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Register of Deeds

# Worcester Registry of Deeds

## Newsletter

October 2024 ~ Issue #36 ~ Fall in New England

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It is that time of year when so many people flock to New England to catch a glimpse of our foliage. Mother nature did not disappoint this year. I have always been a lover of all things Massachusetts and all things nature.

This month I wanted to share with you our two inspired murals. We were so very lucky to have a former Shepard Hill High School, current Savannah College of Art and Design student, Sydney Roland, spend 3

summers with us learning about Massachusetts and the role of the Registry of Deeds. The last two summers she completed two murals to reflect, Massachusetts and nature. Her first mural represents our district within the Commonwealth.

The second mural depicts nature and building. We are the holder of hundreds

of thousands of records that pertain to land. I know you are only seeing photographs of our beautiful art, but we are open to the public and they can be seen in person, too. Just wait we have more art to share in the coming months with our other summer intern by a different medium.

### Community Statistics

Worcester South District

**9303** Number of Recordings in September 2024

**\$539K** Median Home Value

**65.9%** Homes Owned vs. Rented

**357,100** Total Housing Units

**216.3** Density (Houses per Square Mile)





## Spotlight

# Science of Fall Colors

Three factors influence autumn leaf color:

- **leaf pigments**
- **length of night**
- **weather**

The timing of color changes and the onset of falling leaves is primarily regulated by the calendar as nights become longer. None of the other environmental influences – such as temperature, rainfall, food supply – are as unvarying as the steadily increasing length of night during autumn. As days grow shorter, and nights grow longer and cooler, biochemical processes in the leaf begin to paint the landscape with Nature's autumn palette.

### Leaf Pigments

A color palette needs pigments, and there are three types that are involved in autumn color:

**Carotenoids:** Produces yellow, orange, and brown colors in such things as corn, carrots, and daffodils, as well as rutabagas, buttercups, and bananas.

**Anthocyanin:** Gives color to such familiar things as cranberries, red apples, concord grapes, blueberries, cherries, strawberries, and plums. They are water soluble and appear in the watery liquid of leaf cells.

**Chlorophyll:** Gives leaves a basic green color. It is necessary for photosynthesis, the chemical reaction that enables plants to use sunlight to manufacture sugars for food.

Trees in the temperate zones store these sugars for the winter dormant period.

Both chlorophyll and carotenoids are present in the chloroplasts of leaf cells throughout the growing season. Most anthocyanins are produced in the autumn, in response to bright light and excess plant sugars within leaf cells.

During the growing season, chlorophyll is continually being produced and broken down and leaves appear green. As night length increases in the autumn, chlorophyll production slows down and then stops and eventually all the chlorophyll is destroyed. The carotenoids and anthocyanin that are present in the leaf are then unmasked and show their colors.

Certain colors are characteristic of particular species:

- **Oaks:** red, brown, or russet
- **Hickories:** golden bronze
- **Aspen and yellow-poplar:** golden yellow
- **Dogwood:** purplish red
- **Beech:** light tan
- **Sourwood and black tupelo:** crimson

The color of maples leaves differ species by species:

- **Red maple:** brilliant scarlet
- **Sugar maple:** orange-red
- **Black maple:** glowing yellow
- **Striped maple:** almost colorless

Some leaves of some species, such as the elms simply shrivel up and fall, exhibiting little color other than drab brown.



## Length of Night

In early autumn, in response to the shortening days and declining intensity of sunlight, leaves begin the processes leading up to their fall. The veins that carry fluids into and out of the leaf gradually close off as a layer of cells forms at the base of each leaf. These clogged veins trap sugars in the leaf and promote production of anthocyanin. Once this separation layer is complete and the connecting tissues are sealed off, the leaf is ready to fall.

## Weather

The amount and brilliance of the colors that develop in any particular autumn season are related to weather conditions that occur before and during the time the chlorophyll in the leaves is dwindling. Temperature and moisture are the main influences.

A succession of warm, sunny days and cool, crisp but not freezing nights seems to bring about the most spectacular color displays. During these days, lots of sugars are produced in the leaf but the cool nights and the gradual closing of veins going into the leaf prevent these sugars from moving out. These conditions – lots of sugar and light – spur production of the brilliant anthocyanin pigments, which tint reds, purples, and crimson. Because carotenoids are always present in leaves, the yellow and gold colors remain fairly constant from year to year.

The amount of moisture in the soil also affects autumn colors. Like the weather, soil moisture varies greatly from year to year. The countless combinations of these two highly variable

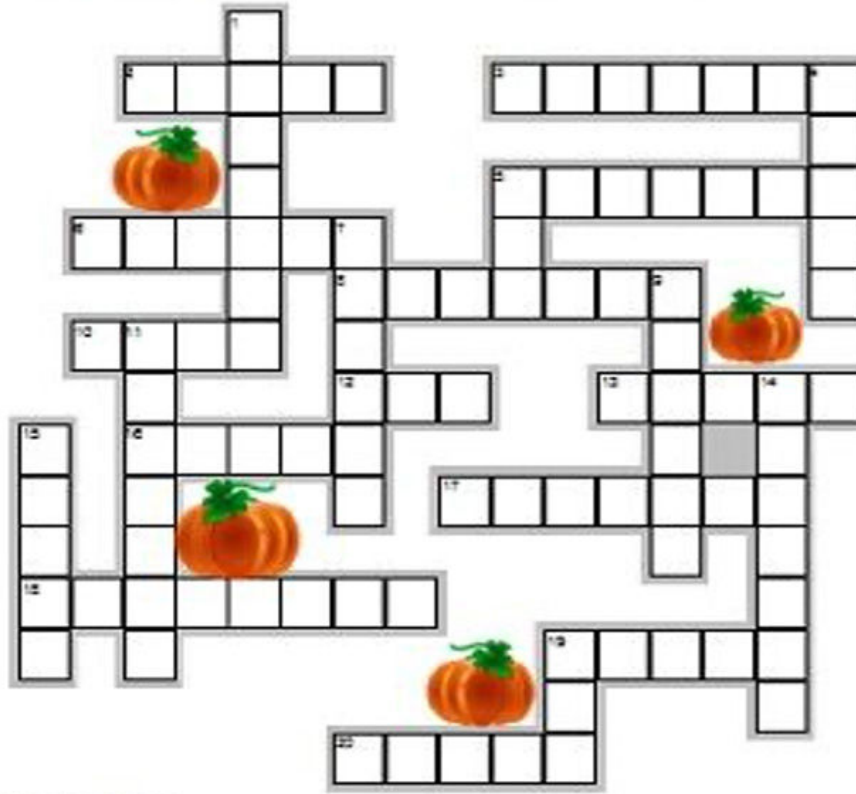
factors assure that no two autumns can be exactly alike. A late spring, or a severe summer drought, can delay the onset of fall color by a few weeks. A warm period during fall will also lower the intensity of autumn colors. A warm wet spring, favorable summer weather, and warm sunny fall days with cool nights should produce the most brilliant autumn colors.

Our District is 55 communities and we have some of the most spectacular foliage in the Northeast. Get out and enjoy the show from our trees.



# Halloween Crossword

Place each of the words below into the puzzle. Use the number of letters in each word to help you figure out where it belongs. This is a bit tricky so use a pencil!



### 3-letter words

BAT  
CAT  
OWL

### 4-letter words

MOON

### 5-letter words

BROOM  
GHOST  
NIGHT  
SCARY  
TREAT  
TRICK  
WITCH

### 6-letter words

SPIDER  
SPOOKY  
SWEETS

### 7-letter words

CARVING  
COBWEBS  
COSTUME  
LANTERN  
OCTOBER  
PARTIES  
PUMPKIN

### 8-letter words

SKELETON

## Upcoming Events

**Wednesday, October 23, 2024 11:00 a.m.**

Lancaster Senior Center 39 Harvard Road,  
Lancaster, MA 01523

**Thursday November 14, 2024 10:00 a.m.**

Leicester Senior Center 40 Winslow Ave,  
Leicester, MA 01524

**Monday November 11, 2024 8:00 a.m.**

Veteran's Day Breakfast 69 Grove Street,  
Worcester, MA

**Tuesday, November 26, 2024 10:00 a.m.**

Veteran's Inc Holiday Harvest 69 Grove Street,  
Worcester, MA