

Illinois Trees

2020 - A Year of Change

The Quarterly Publication of the Illinois Arborist Association

Hindsight is 2020 – I have always hated that phrase. It typically means you did something wrong and now you realize it. This year, that phrase has a whole new meaning. At the beginning of 2020 we budgeted to go into the red \$45,000 in an effort to bring more member value to the membership. We had a robust strategic plan, and we were ready to carry it through. THEN – COVID arrived. At that point, we had to figure out how to continue on, keep our members safe, keep them certified and still move forward. It's funny how quickly gears can change when faced with adversity.

I am happy to report that we not only accomplished quite a bit last year, but we also did not lose much revenue in By adapting and moving the process. our Certification and Municipal Specialist Training to a virtual platform as well as hosting our Summer Conference via Zoom where over 100 members attended, allowed us to continue our training. We decided to make our Annual Conference as close to in-person by hosting it via a platform (Hopin) that allowed for split sessions, an exhibit hall and a career fair. During the conference we held the TREE Fund Auction and raised money to honor our commitment to the TREE Fund. This resulted in closing out the Larry Hall Endowment Fund, so that early next year it will start funding scholarships.

The IAA followed all COVID Guidelines set forth by the State and by ISA while hosting TRAQ Training and Renewal classes. The new social distancing mandate required us to reduce the capacity of in-person testing,

forcing us to run more exams in an effort to keep certifying individuals. Listed here are additional events that we continued to offer to our members:

- Virtual monthly NEMF meetings
- Strike Team Training
- Online eLearning
- Virtual Tree Worker Training provided in Spanish
- Annual Tree Planting Memorial in remembrance of Joe Kramer and Jim Schuster

Unfortunately, we were unable to run our annual Tree Climbing Championship and Golf Outing. However, at the end of the day, we did quite well for 2020. So, hindsight 2020 showed us that when under pressure we adjusted and became stronger as an organization, never losing focus of serving our members. One positive outcome from all of this madness was learning how to offer more opportunities to those who typically cannot travel. Going forward, we will offer more online courses and events in conjunction with our in-person training.

This year we are planning on hosting our Annual Conference in person at Tinley Park Convention Center. No worries, if you are not comfortable attending, we will be streaming the General Sessions and two split sessions "live" while providing recordings of the other sessions after the conference is over. Our virtual attendees will still receive the same amount of CEUs, they just won't be able to enjoy the cookie breaks and taco Tuesday with us. So, if you are planning on joining us virtually, pick up some cookies and tacos so you feel like you are there!

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Don't forget to hold this date for the upcoming IAA Summer Conference the week of July 19th, 2021

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Illinois Arborist Association

Mission Statement

"Foster interest, establish standards, exchange professional ideas and pursue scientific research in Arboriculture"

President's Message

Hello to all our Illinois Arborist Association Members new and old. Hopefully Spring is here to stay, and you are all ready to start enjoying some more enjoyable work weather. We have had a very productive start to our year. We have been able to put on Arborist Certification Workshops, Certification exams, and a Municipal Specialist workshop. We have been adapting to current restrictions by putting on some of these workshops virtually. This has allowed us to operate safely and offer our members the options that they are the most comfortable with. We have continued holding Regular NEMF meetings virtually.

As the weather improves, we will be starting more in person courses and classes. Including TRAQ Course and Renewal, ISA Certified Tree Worker Climber Specialist Course, and Advanced Training Present Day Climbing Level I. Our Staff, Instructors, Volunteers, and the Board of Directors have all worked very hard to insure all our classes and courses are run according to all current safety guidelines. We continue to adapt and adjust to provide a combination of virtual content and socially distanced in person events with reduced numbers to provide you with the best possible content and educational experience we can. The Summer Conference is just around the corner, so, keep an eye out for dates and registration.

The Board of Directors meeting was very productive, and we have a solid plan for this year's budget and laid out our strategic plan goals for the year. I am very excited that we will continue receiving our IDNR Grant this year thanks to the hard work of our Executive Director April Toney in coordination with Mike Brunk from the IDNR. This has allowed us to both provide great education content for our members, while helping improve education and awareness of safe responsible Arboricultural practices throughout the State of Illinois.

As always, I would like to thank our Staff, Volunteers, Board of Directors, and of course all our members for your hard work and support!

Stay Safe,

Illinois Arborist Association President,

Beau Nagan

Ever Gotten this Question: What's Wrong With My Trees?

by Scott Schirmer

By Scott Schirmer, Illinois Department of Agriculture

This seems to be a question I receive with regularity, and I'm sure many of you in the tree care and arborist industry receive constantly. It's kind of our jobs to figure this out. But this day and age you just never know how these calls are going to go or turn out.

Through me experiences, folks tend to call with tree or plant problems in general and go straight to the higher level potential issues such as invasive species, dramatic pathogens, or even some sort of unique herbicide phenomenon. These are issues we actually encourage folks to look for and report right? We want to know about new and unusual problems that could lead to an early detection of the next Emerald Ash Borer, or a new gypsy moth infestation, or a weird herbicide pattern that is now being observed.

I took a call from an individual a few weeks back and the conversation started out with asking me what was wrong with the "pine" trees between her property and the neighboring property. She was very descriptive stating the trees were in a stairstep planter, relatively young and small, but were showing signs of some sort of damage she was attributing to a disease or potentially herbicide exposure. She kept on trying to explain the damage, and all I could fathom was something more abiotic knowing some of the common issues we see with pines planted too close together, or trees planted in raised planters regarding available space, water issues, and so on, but none of this seemed to be a satisfactory answer for her.

She finally said that she had taken photos of the damage and would be happy to send them over to me, and that was the pivoting point. Upon looking through the roughly 20

photos I was able to see the uniqueness of the damage she was attempting to describe, and actually put it in context. I expressed I did not feel this was any sort of natural damage, nor herbicide related, and offered up what I believed it to be with high confidence, but she was still dismissive in what I, at this point, was nearly positive was the cause.

Two of those photos follow, so what do you think?





The tipping point was when I had asked her if there was any construction or mechanical work done recently, to which she replied she had stumps ground along the planter boxes. Eureka! Exhaust damage!

Ever Gotten this Question : What's Wrong With My Trees? (cont.)

She described the stump grinding process as she observed it, and I told her that it is a slow and methodical operation which would have exposed the trees to a constant and horizontally oscillating exhaust discharge for an extended period of time, which effectively burned a strip into the foliage, and you can even see the change in damage height coinciding with the grade of the land. When her observational memory jived with my description of the process, it seemed like everything connected and made sense.

They say a picture is worth a thousand words, and I think this is a perfect example of a moment when everything was able to come together because of the visual impact of the entire situation. Never underestimate the value photos or a site visit can provide when trying to figure out a problem.

I also can't stop thinking about Occam's Razor here. There's an old saying used on medical students to train them in diagnostic skills which is "when you hear hooves, think horses not zebras". What's the most probable answer, and start with that. I'm not sure if that's totally applicable here since I've never encountered an exhaust damage call before, but it goes to show that you can't be swayed or convinced to conclusion based on what you are hearing alone. See it for yourself. But you have to maintain an open perspective and always keep in the back of your mind that the possibility exists that it could be the next EAB.

The Value of Unmanned Aerial Vehicle (UAV) for Herbicide Treatments vs. Conventional Methods

by Deborah Sheeler, Davey Resource Group

The use of small unmanned aerial vehicles (sUAV) or drones are an emerging technology which continues to become increasingly utilized across various sectors. As we write this, Ingenuity, NASA's drone helicopter, is successfully making its first flights on Mars! Complementing traditional methods, spray drones in particular have become popular as an agricultural solution (row crops, trees, nurseries, vining crops, etc.), and interest has peaked for use of chemical application for various other uses to administer herbicide treatments for management plant communities, invasive aquatics, vector control/mosquito abatement and even de-icing and sanitizing in response to the COVID-19 pandemic.

Although the equipment and methods are still being developed and improved for these

various applications, spray drones are a viable alternative when combined with traditional methods for promoting stable landscapes for long term cost savings, sound environmental practices and invasive species management.

But which application method provides the best solution for your needs?

UAVs can capture current high resolution imagery and program automated flight plans and site specific parameters to ensure accurate mapping and treatment area tracking for reliable and repeatable applications. However, if you need to spray hundreds or thousands of wide open acres, then crop dusters and traditional manned aircraft with 100+ high capacity are still a better solution. In comparison to manned aircrafts, drones provide a quick return on investment (ROI)

The Value of Unmanned Aerial Vehicle (UAV) for Herbicide Treatments vs. Conventional Methods

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with low capital expense, simple maintenance and an equipment cost usually under \$10/ hour. Not to mention the added safety of keeping both feet on the ground.

When comparing spray drones with backpack treatment, the value of aerial application comes with the efficiency in covering more ground and improved worker safety benefits along steep, marshy and difficult terrain or other environmental factors restricting access. Both are ideal for smaller projects and work well for Low volume and Ultra Low volume labels, but spray drones provide more precise GPS tracking of the treatment areas and is repeatable for an apples to apples comparison when monitoring the effectiveness. Both require to be accessible by UTV or 4x4 truck to transport equipment, but applying an aerial application reduces soil displacement with field personnel and equipment while backpacks may be more efficient for spot and targeted treatments.

So what are the requirements needed to add UAVs to your toolbox?

Operators must acquire remote pilot certification, approved waivers and exemptions from the Federal Aviation Authority (FAA). In addition, separate Departments of Agriculture regulate pesticide applications in each state and drone sprayer pilots will require this appropriate agricultural certificate.

These rules apply to drones weighing less than 55lbs (25kg), which can only be operated in Visual Line of Sight (VLOS).

These are currently the most commonly used UAVs in the USA and further rules apply to larger models.

What it comes down to is choosing the best tool for the job. No matter which method is chosen, a safety culture is key to understanding the attention required to responsibly apply



chemicals. By using an innovative solution like UAVs to complement traditional methods of application, it can provide a safer program and cost-effective approach. As more and more operators like Davey Resource Group, Inc. are granted permission for commercial use of UAVs for chemical treatments, the popularity of this emerging technology is likely to soar.

Illinois DNR Update

by Mike Brunk

A few weeks ago I was asked if there was any way I could help an Illinois community defend its tree planting budget, as the community leaders are considering whether or not to drop tree planting from the new budget. I'm pretty busy but I dropped everything for a few hours to answer that call and write to that Mayor and Council with an outside opinion. I restructured that letter to be generic for all Illinois communities and I attached a copy to this email. I encourage those in tight budget situations to use and share the letter with your community

leaders or use it to restructure your own words of support. I am singing to the choir and sometimes it takes just one community person to make an impact in that community whether it is through a letter to the local newspaper, a voice at the city council or village board meeting, a segment on a radio or garden show, or a simple conversation with friends. Let's use the momentum of spring, the pandemic and community health and push to bring more trees into communities and establish tree planting as a program foundation deserving of committed support.

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Calendar of Events

May Events

Certified Tree Worker Climber Specialist Workshop, Deerfield – May 8, 15 & 22 Certified Arborist, Municipal & Utility Specialist Exam, Lombard – May 18

June Events

Spanish Rigging & Safe Climbing Workshop, Deerfield – June 5 & 19
Certified Tree Worker Climber Specialist Exam, Deerfield – June 12
Advanced Training Present Day Climbing Level 1, Lake Forest – June 22 & 23

August Events

IAA Annual Golf Outing, Chevy Chase Country Club, Wheeling - August 27

October Events

TRAQ Renewal Course, IDEAS Training Center, Urbana – October 18 TRAQ Full Course, IDEAS Training Center, Urbana – October 19 - 21

November Events

1

IAA Annual Conference & Trade Show, In-Person & Virtual – November 9 & 10



One Natural Resources Way Springfield, Illinois 62702-1271 www.dnr.illinois.gov

JB Pritzker, Governor Colleen Callahan, Director

Dear Mayor and Council Members,

I am Illinois' Urban and Community Forestry Program Administrator. I work closely with the US Forest Service and eastern region state urban forest coordinators and managers. Our combined mission is to improve the vigor and longevity of community trees / forests. Over the last several decades this work has taken on an urgency to prepare communities for 21st century changes. I have a University of Illinois degree, am a certified arborist, an Illinois licensed landscape architect and have 34 years of background experience in local government.

I am reaching out to Illinois communities to express my knowledge and lending hand on the care and oversight of urban and community forests. We are at a critical juncture in the health and well-being of our urban forests and it is paramount, as we march forward into the 21st century, that we have a strong mindset to maintain the fundamental needs of our community trees. The destructive wave of the Emerald Ash Borer has caused a decline in our urban forests across Illinois. This is not the first destructive event our trees have endured and more importantly it will not be the last. The Asian Longhorn Beetle is again rearing its ugly head in the east and with the high number of maples in Illinois could be another devastating wave of tree loss in the next several decades. These are just two insects, there are also new diseases and an increasing wave of climate change that will affect forest trees, especially if left unprepared. What can communities do? Plant trees to build numbers and improve diversity. And prune trees to train and maintain vigor. These are long term endeavors but not exhaustive ones if communities maintain a healthy tree planting and pruning program year in and year out. Communities can build tree numbers and tree genus diversity and lessen the devastation of tree loss simply by maintaining an annual tree program. An annual strategy of planting more trees than were removed each year is the best goal. Planting two trees for every removal provides a tree bank for those devastating years to help stabilize long term canopy cover.

Planting no trees exacerbates the tree loss problem much like a pothole that is left unattended. Before you know it patching is no longer the solution and costs start to increase exponentially.

So, I make my plea for communities to maintain a percentage of the community's annual budget for tree planting and care. Trees are the only component of our infrastructure that increase in value over time. Trees will help attract people to your community which in turn attracts business. Both supply necessary tax dollars to operate a community. Trees are an efficient way to manage storm water as they are much less expensive than installing storm water infrastructure. One large canopy tree can absorb 1,000 gallons of rainwater over the course of an average year. Trees can filter harsh pollutants from entering waterways; Trees provide energy conservation with shade and wind reduction; Trees filter our dusty urban air;

Trees increase property desirability and value; Trees increase resident health and trees are shown to improve social interaction and cognitive development in children. With all this in mind it is easy to see that communities can "Grow Money on Trees"

I know times are tight. I know Mayors and Council, established and new alike, must constantly shuffle budgets to address changing needs. I also know, from my 34 years of local government experience as the past Urbana City Arborist (4 Mayors and a kaleidoscope of council folks) that proactive approach to managing trees (the only live and growing investment of the community's infrastructure) was the most cost effective and efficient approach. We all know that setting aside a set amount of funds every year can build into a worthy savings that one can retire on. In so many ways urban forests are the savings accounts of our communities. A viable verdant infrastructure, to most, directly reflects the health of a community. I ask for all community leaders to consider your community trees as a necessary annual infrastructure investment for community vitality and longevity.

Sincerely,

Michael Brunk, Certified Arborist #IL-0005 Illinois Urban and Community Forestry Program Administrator michael.brunk@illinois.gov 217-361-9033

Last summer, the Morton Arboretum updated a tree census that they first conducted in 2010. This project was conducted using i-Tree Eco protocols, and is the largest i-Tree project in the world. It sampled 1,576 plots across the seven-county Chicago region, and estimated that there are 172 million trees that in the region that provide it with \$136 million dollars each year by sequestering carbon, preventing stormwater runoff, and removing pollution from the air (Fig. 1).

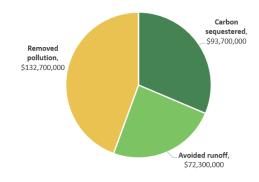


Figure 1: Benefits provided by the region's trees each year.

The most common species in the region are similar in 2010 & 2020. European buckthorn, and invasive shrubby species, has increased in abundance and ash species have decreased. Other species are mostly unchanged (Fig.2)

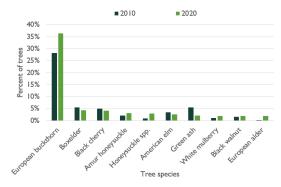


Figure 2: Abundance of most common species in 2010 and 2020.

One of the most important things that this study has captured was the fate of ash trees in the Chicago region. In 2010, it was estimated that there 13 million ash trees in the region. We expected that the vast majority of these trees would be lost to emerald ash borer, but seven million of those trees were still present in the region in 2020. However, these trees were in much poorer health than they were in 2010. Nealy

four million ash trees are in poor to dying health classes or are already dead, and only 150,000 are in excellent health compared to almost eight million in 2010. While many of the region's ash trees are still standing now, they will likely be lost in the next few years.

The 2010 tree census made the scope of invasive species in the region clear and served as an alarm bell to begin tackling the crisis. However, the situation has not improved in 2020. Instead, there are more stems of buckthorn, callery pear, honeysuckle, privet, and Russian olive (Table 1).

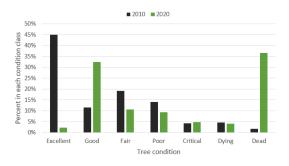


Figure 3: Percent of ash trees in each condition class in 2010 and 2020.

While a few invasive species have decreased in abundance, the scope of the problem has increased.

These inventories have been essential in understanding the region's forest and for drafting consistent policy for improving its health. The 2010 census led to the creation of the Chicago Region Trees Initiative (CRTI). This new census will allow CRTI to refine its objectives and to continue to advocate for the care of trees.

For more information on the tree census and to learn more about how you can support tree planting, care, planting, and invasive species removal visit: https://www.mortonarb.org/trees-plants/2020-chicago-region-tree-census

Table 1: Number of trees of invasive specietin 2010 and 2020 and percent change.

Species	2010	2020	Percent change
Tree of heaven	1,831,000	978,000	-47%
Russian olive	283,000	505,000	78%
Burning bush	149,000	143,000	-4%
Privet	37,000	113,000	205%
Bush honeysuckle	4,930,000	10,539,000	114%
Callery pear	258,000	495,000	92%
Buckthorn	44,866,000	63,382,000	41%
Black locust	2,972,000	2,270,000	-24%



"Illinois Trees" Newsletter

presented by the





Readership includes: Arborists, Urban Foresters, Tree Care Companies and Commercial Arborists, Park Managers, Community Foresters, Utility Foresters, Educators, Grounds Maintenance Personnel, Municipal, County and State Urban Forestry Personnel, Recreation Site Managers or Owners, Nursery and Landscape Professionals, Educators, and Natural Resource Managers.

Trees readership per issue exceeds 2,000 professionals.

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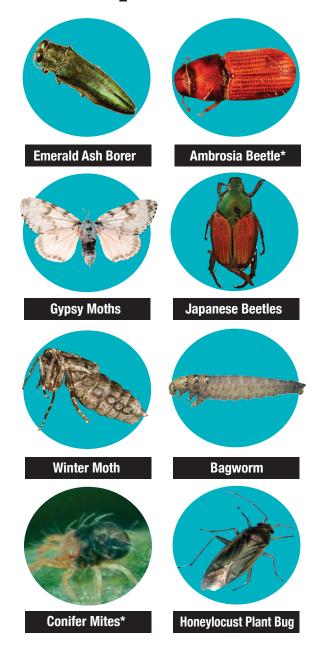


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