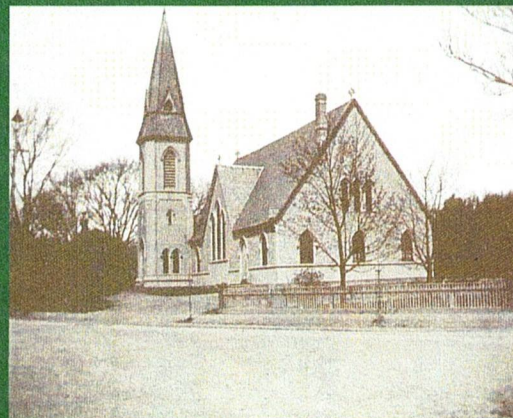


The design and construction of this kiosk was made possible by a generous contribution from  
ENGINE 1, LLC

## ABOUT THE Waverley Trail

The Waverley Trail celebrates our community and our natural heritage from Waverley Square to the Waverley Oaks. In Waverley Square, to the east, you will find a commercial center and transportation hub that hosts such distinguished historic buildings as the 1870 Congregational Church and the 1873 schoolhouse which the Reverend Daniel Butler oversaw as a member of the Belmont School Committee. In the Beaver Brook Reservation at the western end of the Trail are trees that descend from the remarkable Waverley Oaks, a grove of about two dozen very large and ancient trees that in the 1890s inspired the creation of the world's first land trust, as well as the nation's first public regional park authority. As citizens of Belmont and Waltham, we take great pride in the past, present and future of our landmark neighborhood.

For further information visit [www.waverleytrail.org](http://www.waverleytrail.org)



WAVERLEY CONGREGATIONAL CHURCH,  
COMPLETED 1870. Hammatt Billings, architect.  
(Belmont Historical Society)





## Panel 2: Waverley's Origins – Photo of Rev. Daniel Butler

### LOCATION

Also at the kiosk on the “island” between Waverley Road and Trapelo Road in Belmont.

View at <http://waverleytrail.org/Butlerschool.html> .

### MAIN THEME

Leading **CITIZENS** such as Daniel Butler have been involved in making Belmont a good place to live and go to school for more than 100 years – a CENTURY.

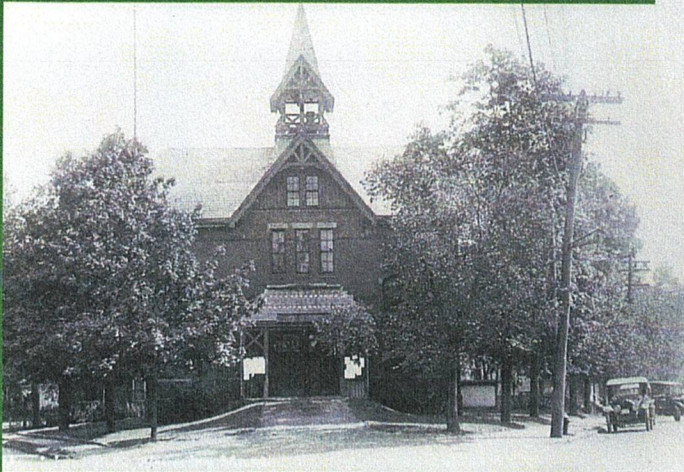
### METHOD

1. Draw the kids' attention to Daniel Butler's picture. Ask them if they recognize the name. Particularly kids from the Butler School should know that he is the person a Belmont School is named after, and was a Belmont **COMMUNITY LEADER** more than a CENTURY ago.
2. Draw the kids' attention to the picture of the first Butler School. Ask them if any of them can find that building (it is just behind the island). Ask them if they can find the pictured WEATHER VANE. Discuss with them the fact the weathervane is both a **SCIENTIFIC TOOL** (that is, something you can use to learn more about the world around us) to see which way the wind is blowing, and a beautiful piece of METAL SCULPTURE (one of many **FORMS OF ART** that we will see on the Trail).
3. Perhaps discuss with them that both the old **SCHOOL BUILDING** and the **CHURCH** are beautiful pieces of ARCHITECTURE, yet another form of **ART**.
4. Review with them the three **VOCABULARY** works just considered: CENTURY, WEATHERVANE, SCULPTURE and ARCHITECTURE.



## THE FIRST DANIEL BUTLER SCHOOL, ABOUT 1910

The building originally known as the Waverley Village School (below) was designed by Moffette and Tolman Architects and completed in 1873. It was later renamed in honor of Daniel Butler, a distinguished local citizen. When a new Butler School was built just a block away, this building was renovated to serve as the Waverley Fire Station. A subsequent addition was made for a branch library. In 2006, the building was rebuilt as the Engine 1 Condominiums. (Belmont Historical Society)

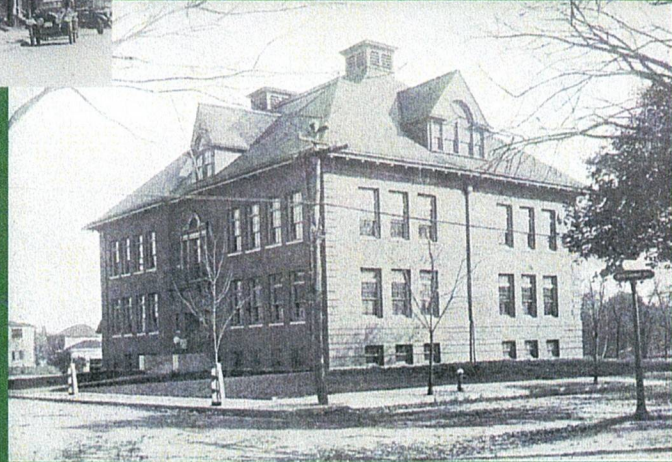


## THE REVEREND DANIEL BUTLER IN THE LATE 1800s

A highly respected Congregational minister and Belmont School Committee member, Daniel Butler (left) first moved to the town in 1865. He served on the Belmont School Committee in the 1890s and represented Belmont in the state legislature in 1883. (Belmont Historical Society)

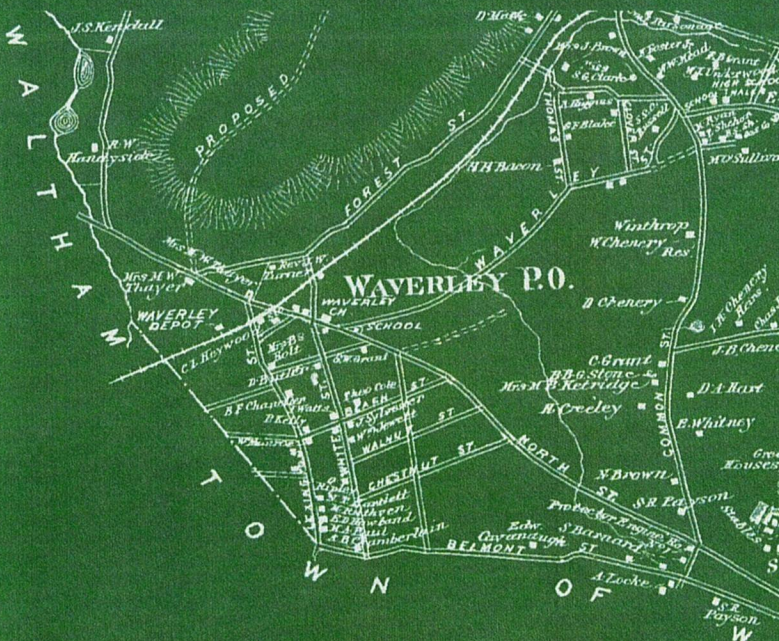
## THE SECOND DANIEL BUTLER SCHOOL

The distinctive arch of the second floor Palladian window was a prominent feature of the school's original entrance on Sycamore Street. The school, completed in 1910 (right), was designed by E. B. Homer. With a 1926 addition, the entrance was moved to White Street. (Belmont Historical Society)



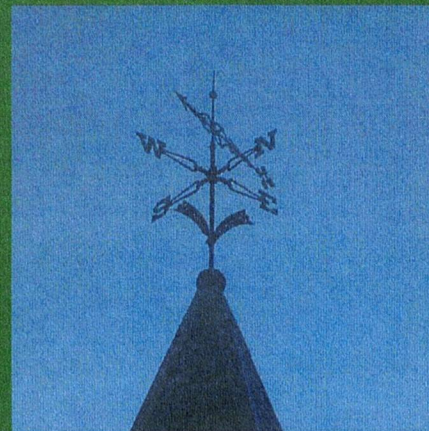
## MAP OF WAVERLEY, 1875

This section of a larger map of Belmont shows that, more than a decade after Belmont's founding, a modest number of homes had been built in Waverley, mostly along White and Lexington Streets. (Belmont Historical Society)



## WEATHERVANE, 2007

Early photographs indicate that the elegant weathervane that crowns the cupola on top of the Engine 1 condominiums has graced the building since its early days. (Jim Levitt)





## Panel 3: Waverley's Origins – “Before settlement...”

### LOCATION

Also at the kiosk on the “island” between Waverley Road and Trapelo Road in Belmont.

View at <http://waverleytrail.org/waverleyorigins.html>.

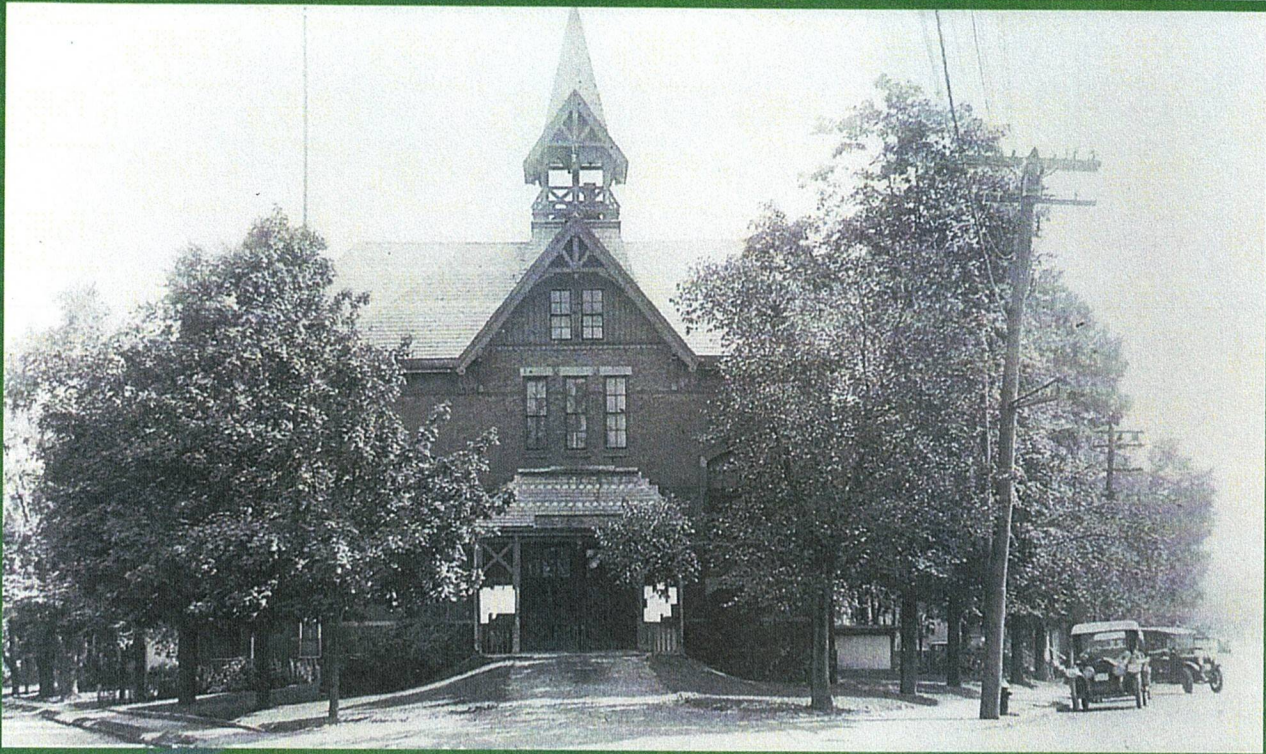
### MAIN THEME

The idea that NEIGHBORHOODS can change dramatically over time.

### METHOD

1. Note that about 400 years ago, Indians used the area around Waverley as a winter site for their houses. In the summer they lived closer to the ocean, near what is now downtown Boston.
2. Ask the kids “What is a NEIGHBORHOOD?” This is yet another **VOCABULARY** word.
3. Ask the kids “HOW HAS THIS NEIGHBORHOOD CHANGED OVER TIME?” How has it changed since the Indians were here 4 centuries ago? How has it changed since the time when the MODEL T cars in the picture on Panel 3 were made? This will, of course, give them a sense of how **HISTORICAL CHANGE** can happen even in a place they think they know very well.





The first Daniel Butler School, about 1910  
(Belmont Historical Society)

## WAVERLEY'S ORIGINS

Before settlement by the English, Indians allied with the Massachuset tribe lived in the vicinity of what became Watertown and Belmont. Trapelo Road, along which the Waverley Trail runs, is believed to have once been an Indian path, traveled by native people going between summer residences near the river and bay to more sheltered inland winter settlements. Remains of such winter settlements have been found in the area known by early settlers as Pequossette Meadow, as well as in today's Beaver Brook Reservation.

Sir William Saltonstall in 1630 led the first party of English settlers up the Charles River into the region that now includes Watertown, Waltham and Belmont. Roger Wellington in 1636 extended Saltonstall's settlement north into the area that later became Belmont Center. Settlements near Beaver Brook remained largely agricultural until the 1840s, when the Fitchburg Railroad crossed the Brook on the way to Waltham Center. Once the Waverley Land Company, a Watertown real estate firm, plotted the neighborhood for the development of large homes in 1851, the rail stop nearby came to be known as the Waverley Depot. The neighborhood slowly filled in and became part of Belmont upon incorporation of the town, assembled from parts of Waltham, Watertown and West Cambridge in 1859.

Among the first substantial community buildings built in the Waverley neighborhood were the 1870 Waverley Congregational Church and the 1873 Waverley Village School. Both buildings have been renovated and expanded several times, and stand today as beautiful, living testaments to the life of our community.



# Panel 4: A Wealth of Diversity

## LOCATION

The panel on the post in front of the Waverley Congregational Church at 471 Trapelo Road in Belmont. View at <http://waverleytrail.org/wealthofdiversity.html>.

## MAIN THEME

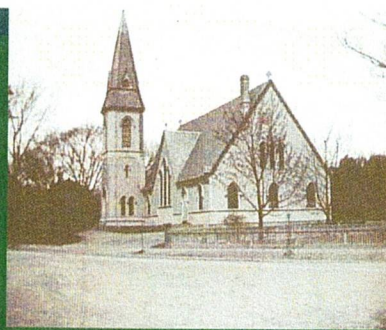
Over the past century, the Waverley neighborhood has had a DIVERSE population, welcoming people from many lands who speak many languages.

## METHOD

5. Draw the children's attention to the picture of the class from the 1950s, and the caption below it. Note that the children's names reflect a wide DIVERSITY of heritages, from Italian (Coluccio) and Armenian (Hagopian) to French (Millet), Greek (Spilios), Irish (Sullivan) and English (Whitney). DIVERSITY is yet another VOCABULARY word.
6. Ask the kids how dress has CHANGED OVER TIME. One common response is their surprise that the girls wore dresses to school in the PAST, while most girls wear pants to school NOW.
7. Get a brief discussion going regarding the benefits of diversity in schools – how working alongside and becoming friends with kids from around the world prepares us to be good CITIZENS in a diverse Massachusetts and the nation, as well as the world.



*One in every four students attending the Butler School comes from a household where English is not the primary language.*



**WAVERLEY CONGREGATIONAL CHURCH, 1870**

This stately structure was one of the first large community buildings built in Waverley. In the twenty-first century, it serves several diverse congregations. (Belmont Historical Society)

## A WEALTH OF DIVERSITY



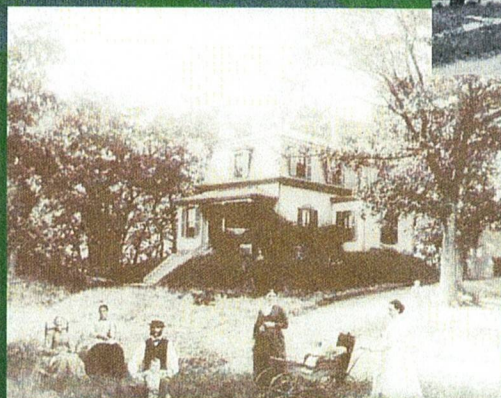
**BUTLER SCHOOL SIXTH GRADERS IN 1950**  
Sixth graders from the Butler School pose in this 1950 class picture with their teacher, Helen Foss. Their family names—Coluccio, Hagopian, Millet, O'Hara, Ruiz, Spilios, Sullivan and Whitney—suggest that their families came to Massachusetts from many nations. (Belmont Historical Society)

The Waverley neighborhood has long enjoyed a wealth of diversity of cultures, languages, religious denominations and professional interests. In the twenty-first century, a variety of dialects, from Mandarin to French Canadian, can be heard on our streets and in our homes: as of 2006, about one in every four students attending the Butler School comes from a household where English is not the primary language. The neighborhood's diversity is further reflected in its churches of many denominations, including Armenian Catholic, Congregational, Haitian Nazarene, Korean Evangelical and Roman Catholic.



### A DIVERSE HOUSING STOCK

The Waverley neighborhood reflects over one hundred years of diverse house styles. The Andrews family home (left) on Burnham Street had an elaborately decorated roof inspired by architectural styles then popular in Europe. In contrast, closely spaced triple deckers, such as the ones shown here (above) on Davis Road in the early 1900s, offered more affordable housing. (Belmont Historical Society)





# Panel 5: A Busy Commercial Center

## LOCATION

The panel on the post in front of the Bank of America at 483 Trapelo Road in Belmont (on the north side of the street). View at <http://waverleytrail.org/busycommercialcenter.html>.

## MAIN THEME

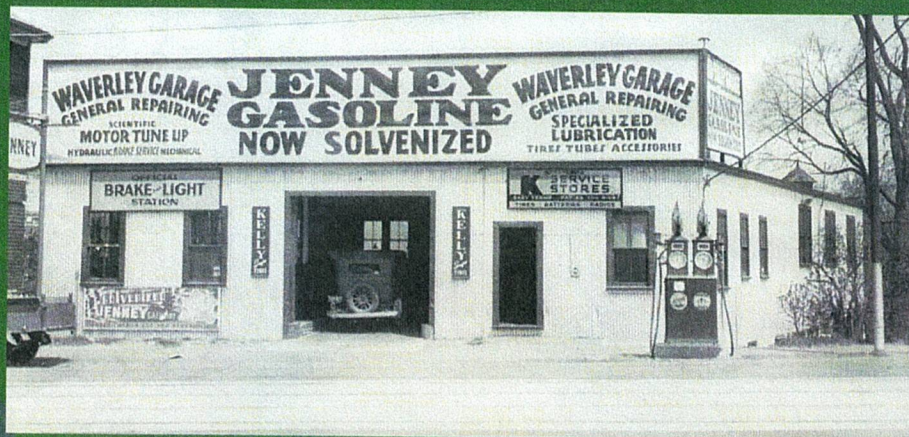
Not only is the Waverley neighborhood a place for schools and churches, it is also an important place for BUSINESS and COMMERCE (VOCABULARY).

Also, that little children that grow up in the neighborhood grow up to be **COMMUNITY LEADERS**.

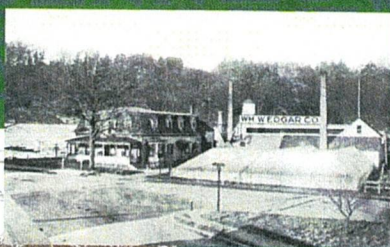
## METHOD

1. Draw the children's attention to the picture of Emilie Edgar. Then draw their attention to the people standing in front of Corbett's Drug Store on a fourth of July in the early 20<sup>th</sup> century. Note that Emilie, once she grew up into a young woman, grew up to be the wife of Alexander Corbett (the man in the suit). For many years, the Corbetts and their store played an important part in the life of the Waverley neighborhood.
2. Ask the kids if they know the building that was Corbett's store is today. Point out to them that it is the green building that can be seen looming across the street, above the U.S. Post Office. Ask the kids how the neighborhood has changed since 1916, when the picture was taken (for example, personal appearance and dress has changed; there are no cars in the 1916 picture).





**THE WAVERLEY GARAGE**  
The forerunner of the Jenney Oil Company was founded in Boston in 1812. Like this one, a number of other garages and auto dealers were located in Waverley. At its peak, Jenney offered its products through more than 600 locations from Maine to Rhode Island. (Belmont Historical Society)



## A BUSY COMMERCIAL CENTER

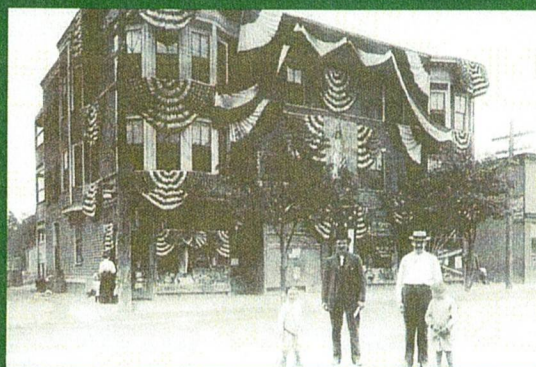
The exchange of goods, services and goodwill has always been central to daily life in Waverley Square. Whether it is greenhouse plants or groceries, oil and gas or banking services, the neighborhood has consistently been enlivened by hardworking business men and women.



### EDGAR'S FLORIST IN WAVERLEY SQUARE

William Edgar's floral and greenhouse company, located along Trapelo Road in Waverley Square (above right), was one of the town's largest businesses. Opened in 1884, the business grew quickly, serving both local and regional markets. Following her husband's death in 1907, Rose Edgar ran the company with her son until 1948, when it was acquired by Pearson and Quint.

The Edgars' daughter, Emilie, is pictured here, in 1897, as a little girl in one of the family's greenhouses. She grew up to marry Alexander Corbett, proprietor of the popular drugstore across the street. (Belmont Historical Society)



### CORBETT'S DRUGS ON THE FOURTH OF JULY, 1916

Alexander Corbett, who married Emilie Edgar, is pictured here in a suit in front of his landmark store, which is decorated for the holiday. With him in the

straw hat is Matthew Daly, the original builder and owner of the building before its sale to Corbett. (Belmont Historical Society)



# Panel 6: A Popular Location for Outdoor Recreation

## LOCATION

The panel on the wall next to the entrance to Belmont Wheelworks, at 480 Trapelo Road (on the south side of the street). View at <http://waverleytrail.org/outdoorrecreation.html>.

## MAIN THEME

People have long come to Waverley to find places to relax and for RECREATION (vocabulary word).

## METHOD

1. Draw the kids' attention to the picture of the bicycle. Ask how bikes have changed since the **PAST and NOW**.
2. Draw the kids attention to the fact that the word "**Waverly**" on the baseball uniforms is spelled differently than the same word is spelled across the street, on the "**Waverley Street**" sign. Ask them, to introduce a concept in SPELLING AND USAGE, which spelling is correct. Let them wonder about the ambiguity of the two spellings.

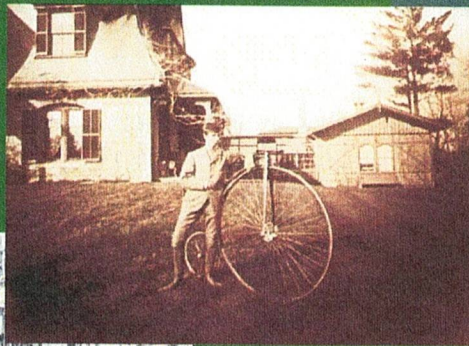




#### AN EARLY WAVERLY BASEBALL TEAM

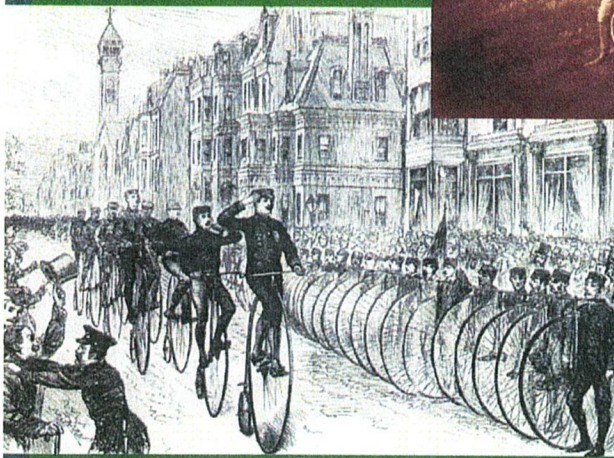
Baseball and football teams sported the Waverly name by the late 1800s. These nine young men, several wearing neckties with their uniforms, are ready to take the field. Note the catcher's mask in the foreground. The first catcher's mask was patented in 1878 by Fred Thayer, a native of Belmont, who played on Harvard's team. His family name is still recognized on Thayer Street and Thayer Road. (Belmont Historical Society)

## A POPULAR LOCATION FOR OUTDOOR RECREATION



#### A LOCAL BICYCLIST

The latest sporting fashions are shown here by a young man outside his Boston-area home, around the turn of the twentieth century. (The Schlesinger Library, Radcliffe Institute, Harvard University)



#### BOSTON WHEELMEN

The League of American Wheelmen, which promoted the sport of bicycling throughout the United States, had enthusiastic adherents in the Boston area. Many of these cyclists made Waverley a destination, as described by Sylvester Baxter in his 1892 article in *Garden and Forest*, "By Bicycle to the Waverley Oaks." (Drawing from Harper's Weekly, June 18, 1881, courtesy of HarpWeek)

Because of its famous oak trees and the generous supply of green hills and open space, Waverley has long been a popular destination for outdoor recreation and sports. By the late 1800s city dwellers looking for a relaxing day in the country might ride here by bicycle or take the train or trolley to Waverley depot to visit the scenic landscape or enjoy a sporting event.



# Panel 7: About the Waverley Trail - Trail Map

## LOCATION

The panel on the wall between Belmont Wheelworks and H&R Block (on the south side of the street). (Similar to panel at <http://waverleytrail.org/abouttrail.html> , except for location of "YOU ARE HERE" arrow and bottom photo).

## MAIN THEME

On the panel is a map with a "YOU ARE HERE" arrow on it. The map can be used to further familiarize kids with local maps and how they work.

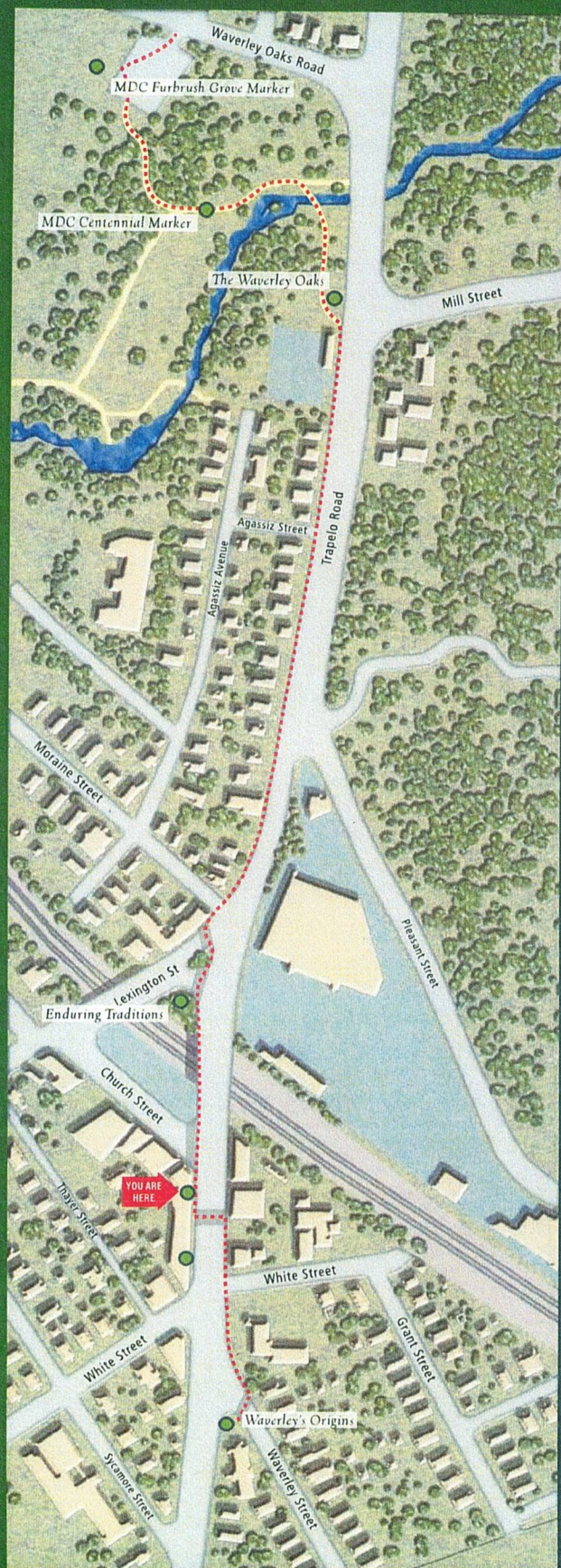
## METHOD

1. Ask the kids if they can find where, on map, they are. Explain that the YOU ARE HERE sign shows where they are currently standing on Trapelo Road.
2. Below the maps is a photo of a football team with the "W" symbol on their jerseys. Ask the kids if they know what the W stands for (its stands of course, for Waverley). The football uniforms, and the fact that Waverley had its own football team, are more reminders of how another Belmont has changed over time.



# ABOUT THE WAVERLEY TRAIL

The Waverley Trail celebrates our community and our natural heritage from Waverley Square to the Waverley Oaks. In Waverley Square, to the east, you will find a commercial center and transportation hub that hosts such distinguished historic buildings as the 1870 Congregational Church and the 1873 schoolhouse which the Reverend Daniel Butler oversaw as a member of the Belmont School Committee. In the Beaver Brook Reservation at the western end of the Trail are trees that descend from the remarkable Waverley Oaks, a grove of about two dozen very large and ancient trees that in the 1890s inspired the creation of the world's first land trust, as well as the nation's first public regional park authority. As citizens of Belmont and Waltham, we take great pride in the past, present and future of our landmark neighborhood.



A WAVERLEY FOOTBALL TEAM FROM 1914  
(Belmont Historical Society)



## Panel 8: Where the Trolley Meets the Train

### LOCATION

The panel kiosk between the railroad tracks and Lexington Street 9 (next to the Flag Pole)

### MAIN THEME

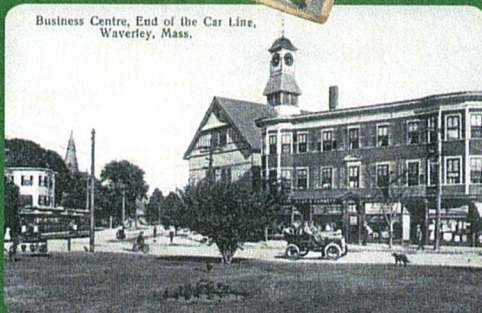
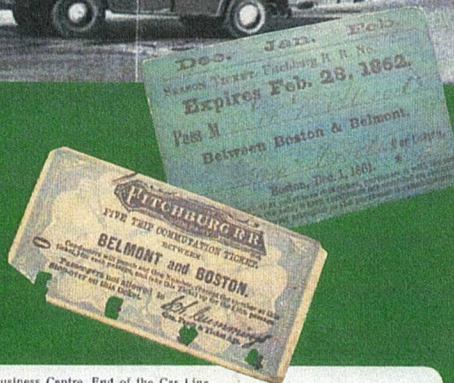
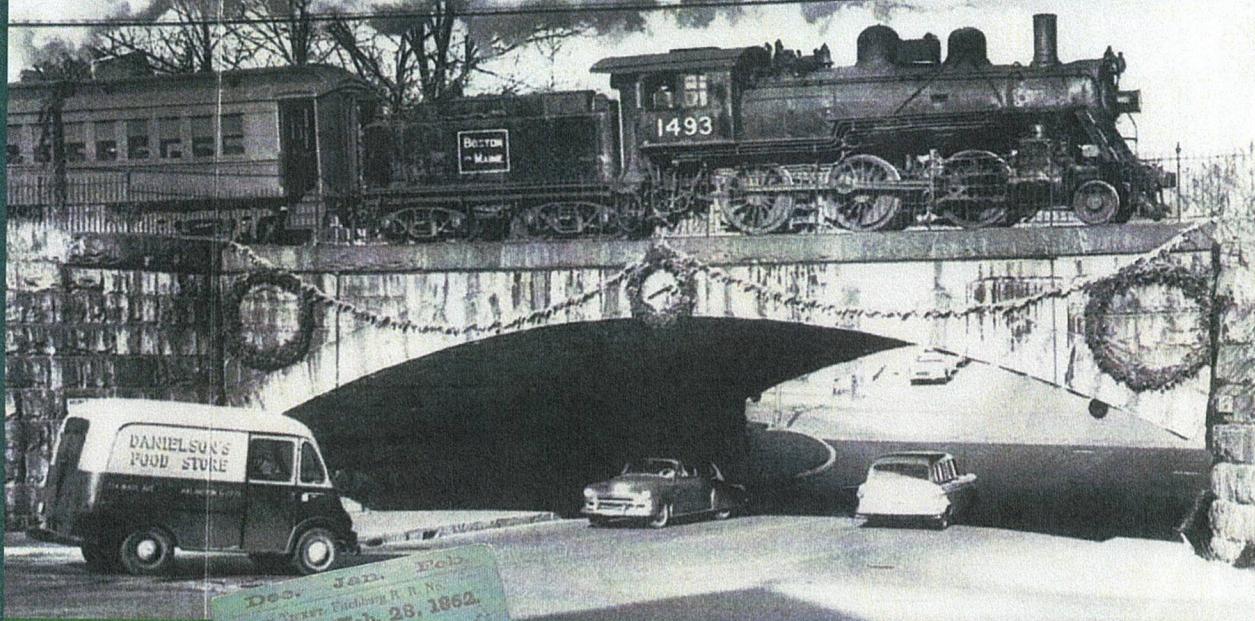
Waverley Square was in the PAST, and is NOW, a CROSSROADS for TRAVEL. The ways we travel has changed dramatically over time. View at <http://waverleytrail.org/trolleymeetsthetrain.html>.

### METHOD

1. Show the kids the picture of the steam engine. Ask them what it is, and talk a little about how trains now look and work differently, using diesel fuel rather than coal.
2. Point out the dates on the railroad tickets, which come from the 1860s. Ask the kids how many DECADES ago that was.
3. **TALLY UP 15 DECADES, OR 150 YEARS.**
4. Read the amusing quote at the bottom of the panel. Remind the kids that Boston is to the EAST, and that WALTHAM and many more towns are to the WEST.



# WHERE THE TROLLEY MEETS THE TRAIN



## POSTCARD OF WAVERLEY SQUARE

The second Waverley Hall, the prominent building in the center, was demolished in 1922. In this view, pedestrians, trolleys, and automobiles converged in the square.

(Belmont Historical Society)

**THE END OF THE STEAM ERA** This picture, taken in Belmont Center in the 1940s, shows the run of one of the last steam engines to operate on the Fitchburg Line. Steam engines had run on the line since the 1840s. (Belmont Historical Society)

Waverley Square has long been an important crossroads, where the trolley from Mt. Auburn Street in Cambridge, and a second trolley coming eastbound from Waltham, met the Fitchburg Railroad travelling between Boston and points west. Since the railroad's completion in the 1840s, such worthies as the philosopher Ralph Waldo Emerson, the naturalist Henry David Thoreau, and the author Louisa May Alcott likely passed through Waverley on train trips to and from Concord and Boston. When the trolley lines were completed to Waverley in the late 1800s, a whole new set of possibilities for transit opened up.

*With the opening of the trolley line, Waverley "is now heard of as far east as Boston and none knows how far her fame may reach in other points of the compass."*

—The Belmont Bulletin, about October 1898



# Panel 9: About the Waverley Trail

## LOCATION

One of three panels on the kiosk , near the flag pole on Trapelo Road (across from the Shaw's parking lot, between the railroad tracks and Lexington Street). (Similar to panel at <http://waverleytrail.org/abouttrail.html> , except for location of "you are here arrow and bottom photo).

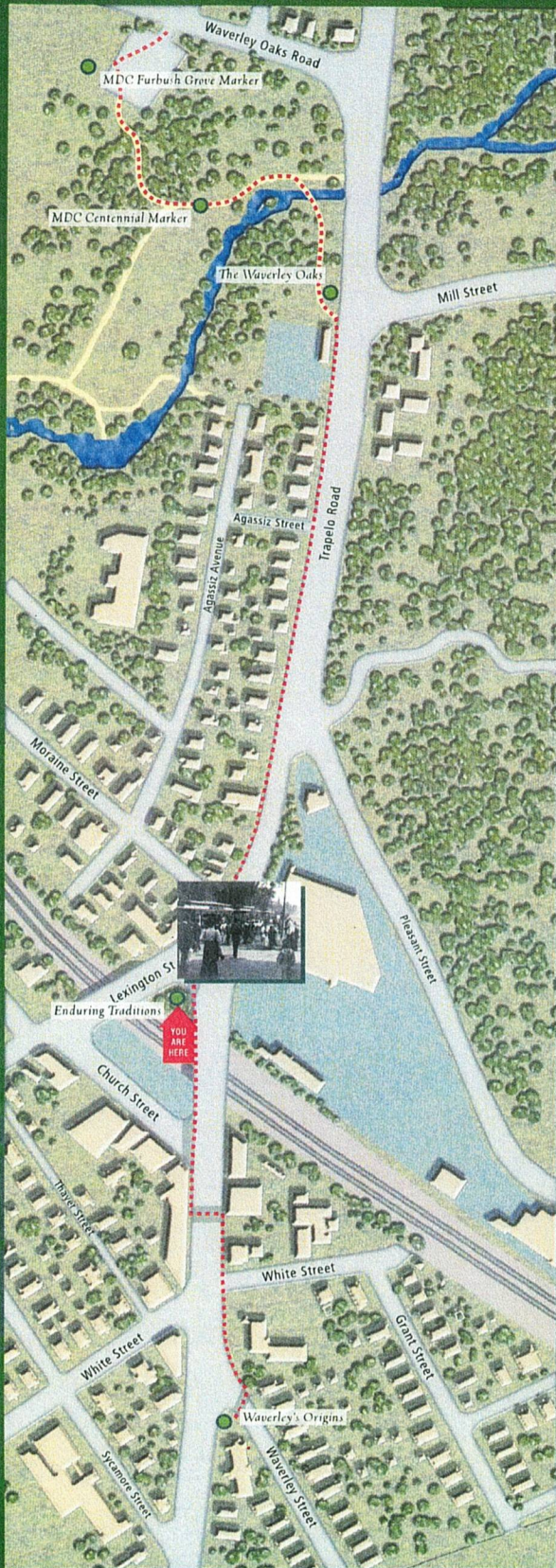
## MAIN THEME

On the panel is a map with a "YOU ARE HERE" arrow on it. The map can be used to further familiarize kids with local maps and how they work.

## METHOD

1. As before, ask the kids if they can find where, on map, they are. Explain that the YOU ARE HERE sign shows where they are currently standing on Trapelo Road.

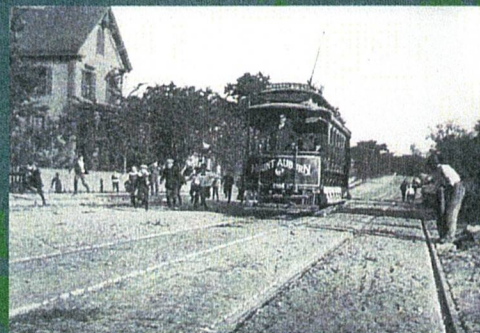




## ABOUT THE Waverley Trail

The Waverley Trail celebrates our community and our natural heritage from Waverley Square to the Waverley Oaks. In Waverley Square, to the east, you will find a commercial center and transportation hub that hosts such distinguished historic buildings as the 1870 Congregational Church and the 1873 schoolhouse which the Reverend Daniel Butler oversaw as a member of the Belmont School Committee. In the Beaver Brook Reservation at the western end of the Trail are trees that descend from the remarkable Waverley Oaks, a grove of about two dozen very large and ancient trees that in the 1890s inspired the creation of the world's first land trust, as well as the nation's first public regional park authority. As citizens of Belmont and Waltham, we take great pride in the past, present and future of our landmark neighborhood.

For further information visit [www.waverleytrail.org](http://www.waverleytrail.org)



CONSTRUCTION ALONG THE TROLLEY LINE FROM WAVERLEY SQUARE TO MT. AUBURN STREET IN CAMBRIDGE (Belmont Historical Society)

The design and construction of this kiosk was made possible by a generous contribution from

JOSEPH AND JAMES DESTEFANO





# Panel 10: Enduring Traditions – 1875 Map of Belmont

## LOCATION

One of three panels on the kiosk, near the flag pole on Trapelo Road (across from the Shaw's parking lot, between the railroad tracks and Lexington Street).

View at <http://waverleytrail.org/enduringtraditions.html>.

## MAIN THEME

Continuation of the themes of historic change in Belmont, and of the alternate spellings of Waverly and Waverley.

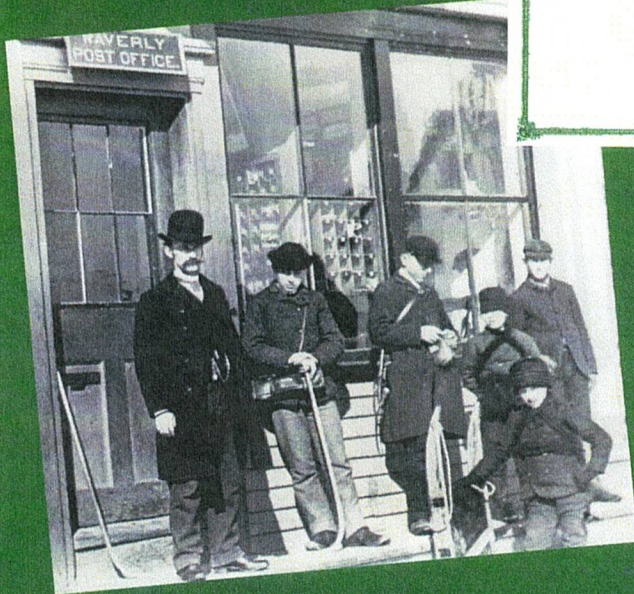
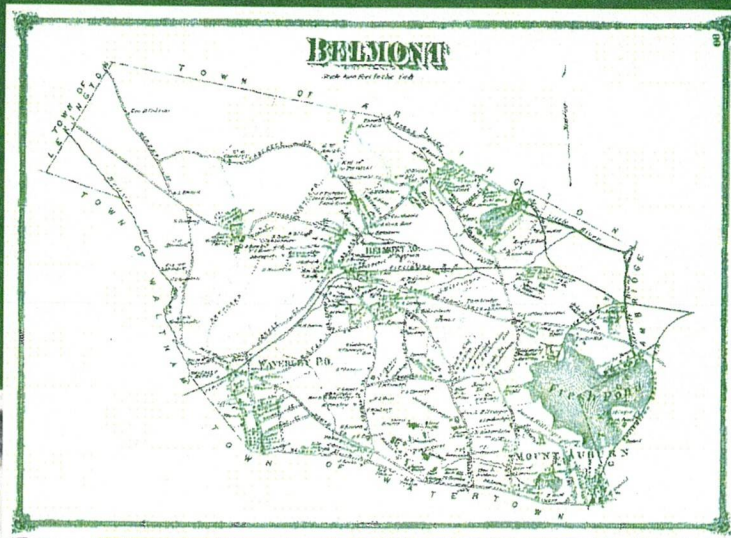
## METHOD

1. Draw the kids' attention to the photo of the man with boys standing in front of the Waverly Post Office. Note, again, how the alternate spelling of Waverly is used. Comment on how the sled one of the boys is using is different from the kind of sleds we use today.
2. Draw the kids' attention to the picture of the two buildings with the 1960s style car in front. Ask them if they can find that building. It is across the square, where the Dunkin' Donuts is today located. Note the stores and the people might look a bit different that we do today, but they are chatting just as we do in the 21<sup>st</sup> century.



## MAP OF BELMONT, 1875

More than a decade after Belmont was incorporated, there were few streets laid out between Waverley and Common Streets. Note that the Waverley Church, the School and several houses dot Trapelo Road, then called North Street. (Belmont Historical Society)

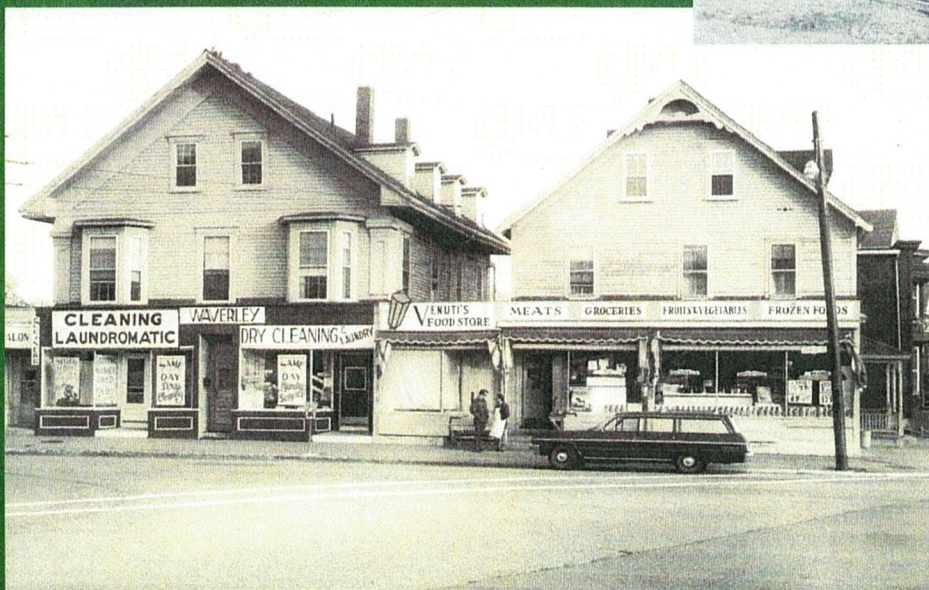


## WAVERLY POST OFFICE

The old post office in the square employed the alternate spelling of "Waverly," which is still used by the U.S. Postal Service and a local business. Two of the boys are ready to go sledding. (Belmont Historical Society)

## RAILROAD CROSSING: LOOKING EAST

A man escorts his son across the tracks, perhaps on their way to church. (Belmont Historical Society)



## WAVERLEY HALL, CHURCH STREET, ABOUT 1964

The first Waverley Hall (the structure on the left in the photograph) was built in 1855. Located along the railroad tracks, it was later moved across the street to 44 Church Street. A general store and post office were located on the ground floor, with a meeting hall on the second floor. This picture shows the building in the 1960s when it was home to Venuti's Food Store, a grocery familiar to earlier generations of Belmontians. In 1998, the building was restored by DESCO Associates and renamed Waverley Crossing. It hosts several businesses including a popular Dunkin' Donuts store. (J. DeStefano)



# **Panel II: Enduring Traditions – Opening of the Trolley Line**

## **LOCATION**

One of three panels on the kiosk, near the flag pole on Trapelo Road (across from the Shaw's parking lot, between the railroad tracks and Lexington Street).

View at <http://waverleytrail.org/waverleyorwaverly.html>.

## **MAIN THEME**

Resolution of the Waverly/Waverley alternate spellings controversy – you can spell it both ways.

## **METHOD**

1. Note the excitement in the photo on the day that the trolley opened to Mount Auburn Street and Harvard Square. Explain that the trolley has been replaced with the electric buses that run along the overhead wires.
2. Have one (or several) of the children read the final three paragraphs on the panel, beginning with “One enduring tradition...” It is OK to help them with unfamiliar or difficult words they encounter in these paragraphs.
3. Explain after the reading that sometimes, in rare circumstances, there can be two acceptable spellings of the same word.





The Opening of the trolley line from Waverley to Mount Auburn, October 1898 (Belmont Historical Society)

## ENDURING TRADITIONS

By the last quarter of the nineteenth century, Waverley Square had become a thriving center where residents of the neighborhood gathered for social events, to buy and sell goods and services, and to travel to the greater Boston metropolitan area via the trolleys and trains that stopped there. It has remained so into the twenty-first century. Just as residents of the neighborhood gathered for social events in the first Waverley Hall as far back as the 1850s, they gather more than 150 years later to share coffee in the same building, which has since been moved across the street.

Another enduring tradition in the neighborhood is the use of two different spellings, "Waverley" and "Waverly." Lively debate has echoed through the years regarding whether it is proper to end the word with "L-Y" or "L-E-Y."

Each side has its proponents. The "L-Y" faction reminds neighborhood residents that the United States Post Office branch station in the Square has used the Waverly spelling for more than 100 years, and that a prominent local business does the same. The "L-E-Y" side replies that the Town of Belmont and the City of Waltham are higher authorities, with street signs that read "Waverley Street" and "Waverley Oaks Road." The Waverley spelling is also used by several local businesses.

Apparently, the debate will go on for generations to come. A 2007 conversation with Belmont Town Historian Richard Betts yielded this thought: "Both spellings have long historical precedents, and we each have our own preferences. However, depending on usage, you can spell it either way."

The Waverley Trail was conceived of and brought to realization between 2004 and 2007 by a dedicated group of volunteers, advisors and friends, including: Marie Daly, Sheila Flewelling, Kathleen Haverly, Karl Haglund, David Johnson, Sam Knight, Jim Levitt, Steve Savarese, Paul Solomon and Adam Tocci.



# Panel 12: An Inspiration to Artists & Composers

## LOCATION

The panel on pole in the traffic island across from Shaw's Supermarket, between Lexington Street and Trapelo Road.

View at <http://waverleytrail.org/inspirationtoartists.html> .

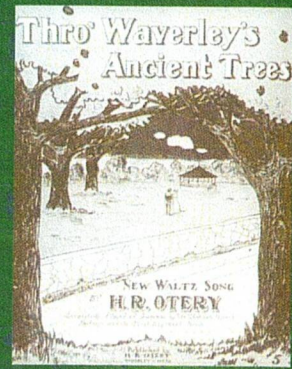
## MAIN THEME

This panel marks the transition from a focus on the neighborhood center to art, nature and parks. Here we explain to the kids how the Waverley area inspired both artists and musical composers.

## METHOD

1. Draw the kids' attention to the painting of the Waverley Oaks by WINSLOW HOMER. Tell them the original of this Homer painting now hangs in a famous museum in Spain .
2. Show the kids the SHEET MUSIC COVER PAGE, representing a song written a century ago by a local resident about the Waverley Oaks. Note that members of his family (pronounced O-ter-i) still live in the neighborhood.
3. Explain that there are **MANY DIFFERENT WAYS TO USE ART AND MUSIC** to represent the beauty of the landscape, including painting, photography, sculpture and music.
4. IMPORTANT NOTE - ON THE WALK TOWARD THE NEXT PANEL, MAKE SURE TO POINT OUT
  - The street sign for MORaine STREET (explain that there are MORAINES, or piles of rock left behind by glaciers, a cool **VOCABULARY WORD**) in the neighborhood
  - The street sign for AGASSIZ STREET (explain that Louis Agassiz was a famous Harvard natural history professor who studied moraines, and wrote about the moraines in the Waverley neighborhood).





#### THRO' THE OAKS

The Waverley Oaks were a romantic destination for many couples seeking an escape from the city in the early 1900s, as depicted on the cover of this musical piece dedicated by the author to Blanche A. Benton of Belmont, Massachusetts. (Belmont Historical Society)

"WAVERLEY OAKS"  
WINSLOW HOMER, 1864  
Homer's painting of two ladies strolling in the woods emphasizes the rural charms of the area. (Museo Thyssen-Boremisza, Madrid)

## AN INSPIRATION TO ARTISTS AND COMPOSERS

The natural scenery in the area that provided "pleasure grounds" to the people of Belmont, Waltham and greater Boston inspired artists and composers to create works of fine art as well as contributions to popular culture.



## Panel 13: A Haven in a Country Setting

### LOCATION

The panel on the pole outside of the Sweet Peach Diner at 628 Trapelo Road, Belmont. View at <http://waverleytrail.org/ahaven.html>.

### MAIN THEME

That men famous for designing landscapes and gardens, more than a century ago, were great admirers of the Waverley area.

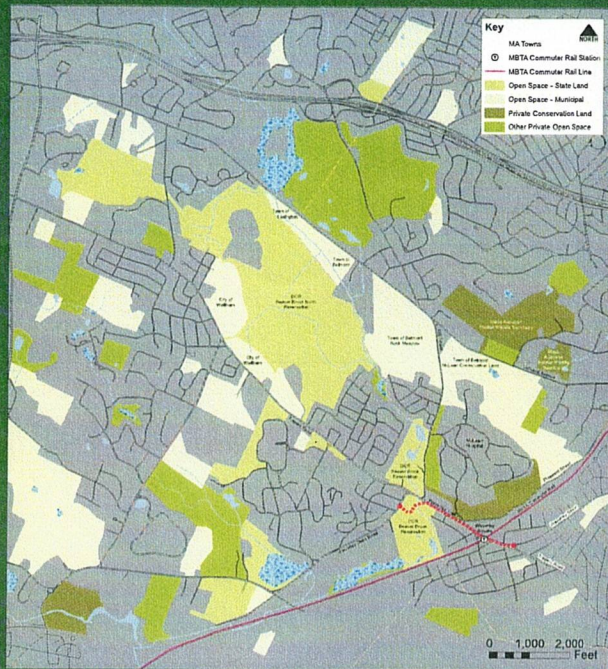
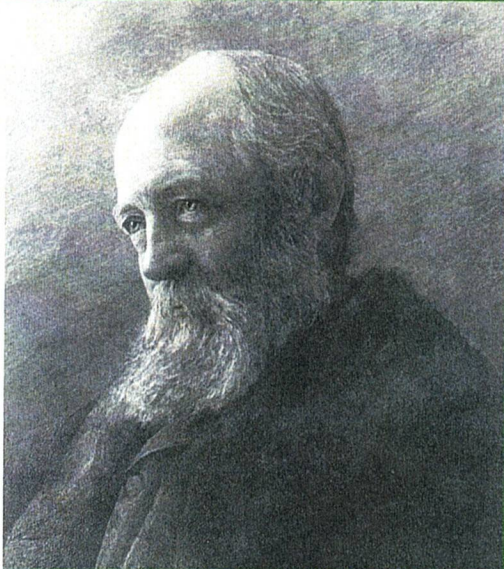
### METHOD

1. Show the kids the picture of FREDERICK LAW OLMSTED. Explain that a century ago, Olmsted was a very important landscape designer in America, and that he helped select the site for McLean Hospital, which today sits on top of the hill north of Trapelo Road.
2. Explain that at the end of his life, OLMSTED got sick and actually lived at that very hospital. He must have enjoyed the views that he himself had selected.



## FREDERICK LAW OLMSTED

Olmsted was America's leading landscape architect in the 19th century. He was engaged by the McLean Asylum in the 1870s to identify a new site for the hospital. In an 1872 report Olmsted wrote that "the Belmont place is a positively excellent one. You might go far and find none essentially better." Olmsted himself required care in the 1890s, and resided as a patient at McLean Hospital in Belmont for the last years of his life. (Library of Congress)



**REGIONAL OPEN SPACE** In the early twenty-first century, the open space adjacent to McLean connects with a broad network of protected lands owned by public and non-profit organizations. (Massachusetts Department of Conservation and Recreation)

## A HAVEN IN A COUNTRY SETTING



**McLEAN HOSPITAL, ABOUT 1894**  
This pen and ink drawing shows the expansive grounds of McLean Hospital in 1894, just before the hospital commenced operations in Belmont. Several structures pictured here are still actively used in the twenty-first century. (McLean Hospital)

Attracted by the open highland vistas, the McLean Asylum acquired a large tract of land east of Beaver Brook in 1875. The hospital moved from Somerville to Belmont in 1895, where it has carried on its tradition of world leadership in treatment, research and education. By the turn of the twenty-first century, a large part of the open grounds had reverted to woods, and the hospital transferred a portion of its property to the Town of Belmont as part of a collaborative process that resulted in over 100 acres being set aside as conservation land. That land is now a green link between the Beaver Brook Reservation, Rock Meadow, Mass Audubon's Habitat Sanctuary, and a vast network of open space beyond.



## Panel 14: Where Nature “Leaps to Music and to Light”

### LOCATION

The panel on the post at the eastern edge of the MDC “Spray Pool” along Trapelo Road in Belmont. View at <http://waverleytrail.org/natureleaps.html>.

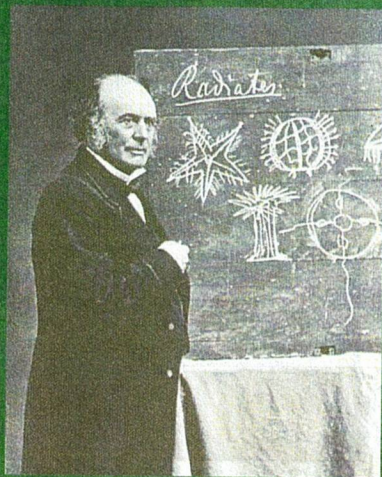
### MAIN THEME

In addition to the painters, musicians and landscape architects that they have already seen, important natural scientists and writers also took a deep interest in nature at Waverley.

### METHOD

1. Draw the kids’ attention to the photo of LOUIS AGASSIZ, explaining the forms of life found in the fossil record. Note that Agassiz is the man after whom Agassiz Street is named, and was probably the most important natural scientist of his day.
2. Also draw the children’s attention to the photo of JAMES RUSSELL LOWELL the founder of the Atlantic Magazine, who often visited Waverley and who hoped to see dams removed to free Beaver Brook to its more natural conditions.





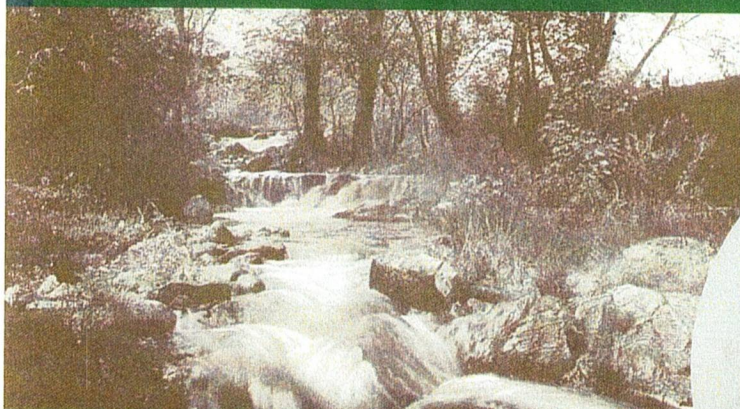
#### LOUIS AGASSIZ

Founder of Harvard's Museum of Comparative Zoology, Agassiz was perhaps the most prominent American natural historian of his day. Writing about glaciers and the landscapes they left behind, he observed in the July 1864 *Atlantic Monthly* that: "the Waverley Oaks, so well known to lovers of fine trees in our community, stand on

an ancient moraine" (a moraine is a gravelly mound formed by receding glaciers). Apparently in honor of that observation, the Waverley neighborhood has three appropriately named streets just east of the Waverley Oaks site: Agassiz Street, Agassiz Avenue, and Moraine Street. (The Schlesinger Library, Radcliffe Institute, Harvard University)

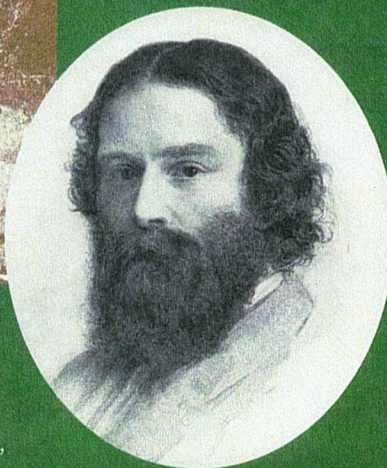
## WHERE NATURE LEAPS "TO MUSIC AND TO LIGHT"

The Waverley Oaks and surrounding countryside attracted many famous visitors interested in natural history in the nineteenth and early twentieth century. Their observations can be still be appreciated, and sometimes reflected even in the neighborhood's street signs, more than a century after they were recorded.



BEAVER BROOK CASCADE (Massachusetts DCR Archives)

*"Surely the wiser time shall come  
When this fine overplus of might,  
No longer sullen, slow, and dumb,  
Shall leap to music and to light."*



**JAMES RUSSELL LOWELL** First editor of *The Atlantic* and himself a lover of fine trees, Lowell wrote lyrically in the 1850s about how beautifully Beaver Brook might flow once an old dam had been removed from its path. The photo of the the Beaver Brook cascade that appeared once the old dam was in fact removed clearly demonstrates his point. (*The Atlantic Monthly*, 1881)



## Panel 15: About the Waverley Trail – Trail Map

### LOCATION

One of three panels on the kiosk, just inside the stone wall marking the edge of Beaver Brook Reservation, at the intersection of Mill Street and Trapelo Road in Belmont.

### MAIN THEME

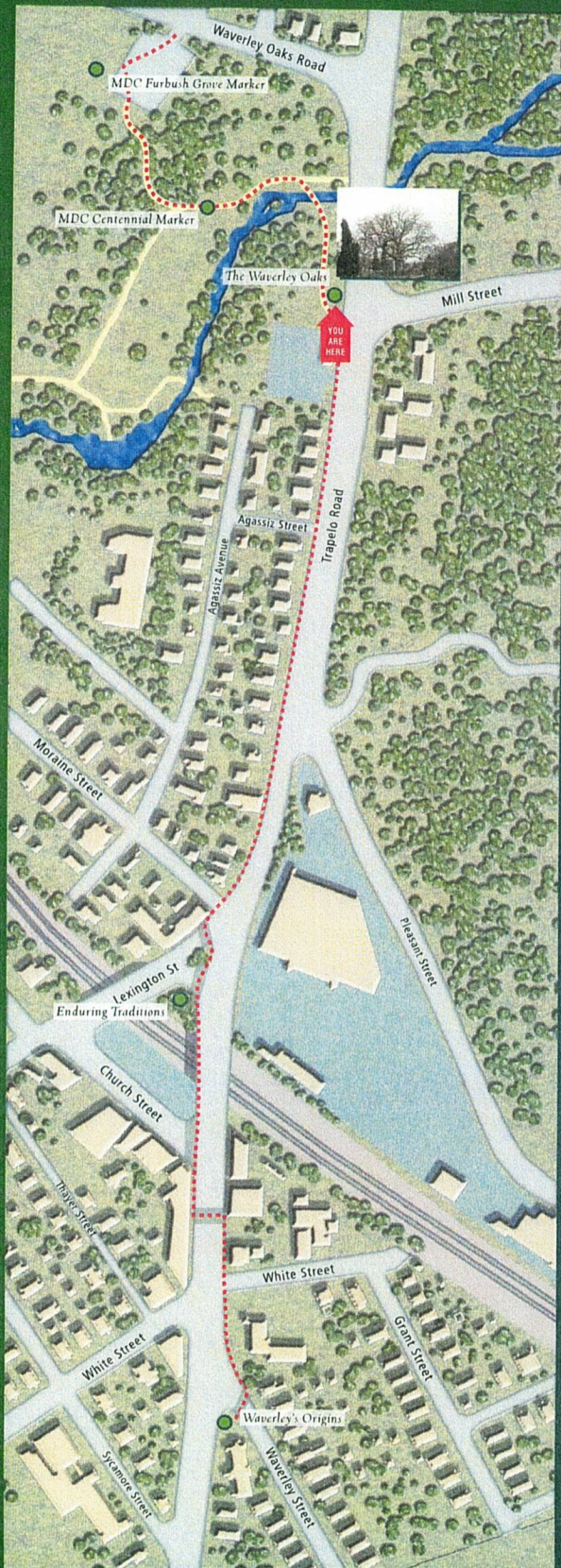
On the panel is a map with a “YOU ARE HERE” arrow on it. The map can be used to further familiarize kids with local maps and how they work.

(Similar to panel at <http://waverleytrail.org/abouttrail.html> , except for location of “you are here” arrow and bottom photo).

### METHOD

1. Ask the kids if they can find where, on map, they are. Explain that the YOU ARE HERE sign shows where they are currently standing on Trapelo Road.
2. Below the maps is a photo of a giant tree. This is one of the famous Waverley Oaks, a prime example of a LIVING ORGANISM in its NATURAL HABITAT (that is, an example of a “**LIVING THINGS IN THEIR ENVIRONMENT**”).
3. Note the fact that the tree is roughly **SYMMETRICAL**, with about the same amount of branches on all sides. This actually helps the tree to stand tall, survive rough wind storms, and live for many, many decades.





## ABOUT THE Waverley Trail

The Waverley Trail celebrates our community and our natural heritage from Waverley Square to the Waverley Oaks. In Waverley Square, to the east, you will find a commercial center and transportation hub that hosts such distinguished historic buildings as the 1870 Congregational Church and the 1873 schoolhouse which the Reverend Daniel Butler oversaw as a member of the Belmont School Committee. In the Beaver Brook Reservation at the western end of the Trail are trees that descend from the remarkable Waverley Oaks, a grove of about two dozen very large and ancient trees that in the 1890s inspired the creation of the world's first land trust, as well as the nation's first public regional park authority. As citizens of Belmont and Waltham, we take great pride in the past, present and future of our landmark neighborhood.

For further information visit [www.waverleytrail.org](http://www.waverleytrail.org)



WAVERLEY OAKS, HAND-COLORED SLIDE, 1896  
Nathaniel L. Stebbins, photographer.  
(Massachusetts DCR Archives)

The design and construction of this kiosk was made possible by a generous contribution from  
**WAVERLY LANDSCAPING, INC.**





## Panel 16: Charles Eliot and Sylvester Baxter

### LOCATION

One of three panels on the kiosk, just inside the stone wall marking the edge of Beaver Brook Reservation, at the intersection of Mill Street and Trapelo Road in Belmont. View at <http://waverleytrail.org/natureleaps.html>.

### MAIN THEME

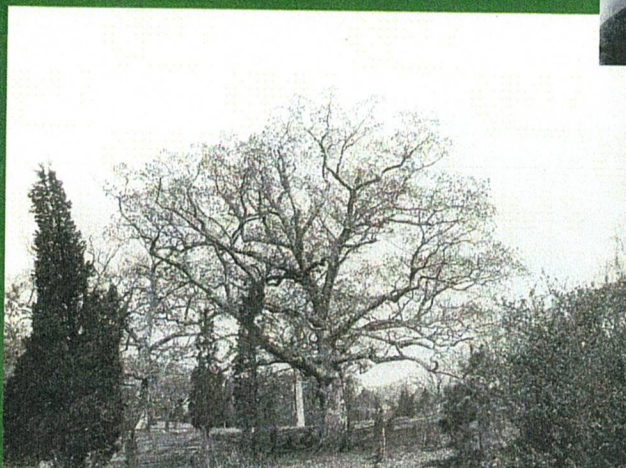
A small group of dedicated people had a big idea – that there should be a system of parks, owned by both independent land trusts and by the state, that would benefit the people for generations to come.

### METHOD

1. Draw the kids attention to the photos of CHARLES ELIOT and SYLVESTER BAXTER. Note for the children that these men, as **GOOD CITIZENS** had a big idea, drawn out on the circular map in the background of the panel. The big idea was to have a system to protect open space and parks for the benefit of people alive in the late 1800s, as well as future generations.
2. Then draw the children's attention to the photo of ELISHA ATKINS, who played another role as a **GOOD CITIZEN** by providing some of the money to buy the land and make it into a park. We can be grateful for both forms of citizenship, as we today are the beneficiaries.
3. Draw the kids attention to the picture of the CUT DOWN TREE (which probably died of old age as well as soil compaction caused by an exceptionally large number of visitors), with the woodcutter standing next to it. The picture gives some perspective of how large the Waverley Oaks really were – as large across as a man is tall (a **LIVING THING IN A HUMAN ENVIRONMENT**).

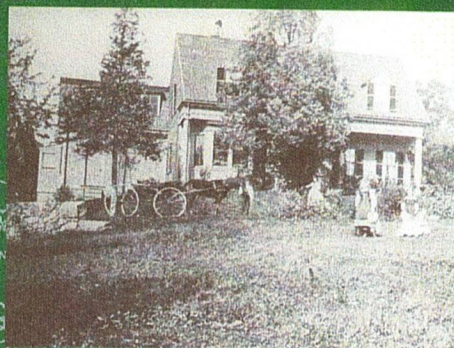


WAVERLEY OAK (Arnold Arboretum)



## CHARLES ELIOT AND SYLVESTER BAXTER

In 1890, Charles Eliot, a protégé of Frederick Law Olmsted, proposed the formation of the world's first land trust, today known as The Trustees of Reservations. The idea was to save "scenes of natural beauty" such as the one at Waverley, "which by great good fortune, still exist near [our] doors." That same year, journalist Sylvester Baxter renewed the call for a metropolitan commission in Boston. (Massachusetts DCR Archives)



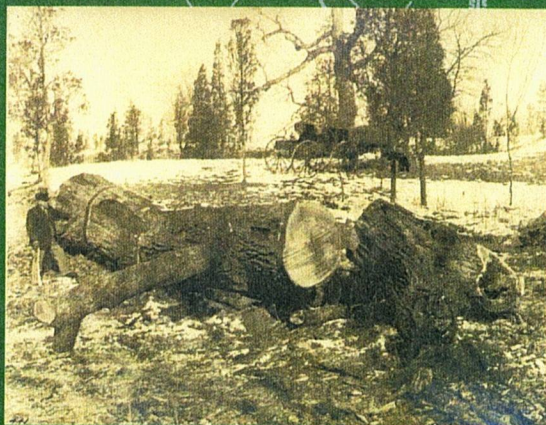
## THE ROBERT MORRIS COPELAND HOUSE, PHOTOGRAPH 1911

Robert Morris Copeland, the widely-read author who lived in the house on Beaver Brook up the hill from the Waverley Oaks, shared contemporary artists' appreciation for natural beauty. In 1869, he published a plan for a metropolitan commission to create a series of parks and reservations around Boston. (Massachusetts DCR Archives)



## EDWIN F. ATKINS

Mr. Atkins and his family were prominent Belmontians and early conservation philanthropists. They donated \$12,500 toward the acquisition of the Beaver Brook Reservation, more than half its entire cost. The gift "greatly facilitated...the preservation of this most interesting locality," as noted in the Metropolitan Parks Commission's first annual report, made in 1893. (Atkins family)



## THE DECLINE OF THE OAKS, 1908

One by one, the ancient oaks, hundreds of years old by the turn of the twentieth century, were lost to fire, disease, and old age. Note the size of the trees by comparing their girth to the man holding the axe. (Massachusetts DCR Archives)

## DIAGRAM OF THE PARKS AND PARKWAYS OF THE BOSTON METROPOLITAN DISTRICT, 1896

The Beaver Brook Reservation, including the Waverley Oaks, was the Park Commission's first acquisition upon its founding in 1893. The Commission was later merged into the Metropolitan District Commission, and in 2003 became part of the state's Department of Conservation and Recreation. (Massachusetts DCR Archives)



## Panel 17: Genesis of Land Trusts and Regional Park Systems

### LOCATION

One of three panels on the kiosk, just inside the stone wall marking the edge of Beaver Brook Reservation, at the intersection of Mill Street and Trapelo Road in Belmont. View at <http://waverleytrail.org/landtrusts.html>.

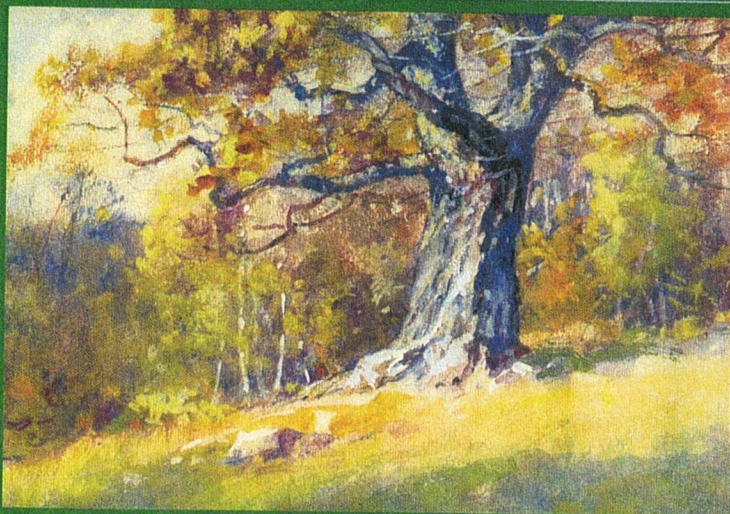
### MAIN THEME

Beautiful writing, in the right place at the right time, can change the world. Eliot's writing actually started the land trust movement, which has led to the establishment of thousands of land trusts around the world in the last 120 years.

### METHOD

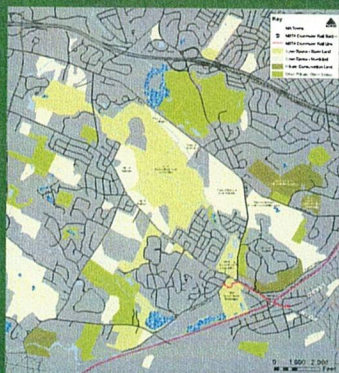
1. Read for the kids, **OR HAVE THEM READ OUT LOUD**, several key paragraphs from the essays Eliot wrote. His ideas, you should explain, have over time had a global impact.
2. Explain, if the kids are attentive, that Eliot was able to start not just the **WORLD'S FIRST LAND TRUST** (today called the Trustees of Reservation), but also the **NATION'S FIRST REGIONAL PARK AUTHORITY** (today part of the State of Massachusetts Division of Conservation and Recreation).
3. Re-emphasize that **HISTORY** was made as a result of **TREES THAT GREW in THE KIDS' OWN NEIGHBORHOOD** (or, near their own neighborhood).





"Waverley Oaks," watercolor by C. Scott White, about 1940  
(Belmont Historical Society)

#### THE WORDS THAT LAUNCHED THE LAND TRUST MOVEMENT



GARDEN AND FOREST, February 19, 1890,  
Editorial Article: "The Waverley Oaks"

"These Waverley Oaks are, all things considered, the most interesting trees in eastern Massachusetts...The age of which these trees have attained and the vicissitudes they have survived entitle them to respect, and the people of Massachusetts might wisely secure their preservation through the purchase and dedication to public use of the land on which they stand."

GARDEN AND FOREST, March 5, 1890,  
Letter in reply from Charles Eliot

"Sir—Your recent editorial on the Waverley Oaks...prompts me to lay before you an imperfect outline of a scheme by which not the scene at Waverley only, but others of the finest bits of natural scenery near Boston, might perhaps be saved to delight many future generations..."

"This...end might...be attained by an incorporated association, composed of citizens of all Boston towns, and empowered by the state to hold small and well-distributed parcels of land free from taxes, just as the public library holds books and the art museum pictures—for the use and enjoyment of the public..."

"Lovely natural scenery supplies an education in the love of beauty, and a means of human enjoyment at least as valuable as that afforded by pictures and casts... As Boston's lovers of art united to found the Art Museum, so her lovers of nature should now rally to preserve for themselves and all the people as many as possible of these scenes of natural beauty which, by great good fortune, still exist near their doors."

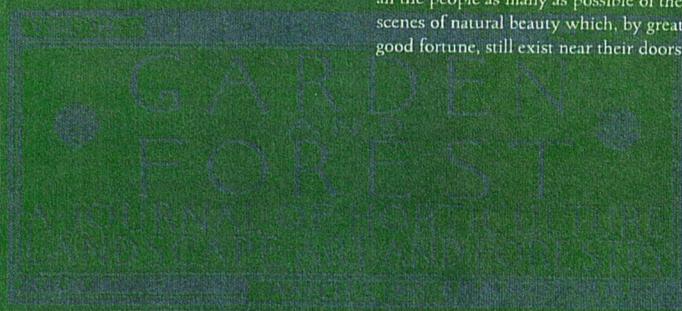
## THE GENESIS OF LAND TRUSTS AND REGIONAL PARK SYSTEMS

The Boston landscape gardener Robert Morris Copeland, who lived for a time in a rustic home on Mill Street in Belmont, published a plan in 1869 for a metropolitan commission to create a series of parks and reservations, as well as a grand boulevard that would extend around Boston in a sweeping arc.

Twenty-one years later, the beauty of the Waverley Oaks—a group of about two dozen very large and ancient white oak trees set on the small hills along Beaver Brook—inspired Charles Eliot to propose the creation of a land trust to acquire natural and cultural landscapes "just as the public library holds books." With leadership from Eliot, the world's first regional land trust, today known as The Trustees of Reservations, was created in 1891. However, in part because the proposed Beaver Brook Reservation straddled the Belmont-Waltham town line, the new organization was unable to acquire the parcel.

That same year the journalist Sylvester Baxter renewed the call for a metropolitan commission to provide public services, including water supply, fire, police, schools—and public parks. In 1893, the Metropolitan Park Commission was authorized by the Massachusetts legislature, the first regional park organization in the nation. The MPC's first acquisition was Beaver Brook, including the sites of the Waverley Oaks and the Beaver Brook cascade. Within eighteen months of its creation, the MPC acquired almost 7,000 acres of parkland throughout Metropolitan Boston.

Sadly, damaged by fires, disease and the heavy use of the park, most of the Waverley Oaks died early in the twentieth century. Their offspring still grace the Beaver Brook Reservation in the early twenty-first century.





## Panel 18: Beaver Brook

### LOCATION

One of two panels on the post alongside Beaver Brook in the Beaver Brook Reservation (follow the green line down the hill and to the west of the kiosk). View at <http://waverleytrail.org/beaverbrook.html>,

### MAIN THEME

Beaver Brook was first named by John Winthrop, founder of the Massachusetts Bay Colony, nearly 400 years ago. It is a large area that goes through Lexington, Belmont, Waltham and Watertown.

### METHOD

1. Show the kids the picture of JOHN WINTHROP and explain that he was the leader of the English people who settled Boston nearly 400 years ago.
2. Draw the kids' attention to the line drawing of the beaver in the upper portion of the panel. Winthrop gave Beaver Brooks its name because, when he arrived, he saw lots of BEAVER in and around the brook.
3. Today Beaver Brook offers habitat for many wild species, including turtles, some fish and wild turkeys. Unfortunately, all of the beavers were gone long ago, when they were hunted out of existence. Perhaps, someday, the beaver will be back, like the deer and wild turkeys that have returned to Belmont after many decades of absence. It is amazing how, when the native HABITAT is welcoming, species do in fact return (**LIVING THINGS IN THE ENVIRONMENT**).



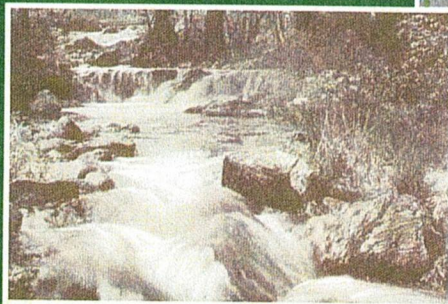
JOHN WINTHROP  
(Harvard University Portrait Collection)



## BEAVER BROOK

Beaver Brook is a stream that gives its name to the Beaver Brook Reservation. The brook flows from uplands in Lexington past the historic home of the Waverley Oaks and on to the south, where it empties into the Charles River, near Newton Street in Waltham. The brook was named by John Winthrop, leader of the Massachusetts Bay Company, during an expedition up the river in the early 1630s. Winthrop named it Beaver Brook because of the numerous beaver dams that he observed at the point where it joins the Charles River.

BEAVER BROOK ILLUSTRATION  
(Robert Morris Copeland)



**THE MILLS OF BEAVER BROOK** Many different mills have been built along the brook. Where the Beaver Brook Reservation now stands is the historic home to many mills, including a flour mill and a "satinet" (a kind of wool cloth) mill which burned down in 1849. The mills have been gone for almost a century, and today Beaver Brook Reservation is protected from the sort of development that used to be common on the very same piece of land.  
(Massachusetts DCR Archives)



THE BEAVER BROOK SUBWATERSHED, part of the Charles River Watershed (Charles River Watershed Association)



# Panel 19: The Charles River Watershed

## LOCATION

One of two panels on the post alongside Beaver Brook in the Beaver Brook Reservation (follow the green line down the hill and to the west of the kiosk). View at <http://waverleytrail.org/charlesriver.html>.

## MAIN THEME

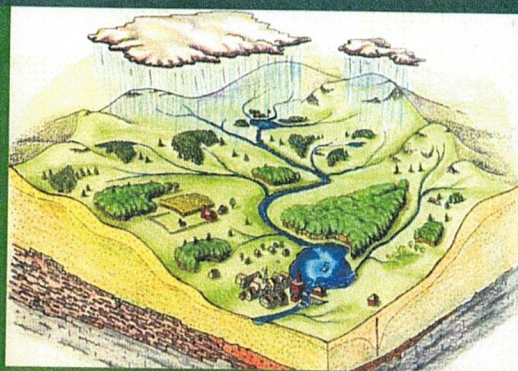
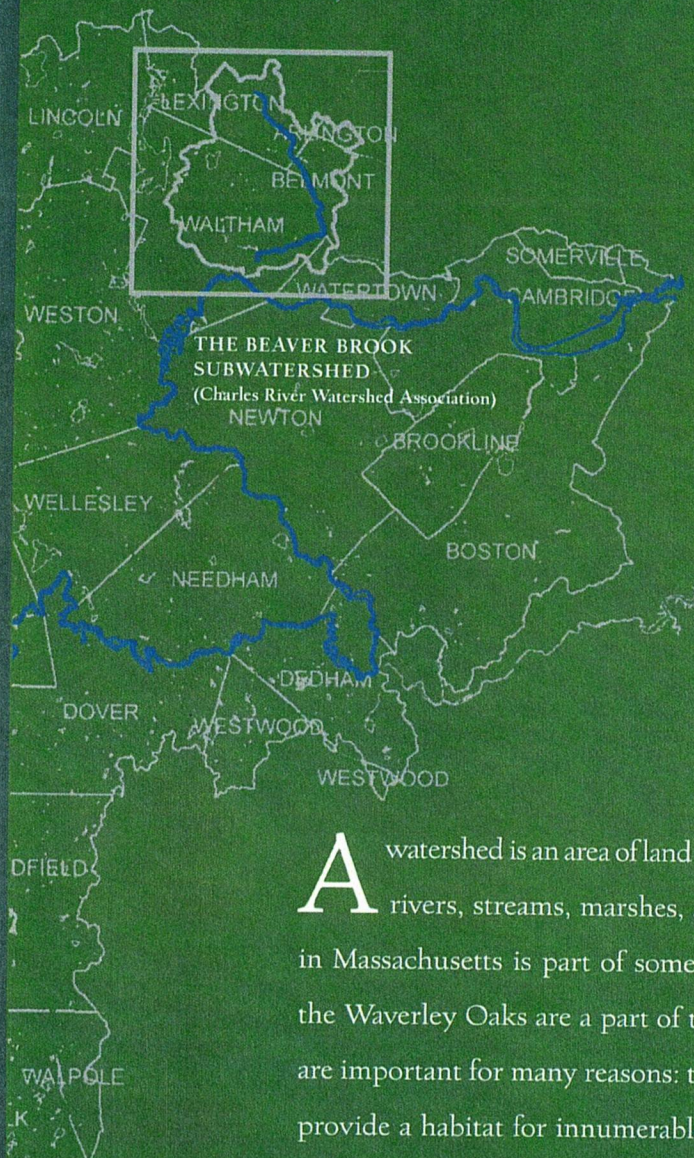
The surface of the land contains many **WATERSHEDS**, where liquid water collects into streams, brooks, and rivers, ponds and lakes, on its way to the ocean. (Other evaporated water returns to the air).

## METHOD

1. Ask the kids to answer the homework question they were asked the prior day: WHERE DOES WATER GO THAT FALLS ON YOUR ROOF AT HOME AND THEN TO THE GROUND?
2. After getting some answers, reinforce the idea (with the cartoon illustration on the panel) that water travels downhill in networks of ponds, lakes, streams, brooks and rivers on its way to the ocean. This network of waterways is called a WATERSHED
3. Show them that they are actually standing in middle of a watershed, shaped somewhat like a bowl. The water comes down off of roofs on nearby houses, down the hill and into Beaver Brook. Beaver Brook flows into the Charles River, and onto the Atlantic Ocean in Boston.
4. Explain that households in Belmont, depending on where they are located, actually send their water into one of two watershed: (A) for homes south of Concord Ave above Belmont Center, the water generally goes into the Beaver Brook/Charles River watershed. For most of the other homes in town, water generally goes into Winn Brook and other brooks, finding its way into the Mystic River Watershed.
5. If we take care of our watersheds, and keep oil and grease out of them, then we will have more clean water to drink, to swim and boat in, and to be good HABITATS for fishes, turtles and other animals that live in the water (**LIVING THINGS IN THEIR ENVIRONMENT**).



**THE CHARLES RIVER WATERSHED**  
(Charles River Watershed Association)



When rain falls on the ground in the Beaver Brook Reservation, some of the water finds its way downhill over the land's surface into Beaver Brook. Once in Beaver Brook, the water then travels, in part underground, to merge into the Charles River near Newton Street in Waltham. Once in the Charles River that rain water is carried out to Massachusetts Bay, and then into the Atlantic Ocean.  
(Massachusetts Watershed Coalition)

## CHARLES RIVER WATERSHED

A watershed is an area of land that drains rain and snow into groundwater. rivers, streams, marshes, and eventually, the ocean. All of the land in Massachusetts is part of some particular watershed; Beaver Brook and the Waverley Oaks are a part of the Charles River Watershed. Watersheds are important for many reasons: they are a key link in the water cycle; they provide a habitat for innumerable plants and animals that live on land, in the air and water; and they provide many people with drinking water - in Belmont and Waltham, we get our drinking water from a series of reservoirs fed by the Swift River and its watershed.

Unfortunately, today many watersheds carry more than clean water: they also serve as wet highways for a wide variety of pollutants, including oil, pesticides and excess fertilizers. These pollutants can cause serious damage to land and water resources used by people and wildlife. Citizen scientists, such as those that work with the Charles River Watershed Association and the Mystic River Watershed Association, work tirelessly to monitor and improve water quality in cities and towns throughout the region.



## Panel 20: White Oak

### LOCATION

One of two panels on the post just south of the Beaver Brook Reservation parking lot at about 538 Waverley Oaks Road in Waltham (continue to follow the green line up the hill from Beaver Brook towards the parking lot). View at <http://waverleytrail.org/whiteoaks.html>.

### MAIN THEME

This panel gives the kids a chance to closely **OBSERVE THE PROPERTIES OF LIVING THINGS**, and understand **both the LIFE CYCLES and ANNUAL CYCLES** of living things.

### METHOD

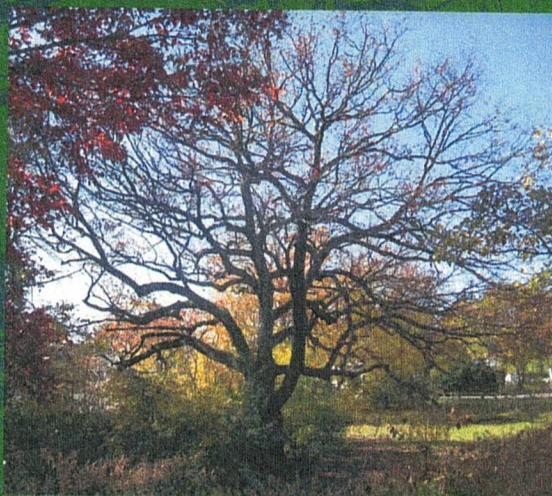
1. Draw the kids' attention to the picture of the "LAST SURVIVING WAVERLEY OAK." Ask them if they can find it. It is located to the south of the parking lot, in the ravine. Explain that the Waverley Oaks get their name from the place in which they live, but that scientists know them, and other trees like them, as **WHITE OAK** trees.
2. Explain that we know these are **WHITE OAK** trees because of the SHAPE OF THEIR LEAVES (lobed tips on the leaves) and the long, skinny SHAPE OF THEIR ACORNS (see line drawing on the panel) (this is a good opportunity to have the kids **OBSERVE THE PROPERTIES OF A LIVING THING**).
3. Tell the kids that the tree looks different than it is in the picture because it is very old, and has recently lost some big branches. Explain that like all living things, it may be near the end of its life. Some of the ACORNS that it drops to the ground will become the seeds of new trees that will someday, IN THE FUTURE, grow in its place, completing the **LIFE CYCLE**.
4. Explain that even this ancient tree still goes through **ANNUAL CYCLES**. We know because we can **SEE THE LEAVES CHANGING COLORS EACH FALL**.
5. Discuss how other living things depend on the Waverley Oaks for food. For example, **WILD TURKEYS** love to eat the White Oak acorns.



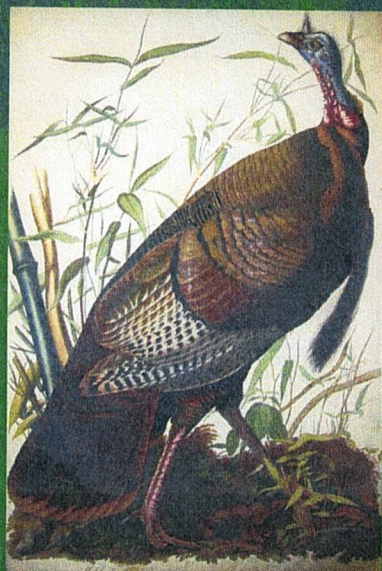
# WHITE OAK

The last remaining Waverley Oak, like its siblings which no longer exist, is a member of the species, *Quercus Alba*, or white oak. Mature white oaks can often grow to between eighty and one hundred feet tall, and can have branches which spread as wide as 116 feet across.

It is unclear how many hundreds of years the last of the Waverley Oaks has lived, but we can be sure from the height of its crown and spread of its branches that it has witnessed the passing of many, many seasons.



THE LAST SURVIVING WAVERLEY OAK  
(Jim Levitt)



WILD TURKEY BY J.J. AUDUBON  
(Massachusetts State Library)

Being sweeter than the acorns of the red oak, the white oak's acorns are favored by many wild animals such as turkeys, rabbits, pheasants, and deer. American Indians used the white oak's acorn to make flour. White oaks can live for several centuries; indeed, some specimens have been known to live for over 600 years. One explanation for the long life is the ability of white oaks to survive forest fires. They are protected from fire damage by their exceptionally thick bark.



**WHITE OAK LEAVES AND ACORNS** In late April and May, when its leaves begin to grow, the white oak sprouts furry red and yellow flowers. The white oak's leaves can be identified by their oblong shape and their seven to nine fingerlike lobes, which have rounded tips (unlike red oak leaves, which have pointed tips). White oak acorns, the seeds of the next generation of trees, fall from the tree, sometimes in great numbers, in the late summer and early fall of the year.



## Panel 21: Stewards

### LOCATION

One of two panels on the post just south of the Beaver Brook Reservation parking lot at about 538 Waverley Oaks Road in Waltham (continue to follow the green line up the hill from Beaver Brook towards the parking lot). View at <http://waverleytrail.org/stewards.html>.

### MAIN THEME

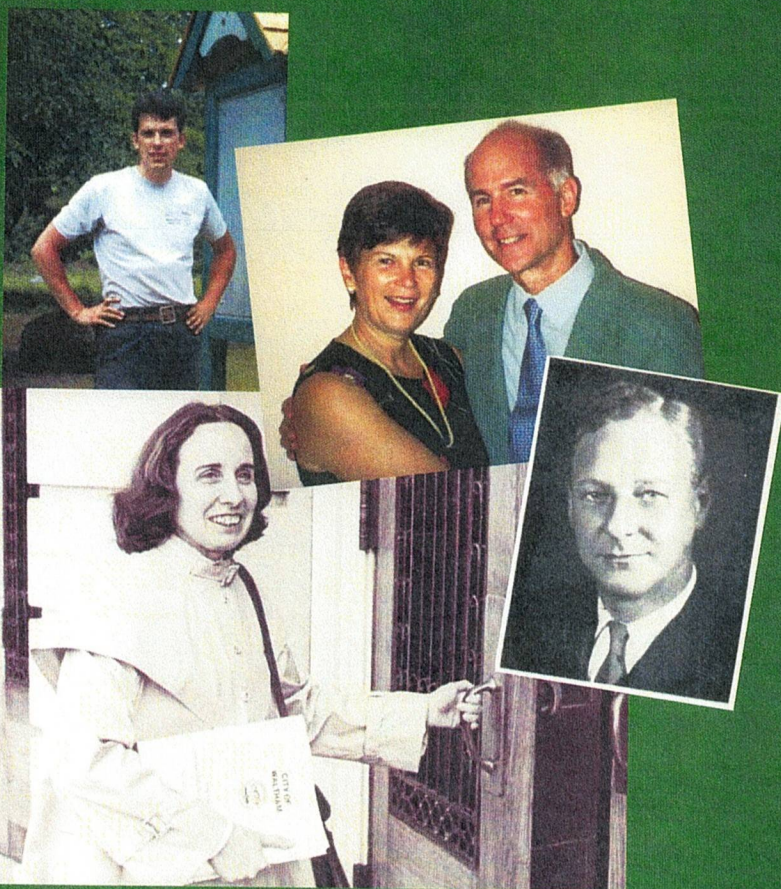
It takes many generations of **GOOD CITIZENS** to take care of beautiful places so that future generations of people can enjoy those places

### METHOD

1. Explain the meaning of the word STEWARD - keeper of the house, or the estate. Ask the kids what a good steward of the *WAVERLEY OAKS* might do.
2. Discuss with the children the roles of the four people pictured on the panel, who have served as **GOOD CITIZENS** in the footsteps of Charles Eliot, making sure that the Beaver Brook park and the *WAVERLEY OAKS* are there for them to enjoy.
3. Walk the children down to stand under the last of the Waverley Oaks. Ask them to imagine what 24 of these trees, all together, might have look liked. Express your own admiration for the tree, and for the natural scene around it.
4. Give the children their homework assignment. Just like the people who protected the Waverley Oaks in the century before today, ask them what they might do, as children and later as adults, to make the world a better place for the generations that will come in the future. (THIS IS, OF COURSE, WHERE THE KIDS CAN THINK ABOUT THEIR OWN ROLES AND RESPONSIBILITIES AS MEMBERS FO THE COMMUNITY).
5. Discuss the children's ideas that are coming into their minds. Thank them for their attentiveness and excellent behavior. Tell them that you **VERY MUCH LOOK FORWARD** to seeing their ideas in the **LETTER THEY WILL WRITE**.
6. Send them, with their teachers, back to the bus, which should be waiting for them in the nearby parking lot.



Clockwise from top: Rene Morin, Gene and Judy Record, Richard Furbush and Kit Burstein.  
(Courtesy of the Morin family, the Record family, the Massachusetts State Library and the Burstein family)



## STEWARDS

The word “steward,” which comes from the Old English word for “guardian of the house, or estate,” is today used by conservationists to honor an individual or group that cares for and protects a natural resource so that it can be passed on to future generations. The site of the Waverley Oaks and the rest of the Beaver Brook Reservation, as well as the entire Charles River Watershed, have been fortunate to have had generations of stewards who have protected these important resources for us all.

Robert Morris Copeland, writing in his 1859 book *Country Life*, was an admirer of Beaver Brook. Charles Eliot and Sylvester Baxter later helped to establish the Beaver Brook Reservation in the 1890s. The stewards who followed have helped to protect the site through the twentieth and early twenty-first centuries.

---

**RICHARD FURBUSH**, statewide political leader and former President of the Massachusetts Senate, also served as Secretary of the Metropolitan District Commission from 1957 to 1974. He is honored for his service by the plaque designating “Furbush Grove,” home of the last surviving Waverley Oak.

---

**KIT BURSTEIN**, a tireless champion for the protection of the entire Charles River Watershed, persuaded the mayor of Waltham to organize the city’s Conservation Commission and became its first chairwoman in 1970.

---

**JUDY RECORD** worked courageously to protect the open space adjacent to McLean Hospital, and was instrumental in the negotiations that led to the protection of what locals now refer to as “Lone Tree Hill” along Concord Avenue. After Judy passed away in 2000, her husband Gene has been a leader in carrying on her work through the Judith K. Record Memorial Conservation Fund, which helps to underwrite trail and landscape management at the site.

---

**RENE MORIN**, of the Massachusetts Department of Conservation and Recreation, has carried on the work of former stewards in the twenty-first century by looking after every corner of the Beaver Brook Reservation. He also handcarved the Waverley Oaks insignia that has resided since 2007 in the Belmont Town Hall.

The children who are taking to heart the examples set by stewards from the past and present day will add new chapters to this story. It is, of course, on these children – and their children – that we will depend for the next generations of stewardship at this remarkable site.



# **BACK IN THE CLASSROOM, AFTER THE TOUR OF THE WAVERLEY TRAIL**

## **MAIN THEME**

Writing a thank you letter, and setting long-term goals to  
“make the world a better place.”

## **METHOD**

1. Back in the homerooms, or other gathering place, ask the children to write a short letter to:
  - Thank their guide for the tour of the Waverley Trail
  - Offer one or two ideas (perhaps inspired by their walk along the Waverley Trail) about how they can make the world a better place for the children of Belmont in the future (say, 50 or 100 years from now).

We would appreciate it if you could mail or email copies of the letters to the following address. Also, any suggestions you may have for improving the trail would be most welcome.

Jim Levitt  
25 Juniper Road, Belmont, MA 02478 USA  
jnlevitt@outlook.com  
+1 617 966 1117