



## Introducing the Madison Tree Map

An interview with our Executive Director, Evan Slocum

By Adityarup Chakravorty

Quick! How many bur oaks are there in Madison and where are all these trees located? Unsurprisingly not many people can answer that question. But with the help of the Madison Tree Map, the Urban Tree Alliance is hoping information about the Madison area urban forest becomes easily accessible to all. We sat down with our Executive Director, Evan Slocum, and chatted about the Madison Tree Map, why it's important, what kinds of data are available to everyone and how anyone can contribute to filling in the blanks in one of the largest databases of its kind in the entire country.

Evan, what is the Madison Tree Map?

The Madison Tree Map – we will just call it MTM for short – is an online database and map interface of trees in the Madison area. It's designed to be user-friendly, easily accessible, and easy to use while also providing great information about our urban forest, like where trees are, what species they

are, what size they are and so on.

The MTM is based on a platform called the Open Tree Map, originally made by a company called Azavea. Along with a map display of the trees in the Madison area, it allows us to collect "wiki style" inventory data from the general public. That allows users to access existing information and also add trees and information about those trees to the database.

It also links to a modeling software called iTree, which contributes dollar values of ecosystem services provided by trees in our urban forest, such as carbon storage, storm water interception, air pollutant removal, property value increase.

The screenshot shows the Madison Tree Map interface. At the top, there is a navigation bar with the logo, user name 'Hello, utaadmin', and 'Logout'. Below the navigation bar are search filters: 'Search by Location' with 'Madison, WI' and 'List' button, 'Search for a Species' with 'All trees' and 'List' button, and 'Advanced Filters' with a 'Search Trees' button. The main content area displays '149,517 trees selected' and a '(reset search)' link. On the left, a 'Yearly Eco Impact' section lists benefits for the selected trees:

Yearly Eco Impact	
Selected trees in the region	
Total Benefits	\$15,936,036 saved
Greenhouse Gas Benefits	34,428,584 lbs CO2 reduced \$256,605 saved
Water Benefits	631,258,692 gallons conserved \$1,650,933 saved
Energy Benefits	20,565,756 kWh conserved \$12,969,319 saved
Air Quality Benefits	112,538 lbs pollutants reduced \$1,059,177 saved

The map on the right shows a satellite view of Madison, WI, with numerous green tree icons overlaid on the city area. A 'View Satellite' button is visible in the top right corner of the map.

Why do we need a Madison Tree Map?

When we talk about managing the urban forest, we have to consider what is an urban forest and how is it different from a natural forest? At its heart an urban forest is managed. I know we tend to think of trees as 'natural', and they are, but we make a lot of decisions while managing an urban forest: should we have native species or non-native species, should we plant the

tree on the sidewalk or in a park, which trees should live and which trees die?

To manage any resource, whether it's your inventory at the grocery store or the number of spots you have in a parking lot, or your urban forest you need information. That's what the MTM does; it lets us know the locations of various trees, and the composition and structure of the urban forest.

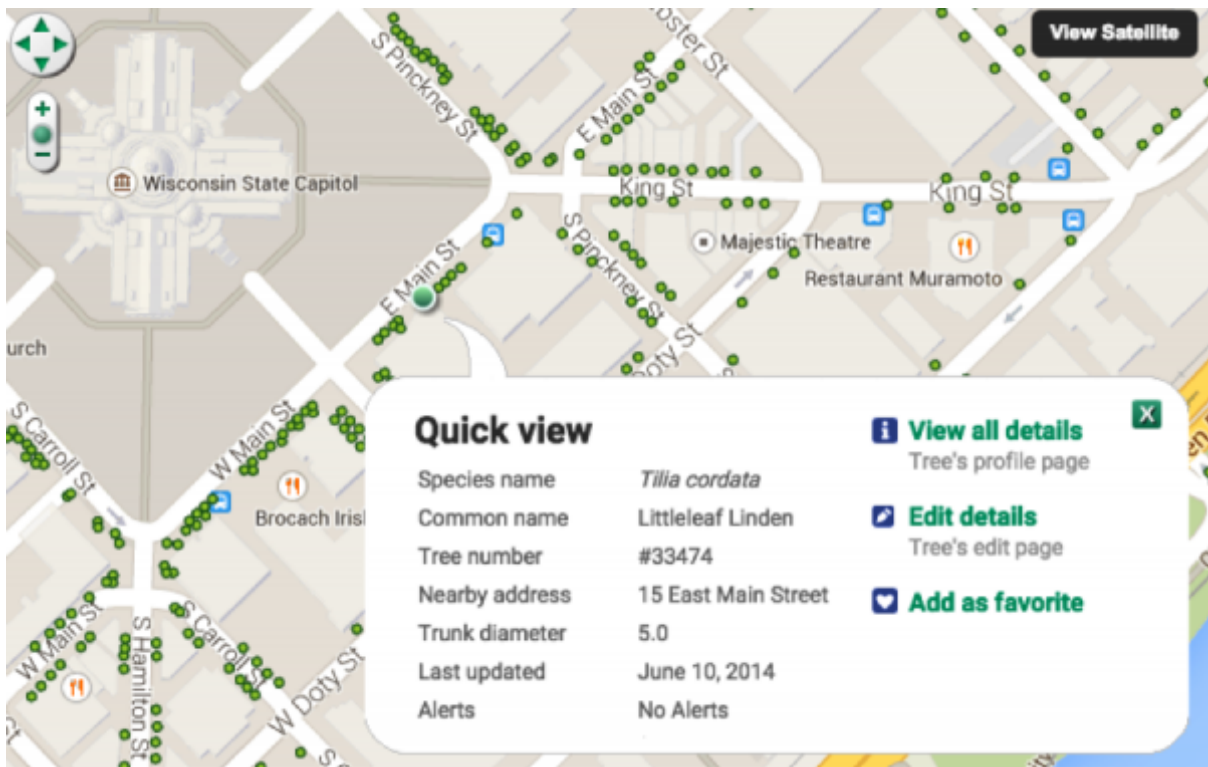
Let me give you an example. Maybe 5% of the Madison urban forest is made up silver maples, but if all of those silver maples are mature and large, that's different from having silver maples of various ages. The MTM can tell us what trees are up and coming, what trees are fading out and then we can predict how that's going to change the urban forest in the years to come and make better decisions.

And the information we have now is only partial. The City of Madison knows exactly what trees are on the streets, but nobody knows what's beyond the street, what's on private properties. Right now the MTM includes about 150,000 trees and a lot of that information is from the City of Madison, other municipalities in the area, and the UW arboretum. Our goal is to learn more about the trees in backyards and private properties and open spaces.

Also, we want people to be able to learn more about the trees in front of their own house. A lot of people won't be able to just walk out and say 'Oh, I have a Norway maple in front of my house'. We hope the MTM will allow people to gain knowledge about the trees around them. The MTM is a tool that lets us spread information but also lets people contribute to that information.

So how can people get involved with the Madison Tree Map?

We would love for people to start using the MTM and having fun with it. Go ahead and learn about some trees in your neighborhood that are already in the database, and feel free to add new trees. It's designed to be easily usable by individuals and groups. You don't have to get a group of volunteers together to make use of the MTM. We do plan to work on some projects using the MTM in a group setting, such as taking inventories of trees in community spaces, but it's designed to be used by individuals. If you have any ideas, we would love to hear them!



Tree info
Edit tree

**20% complete**

[Edit this tree »](#)

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**General tree information**

Tree number	#33474	
Scientific name	<i>Tilia cordata</i>	
Common name	Littleleaf Linden	
Trunk diameter	5.00 inches	
Tree height	Missing	
Date Planted	Missing	

Yearly ecosystem services	Value	Value
Energy conserved	174.71 kWh	\$22.05
Stormwater intercepted	133.22 gal	\$1.32
Air pollutants removed	0.35 lbs	\$1.50
Carbon dioxide reduced	130.90 lbs	\$0.44
Total Co2 stored to date	279.06 lbs	\$0.93

What if I can't tell an oak from a maple? Can I still contribute?



Yes! We have a tool built into the website that can help with tree inventory. It's a pretty effective tool, and we are not looking for perfect data. I would argue that no inventory is perfect, and to us it's as much about the process of people getting involved, and being interested in the trees around them.

Also, you can go back and change your entries at any time. There's a reputation system built into the software. As you add more trees and as they are validated by others you gain reputation points. Once you have a certain number of reputation points you can edit entries by someone else. But you can always go back and change your own entries. For example, if I enter a tree as a sugar maple, and then I go to the arboretum and see what a sugar maple looks like and realize it was actually a Norway maple, I can go back and change it. So I would encourage people to give it a try, use the identification tool to help you and go for it!

What do you see as the future of the Madison Tree Map?

Ideally we would like to have a lot of private trees in the inventory, and an active citizenry who are adding trees and editing trees on the map. If there are still glitches with the program, we would like to know about them and iron them out quickly. We want to make the MTM into a highly-functional, easy to use tool, and in the long term we just want to see people using it.

You know, I am happy the MTM is up and functioning. We have one of the bigger Open Tree Map applications in the country now, with maybe only a couple of cities that have more trees in their inventory. That's due in large part to the dedication of people in the Madison area to our urban forest, and that's just great to see!

We hope you will give the MTM a try. If you have any questions or ideas about the MTM please contact us via phone or email. By the way, there are 1345 bur oaks in the Madison Tree Map database right now. How many more do you think there are in the Madison urban forest?

[www.madisontreemap.org](http://www.madisontreemap.org)

The Madison Tree Map is sponsored by the Urban Tree Alliance and funded in part by an urban forestry grant from the State of Wisconsin Department of Natural Resources Forestry Program as authorized under s. 23.097, Wis. Stat.

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## Tree planting in Madison Parks: Three down, one to go!

With the help of more than eighty volunteers, the Urban Tree Alliance planted forty-two trees in three Madison parks (Warner Park, Carpenter-Ridgeway Park, and Whitetail Ridge Park) over the past two weeks. We cannot thank all of our incredible volunteers enough!

Groups that took part in the tree planting include [UTA's Citizen Foresters](#), Wild Warner, the Carpenter-Ridgeway neighborhood association, residents of the Whitetail Ridge neighborhood, students from the MATC TRiO program, Boy Scout Troop 34, students from the Exploring Service in Science course at UW Madison, and many individuals who pitched in for a couple of hours.

Special thanks to those who have 'adopted' these trees. Each of the forty-two trees is 'adopted' by a volunteer (or group of volunteers) who is committed to watering the tree for two years. We couldn't have planted these trees without you!

We hope you will join us for tree planting at Marlborough Park on Saturday, May 9th (1-4 pm). We're planting ten large trees and could really use a few more helping hands! Marlborough Park is located in south Madison at 2222 Whenona Dr.

If you would like to help us plant trees at Marlborough Park, please email Patricia at [patricia@urbantreealliance.org](mailto:patricia@urbantreealliance.org) or call her at 556-5331.

Photos by Jessica Ciomperlik, Jeff Galligan, and Patricia Lindquist Chakravorty.

### **Warner Park**





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