Dear Tree Spotters,

If you have been Tree Spotting this fall, you probably observed some some atypical leaf behavior. Those three really cold nights - November 12, 13, and 14, with official lows of 26 degrees, 21 degrees, and 23 degrees respectively - meant that some leaves didn't have a chance to change to their typical fall color before they withered. The *Tilia americana* in the photo on the right is a good example. All of the leaves shown here are dead, even though some are still green, so the observation is Leaves = N.

Hope this helps when you are reporting your observations - and I also hope you enjoy this edition of Spot On!.

Suzanne Mrozak,
Tree Spotters Volunteer Coordinator
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**Topics in this issue:**
- Tree Spotters Holiday Potluck, Thursday, December 5, 6:00 - 7:30pm
- Tree Spotters Book Club updates
- Botany Blast schedule
- Clarification from NPN on how to record Yellow Birch fruits
- Featured links: How is Climate Change Affecting Autumn?, Using Phenocams to Study Phenology, and Leaf Peep for Science
- Twitter reminder and a selection of Tweets
- Tree Spotters Spotlight

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**Tree Spotters Updates**

**Tree Spotters Holiday Potluck, Thursday, December 5, 6:00 - 7:30pm**

A final reminder that we look forward to seeing many of you at our fifth annual Tree Spotters Holiday Potluck Party on December 5th. You will have an opportunity to meet members of the Arboretum staff and your fellow Tree Spotters and their guests. Experience tells me that you can also expect great food - everything from appetizers through to dessert :-)

Invitations for you and a guest were sent via Paperless Post on November 16th. If you didn’t get one, please check your spam folder and if it’s not there, let me know.

**Date:** Thursday, December 5.
**Time:** 6:00 – 7:30pm. Doors open at 5:30.
**Location:** Weld Hill Research Building Lecture Hall, 1300 Centre Street.

We are looking for musicians to participate in our "Music in the Alcove" event. If you sing and/or play any kind of instrument and would like to help provide some pre-dinner background music, please let me know!

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**Tree Spotters Book Club updates**
We have two updates to report:

1. This season, we will be using two locations, so please make sure you make note of which meeting is in which location!
2. We will be voting on our third book at our first meeting.

See details below.

Location
- January 22, March 10, and our back-up date, April 1: The Weld Hill Lecture Hall, 1300 Centre Street.
- February 13: The Hunnewell Building Lecture Hall, 125 Arborway.

Free parking is available in both locations.

Books
- January 22: Brilliant Green: The Surprising History and Science of Plant Intelligence, by Stefano Mancuso and Alessandra Viola
- March 10: either Ecology of a Cracker Childhood, by Janisse Ray or Ginkgo: The Tree That Time Forgot, by Peter Crane. (They were tied for third place, so we will vote at our first meeting to decide.)

Details
The doors will open at 6:45pm. The Book Club itself will be from 7:00 - 8:30, with 7:00 - 7:15 set aside for social time.

Once again, Betsey Henkels and Nicole Uhre-Balk will share the role of moderator. (Thanks Betsey and Nicole!)

Tea will be provided. You are welcome to bring snacks to share.

For more information on the Book Club, visit our Book Club webpage.

If you are not already a Book Club member but would like to join us this season, just email us at TreeSpotters@fas.harvard.edu. We are always happy to welcome new members.

Botany Blast schedule

We are pleased to announce our first Botany Blast of 2020. (See details below.) We also have another Botany Blast in the works: a flower dissection class in February. Details on that one will be posted in the December Spot On!

Botany Blast: What is Biodiversity and Why Does It Matter?

Jake Grossman, PhD, Putnam Postdoctoral Fellow, Arnold Arboretum of Harvard University
1 Session: Tuesday, January 28, 6:30–8:00pm
Location: Hunnewell Building

Most of us have an intuitive sense of what counts as "biodiversity" and why it is important to live in a biodiverse world, but these questions have also powered decades of revelatory and complex ecological research. Join Putnam Postdoctoral Fellow Jake Grossman for an exploration of the world of biodiversity research. Our focus will be on how scientists define and quantify biodiversity and how biodiversity loss affects the way that ecosystems work. Jake will share highlights from his dissertation research, which entailed the use of experimentally planted "forests" to study the role of biodiversity in supporting tree growth, health, and nutrient use.

Free, but registration is requested: https://my.arboretum.harvard.edu/Info.aspx?DayPlanner=2118&DayPlannerDate=1/28/2020 or call 617-384-5277.

Clarification from NPN on how to record Yellow Birch fruits

One of our Tree Spotters asked for clarification of the "Ripe fruits" definition for Betula alleghaniensis (Yellow Birch), and
Current "Ripe fruits" definition: "One or more ripe fruits are visible on the plant. For Betula alleghaniensis, a fruit is considered ripe when it has turned tan or light brown and readily drops from the dark brown catkin when touched. Do not include empty catkins that have already dropped all of their nutlets."

When I reviewed the definition (see left), I agreed that there was room for improvement.

For one thing, it does not include the fact that the seeds (the nutlets) continue to fall through the winter - and even into the following spring.

For another, the term "empty catkins" is not applicable here. When the seeds disperse, the catkin disintegrates, leaving a woody stalk. (You can see this happening in the photo on the left.)

I contacted the good folks at NPN and they appreciated the feedback. They clarified that "Ripe fruits" (the mature, tan nutlets in the catkins) should be reported for as long as you see them on the tree, which may mean as late as the following spring.

They will consider modifying their definition to accordingly, as well as remove the term "empty catkin".

Bottom line: Please ask if you have any questions about what you are seeing! The NPN definitions can sometimes be very general and they are aware of that - and are happy to make them more helpful.
Pub Carol Sing: New venue!

**Date:** Saturday, November 30  
**Time:** 1:00 – 4:00pm  
**Location:** The Back Room at [The Burren](#), 247 Elm Street, Somerville.  
**Admission:** Free! (but we will pass the hat for the waitress)

Start your holiday season with Greater Boston’s favorite Christmas tradition - the annual Pub Carol Sing!, sponsored by the [Folk Song Society of Greater Boston](#) and [The West Gallery Quire](#).

Come and sing Carols from the Sheffield, Hampshire, West Gallery, and Sacred Harp traditions (as well as some standard favorites), led by Bruce Randall of The West Gallery Quire.

Special guests, The Paper Bag Mummers, will providing merriment and mayhem!

Suitable for all voices and melodic instruments. Music will be available to share.

I’ll be at the door to the back room to welcome you.

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The Light You Cannot See: Infrared Photography by Betsey Henkels

October 25, 2019 – February 2, 2020  
**Location:** Hunnewell Building

Betsey Henkels, one of our Tree Spotter Book Club moderators, uses the camera to explore the world in two ways--first by noticing and appreciating objects that she might otherwise overlook, and second, by transforming ordinary scenes into prints that are compelling and unexpected. She is intrigued by the magical and mysterious properties of infrared light and has spent many hours in the Arboretum, photographing tree canopies, bark, and above ground roots, hoping to capture their spirits.

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Winterlights at the Bradley Estate

Pianist and Tree Spotter Michael Leidig will be performing seasonal music at the Eleanor Cabot Bradley Estate’s Winterlights event in Canton from 5:00 - 8:00pm every Friday, Saturday, and Sunday evening from November 22 through December 29 except for December 1 and December 20.

Timed tickets are required, since the event is likely to sell out. Proceeds go to The Trustees, where Michael volunteers regularly. The Trustees care for over 100 parks, farms/CSAs, historic houses, and community gardens in Massachusetts. If you don’t already know about them, I suggest to visit their website!

Parking will be off-site at the DCR Ponkapoag Golf Course at 2167 Washington St, Canton and a free
Wrap Up

The deadline for the next edition of Spot On! is December 21. If you have any information that you would like to share with your fellow Tree Spotters, please let me know by then.

As always, if you have any comments or suggestions regarding this issue of Spot On!, suggestions for future issues, or feedback on the Tree Spotters program in general, please email us at TreeSpotters@fas.harvard.edu.

To contribute to the Tree Spotters Fund, go here and click on "Tree Spotters" from the "Select a Fund" drop down menu.

Visit the Tree Spotters Website