

Jacksonville Tree Commission

10:30 AM-117 W. Duval St., 3rd Floor, Conference Room C

Commissioners:

Jeremy Cooper

John Crescimbeni

Aaron Glick

Curtis Hart

Richard Leon

Kathleen McGovern

John Pappas

Rhodes Robinson

AGENDA

Order of Agenda is Subject to Change

Tuesday, January 9, 2018

A. Call to Order/ Verification of Quorum

1. Roll Call
2. Submittal of Speaker's Cards
3. Approval of Minutes from last meeting (as this is the first meeting there are no minutes to approve)

B. New Business

1. Elect Commission Officers- Chair and Vice-Chair
2. Review Commission's Purpose and Duties
3. Sunshine Law, Public Records Law, Ethics Overview
4. Review and adopt Bylaws

C. Public Comment

D. Information

E. Adjournment

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Commissioners: Jeremy Cooper
John Crescimbeni
Aaron Glick
Curtis Hart
John Pappas
Rhodes Robinson

Public: Tracey Arpen
Anna Dooley
John November
Tom Larson
Leslie Pierpont
Susan Caven

Advisors: Sondra Fetner, OGC
Richard Leon, COJ
Kathleen McGovern, COJ
Jason Teal, OGC

Staff: Cindy Chism

A. Meeting was called to order by Sondra Fetner.

1. All present introduced themselves.
2. Speakers' cards were collected and held by Staff.
3. No minutes to approve for this first meeting.

B. New Business

1. Ms. Fetner opened the floor to nominations for Chair and Vice Chair.
 - Mr. Teal listed some of the duties and obligations of a Chair: The Chair runs the meeting. There is not a large requirement in terms of certification other than knowing how to run a meeting, familiarity with Robert's Rules of Order, setting and following the agenda, with input from staff. The meeting requirements are once per month with the Chair attending. Mr. Teal suggested a discussion in terms of time commitment issues or just uncertainty with how to run a meeting or any other concerns.
 - CM Crescimbeni asked if the only people eligible for Chair or Vice Chair were the people currently sitting at the table: Mr. Robinson, Mr. Hart, Mr. Pappas, Mr. Glick, and Mr. Cooper. Mr. Hart said he would volunteer but pointed out that he wasn't sure having a Developer as the Chair was appropriate. Mr. Pappas listed the breakdown of the Commission; 7 people total, 5 of which are from the general public, 3 of the 5 were appointed by the City Council and 2 appointed by the Mayor. A general public Chair or Vice Chair is important for the make-up of the Committee. Mr. Teal clarified CM Crescimbeni's question regarding those eligible for Chair or Vice Chair. He stated those positions could be filled by anyone on the Commission, there is no restriction. The Council appointee is a full member of the commission. Policy-wise you may want to think in terms about the appearance of the commission, but legally speaking there is no restriction on CM Crescimbeni being the Chair or Vice Chair.

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- CM Crescimbeni noted that Mr. Hart is the only one who has voiced interest in being the chair, which he would certainly support. Mr. Hart remarked he can certainly run a meeting, as he is president of 14 organizations, and knows Robert's Rules; it just depends on what you want on the face of the Commission. Mr. Hart said he wouldn't mind. Mr. Pappas said that with the make-up being 5 from the general public he had no objection to Mr. Hart being the Chair. It's obvious that the general public will have a large role in this commission.
- CM Crescimbeni asked if anyone else had meeting experience. Mr. Glick said he did but was concerned about time commitment as he was VP of SPAR, Springfield Preservation Association, and participates in a lot of committee work.
- Mr. Hart asked if CM Crescimbeni wanted to Chair. CM Crescimbeni said he would if the commission wanted him to but he had plenty of other things he could do. Ms. Fetner added that she didn't believe there would be a lot of time commitment outside of the meeting to be the Chair, other than some phone conversations with staff to figure out what goes on the agenda. CM Crescimbeni said he could start off and once the Commission got up to speed someone else could take over.
- Mr. Pappas recommended CM Crescimbeni as Chair and Mr. Hart as Vice Chair. Mr. Cooper seconded. A vote was taken, there were no dissenters. The motion was passed. CM Crescimbeni is Chair and Mr. Curtis Hart is Vice Chair.

2. Purposes & Duties of the Commission

- Ms. Fetner gave a brief overview of the Commission: The Commission was created as the result of a settlement agreement to help the City in planting trees.
- The City has 2 tree funds, 1 is called the Charter Fund (15(N)) and the other is called the Ordinance Fund (15(F)), attached are the provisions from the Code and Charter (Attachment A). They both operate in the same manner, except that money from a specific bucket goes into a specific fund. For example, if something requires mitigation that trips the City Charter tree fund, that money goes into the Charter fund and shall be used *exclusively for the planting or replanting of mitigation trees and for their maintenance along public rights-of-way and on public lands within Duval County, Florida*. There is a calculation highlighted on Attachment A 24.03(c), which shows how the money that goes into the Charter Fund is calculated.
- The Ordinance Fund (15(F)) is more flexible in terms of what the money can be used for. It *shall be expended for providing trees and incidental landscaping and maintaining trees, within City rights-of-way and on other lands owned by the City, its agencies or authorities, or upon which other ownership control may be exerted by the City, its agencies or authorities, including parks, public areas and easements, and also along all other public rights-of-way and on all other public lands in Duval County. The funds may also be used to pay the salary and benefits of one City Arborist position. The City Arborist must be exclusively focused on the planting of trees and other activities directly supporting planting projects in the City which utilize money from this trust fund.* Ms. McGovern is that Arborist.
- In terms of purpose, if you look at the Ordinance 2017-397 (Attachment B) it details the purposes and duties of this Commission. Briefly it is *to study and make recommendations to the City Council, Mayor's Office, City Staff, and community stakeholders with respect to the planting of trees and the health of the City's tree canopy.* (2017-397, Sec 94.105(a)).

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Information on the health of the City's tree canopy will be compiled by Mr. Leon and Ms. McGovern. They will provide the Commission with real time data-to help the Commission make these recommendations.

- *The Commission will formulate an overall plan for the planting of trees and the health of the City's tree canopy and thereafter to annually review the plan and report recommendations to the Mayor's office(2017-397, Sec 94.105(b)).*
- *The Commission will act as a motivating and coordinating body to encourage joint public and private participation in the planting of trees and the health of the City's tree canopy (2017-397, Sec 94.105(c)).*
- *Also the Commission will review and make recommendations concerning the city's tree protection and landscape regulations (2017-397, Sec 94.105(d)).* That would be the Ordinance Code dealing with tree protection there is also a landscaping regulation within that, Chapter 12 of 656. Those are your purposes. Are there any questions?
- The Commission's role is advisory. Council Members and the Mayor's office can plant trees without coming to this Commission first. This Commission's role is not to review the use of the funds but to encourage the use of the funds. You'll advise and make recommendations to the Council or the Mayor's office but they don't have to come to you for any planting.
- Ms. Fetner read the duties listed in 2017-397, Sec 94.106(a-k). *(a) The Commission will act as a coordinator for programs, projects and activities related to planting projects and the health of the tree canopy between all public and private entities;* For that duty we foresee community stakeholders and the public will come to this body and say we have a need for trees on this public right-of-way or in this public park and we would like for this Commission to make a recommendation to use funds do this planting project. In that respect you'll discuss it as a Commission and decide if you agree with this planting project; how much you should put in; what type of trees should be put in; you can go very in depth on the project. As this is the first meeting, we're not exactly sure how it will go, but we put this in the duties section assuming that's what will happen.
- *(b) Review expenditure proposals and plans for planting projects;*
- *(c) Prioritize planting projects based on established criteria for recommendation to the Council.*
- *(d) Formulate a recommended priority project list. An estimated implementation cost for each item for tree planting and canopy maintenance and to annually review the priority project list and report recommendations to the Mayor's office.* Ms. Fetner asked Mr. Leon if he had a priority project list yet, or was that something which needed to be developed. Mr. Leon said we have several projects ongoing but they are not prioritized. Ms. Fetner suggested that would be something this Commission could look at if there are projects which should be prioritized but aren't started yet we could discuss that today, if you are prepared. Mr. Leon pointed out that the Commission could utilize the software which was purchased, Plan-it Geo, to develop their own projects which could run parallel to the ongoing City projects. Plan-it Geo will be explained later in more detail.
- *(e) Coordinate the maintenance of an inventory of the urban tree canopy with an emphasis on historic trees, exceptional specimen trees and other unique environmentally significant trees within the City.*
- *(f) To assist in the establishment of education and outreach programs to encourage proper management and maintenance of trees on private property in the City.* The trees that are

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paid for with the tree funds cannot be put on private property. They are limited to the City right-of-way, City public, Agency, and Authority lands. We don't want to completely ignore private property so this Commission will have a role in encouraging safe practices with trees and encourage plantings on private property as well.

- *(g) Conduct research studies, collect and analyze data and prepare maps, charts and plans for the accomplishment of its purposes.*
- *(h) Identify issues relative to the health and protection of public trees and recommend solutions to problems identified.*
- *(i) Recommend and help develop opportunities for the City's grant writing office for grants and solicitation of donations to support the city's tree canopy.*
- *(j) Perform an annual audit of funded projects, the status of the inventory, and tree permits submitted to the City to be included in an annual report to the Mayor's office and City Council.*
- *(k) Develop and maintain a tree canopy and existing tree inventory.*
- There are a lot of things listed but the Commission needs to have the ability to look at all aspects of the tree canopy in the City. All items may not get checked off this year but we wanted to make sure you have the ability to do that.
- Mr. Pappas commented that when you see the points for reporting to the Mayor's office it is an effort to identify projects for the coming year for fund allocation in time for the budget process. This Commission could play a big role in this effort. CM Crescimbeni added that this "big role" will probably require more than once per month meetings and maybe even some sub-committee work to prepare for that budget process.
- CM Crescimbeni noted the City has collected mitigation funds from people who have removed protected trees for years. The expenditure side of putting those dollars back into the ground as living trees, which is what those mitigation funds are for, has been somewhat willy-nilly. A Council Member has a project here or Mayor's office wants to plant some trees there, there is no master plan. So something this Commission has the opportunity to do is to develop a long range plan. Because the dollars are being paid into the mitigation fund at a much more rapid rate than they are being expended they are not fulfilling their intended purpose. We are gathering green but its green sitting in a bank account but it's supposed to be green sitting on public property. It may be as much as 18-20 million dollars which does not belong in a bank account it belongs doing what it was intended to do to replace a tree which came down pursuant to the ordinance codes. I think the top objective is to develop some sort of plan using the tree inventory from Plan-it Geo to figure out where the needs are. I anticipate an opportunity to hear from Council Members, Civic Organizations, perhaps the school system, and/or the park system, what they think is needed and marry that up with the Plan-it Geo survey and come up with some kind of plan that pushes in the direction to disperse those funds and get them out of the bank account and into the ground.
- Mr. Leon passed out a list of the current 2018 COJ Planting projects (Attachment C) with areas. These are being paid for from the Ordinance Fund (15N). Most are by request of City Council members and some are Hurricane Irma tree replacements. There is no budget allocation City-wide to replace some of the trees which came down in the Hurricane. In District 14 there is one for several large Laurel Oaks. There is separate legislation for each item on the list. Dollar values will be added for each item (Ms. McGovern).

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- It was pointed out that there is a need to establish how much money is available and how much money each of the projects on the current 2018 COJ list is required.
- Mr. Leon also informed the Commission of the new website which will be going up soon. It will enable anyone to track the spending of the tree fund. He also suggested that perhaps OGC would educate the members of the Commission on how the Tree Fund money is appropriated so everyone understands the process. The Commission can then have their own tree projects in parallel with the COJ projects. The website will show exactly the amount of funds available. Mr. Provenza was able to provide the numbers as of this morning: Ordinance Fund (15F) available for appropriation is \$17,347,831.52 and the Charter Fund (15N) has \$3,619,135.55. In the future the available funds will be listed on the agenda (Cindy Chism).
- Mr. Hart requested a presentation on the Plan-it Geo software. City dollars were appropriated and a contract with the Environmental Protection Board (EPB) for purchase of the Plan-it Geo software. John November, from the EPB, explained that the Plan-it Geo tool takes a 1 meter satellite image map of the entire 700+ square miles of the City, so we know where every tree is on public and private property. Then we overlay a GIS layer and include socio-economic factors, environmental factors, Council districts, and census blocks, so we can have a general idea where the trees are and where they are not. Then we look at what criteria of a city do we want to look at to plant trees. We can adjust these factors to use science and data driven decisions on where to plant trees. This software is compatible with any GIS software. This software has been used in hundreds of communities across the country. A more detailed presentation will be done at the next meeting.
- Mr. Leon informed the Commission that there is a ground-up inventory on individual trees which has been done by Public Works in Riverside, Avondale, most city parks and Springfield. There is funding to continue this inventory in the summer.

3. Sunshine Law, Public Records Law, Ethics Overview

- Ms. Fetner gave a brief overview of the Sunshine Law and Public Records Laws which you must adhere to as a member of a Commission.
 - i. Sunshine Law, Florida Statute 286.011, has 3 requirements: that the meetings must be accessible to the public; there must be reasonable advance notice of the meeting; and that all meetings must have minutes. This is all so the public has transparency of their local government. There will always be an advance notice, we have an agenda, agendas are not legally required but we provide them to help guide the meeting.
 - ii. There is also Florida Statute 286.0114 which requires this Commission to offer the public an opportunity to be heard. That opportunity must come prior to a decision being made. It is not required to be at the same meeting or immediately before the decision is made but within reasonable proximity, however it must be prior to any vote.
 - iii. A Meeting. There are other things that can be considered a meeting. If you are speaking to another Commissioner about the business of this commission or speaking about any decision or recommendation that's coming before the commission, that is considered a meeting and must be noticed. Be careful you are not creating a meeting, for example, if Mr. Pappas meets Mr. Glick at Publix they cannot discuss some decision which will be coming before the Commission. Another example is Mr. Leon sends an email to the Commission members listing the topics for the next meeting. Do not reply all. Only reply

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to Mr. Leon. Once you reply all and a conversation begins among you that is a meeting and must be noticed and is technically a violation. You must not talk about the business of this Commission outside of the public between 2 or more of you. You may speak to any of the City staff individually, that's not considered a meeting. You can send a statement of your position or future actions you intend to take as long as you don't ask for comments and you don't start a conversation. It is recommended you make all decisions at the meeting and not inform your fellow Commissioners of your intentions; it creates a look of impropriety. Mr. Teal clarified that there should be no discussions with any other Commissioners; in person, text, emails or even using a 3rd party. Those communications all have to be held as a noticed meeting. If it is about business that is or is likely to come before the Commission, it must be noticed. Notice of the meeting needs to be done 24 hours in advance. Minutes will be kept and possibly uploaded to the new website. (Mr. Leon will make getting this website up a priority)

- iv. The Penalty for violating the Sunshine Law could be a civil penalty up to \$500 as well as lawyers' fees and may be against you personally. It may invalidate your action or the vote that was made. Also, negative press. It's best to err on the side of caution. If you have any questions at all, please contact Ms. Fetner or Mr. Teal. This briefing is considered your Sunshine Law and Public Records training.
- v. Public Records Requirement is any document created at this Commission or presented becomes public record. For example, a community stakeholder comes and presents a project they would like you to recommend, that presentation becomes a public record. We will request a copy of it in case we receive a public records request. Any paper, emails, anything that is presented to you, documents or recordings are public records and need to be preserved. Your own notes or notes you take on your agenda, that's not a public record; those are for your sole use. Assume everything you create regarding this Commission is a public record. There will be a master documents file, so any documents presented at the meetings will be held in that file or possibly uploaded to the website. The Commissioners are not required to keep them. If a COJ employee emails you, there is a copy retained on the City server. However, if a member of the public or anyone outside emails or sends anything to anyone on the Commission, it must be kept. It is recommended that a separate folder be created in your email for these types of documents or emails but you are not required to give out your email address to be contacted that way.
- vi. Mr. Teal explained ex parte communications. Ex Parte means discussions outside of a public meeting. This isn't technically a quasi-judicial board but there's appearance of impropriety and there's what's illegal. The laws are very definite on what's illegal and what's not. We also want to protect the integrity of this Commission. Meaning, so it doesn't look like back door deals are being made; it doesn't look like people are reaching out to you individually to get preferential treatment; it doesn't look like you're affording one party more time than another in a meeting; or access to you that another party doesn't have. There's a fairness factor. You are as accessible to people as you want to be. You are not required to engage with anybody. If you want to we cannot legally prohibit you from engaging with folks in terms of ex parte. If someone picks up the phone and calls you or someone runs into you at Publix and they try to talk to you about Commission business, you can feel free to engage in that discussion if you want to. We have some

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Commissioners who will not engage outside of the Commission as a policy. There are 3 minutes at each meeting to address us there. Others have a more open door policy, about discussing different things that come before them. It is however recommended that you do disclose that conversation or discussion; when it happened, what was discussed and with whom prior, to any vote. As this isn't a quasi-judicial board there's no legal requirement for you to disclose those ex parte communications because your decisions here are not based on evidence submitted at this meeting. This is an advisory group. You still have to conduct your business in the Sunshine; you are still subject to public record laws but it's not as stringent for you as someone who actually makes a decision for the City. Send any public records requests to Staff Support immediately.

- vii. Mr. Cooper asked if documents are shown to us or submitted to us are they public records. CM Crescimbeni replied, yes, if you keep a copy of it. If someone just shows you something and takes it back with them, it would not be. As a reminder, this Tree Commission was created out of settlement agreement litigation against the City. So there may be additional scrutiny especially from the folks who were plaintiffs in the Agreement.
- viii. Mr. Glick and Mr. Robison still require their Ethics Training. Mr. Hart and Mr. Cooper have already completed theirs. It must be completed before the next meeting. Ethics training is required every 4 years. 904-630-1015 Ethics Hotline. (Ms. Fetner will email the next scheduled Ethics Training.)

4. Review and Adopt Bylaws

- There is a draft which will be circulated to the members and it will be on the agenda for the next meeting.
- Sometimes on Commissions there are voting conflicts where the vote will directly affect one of the members in a pecuniary fashion, i.e., you may receive or lose money from a decision before the Commission. If so, you must recuse yourself from the vote. There will be a form for you to complete.
- As a Commission, to pass a recommendation, there are 2 ways to accomplish this: a majority vote would be required. It must be decided what the majority is. There are 7 on the Commission, so there must be 4 for a quorum. For an affirmative vote you would have to have 4 out of the 7 approve it. If someone has recused themselves, we can make it so only the members voting and present are counted or the majority of the commission is required to pass the vote. How many people are necessary to approve or deny an action? This will be decided at the next meeting.
- Meetings are required to be monthly. Currently the meetings are scheduled for the 2nd Tuesday at 10am. Mr. Pappas suggested the meeting move to the 2nd and 4th Thursday, of the month from 1-2:30pm. The new schedule was agreed upon pending conference room availability.

C. Public Comment

Mr. Tracey Arpen, 8338 Daffin Lane, retired attorney from OGC. Thanked the Commission for their service. Since the dissolution of the Landscape Commission there has been no body which took the broad overview of issues regarding trees and landscaping. As CM Crescimbeni pointed out a lot of the appropriation from the tree fund has been on an ad hoc basis as a result the funds have not

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been fairly and wisely distributed around Jacksonville. This Commission gives us the opportunity to put master plans or master guidelines in place which hopefully will be a mixture of City spending and non-profit organizations to spend that money. Mr. Arpen passed out a document with a decision upholding the tree regulations against challenge and why that's important (Attachment D). Mr. Arpen also recommended the Commission distribute a memo from Susan Grandin, OGC, which detailed how the monies from each of the Tree funds can and cannot be spent. He emphasized that the Commission needed to be very mindful of how they distribute the funds.

Ms. Anna Dooley, 4582 Corrientes Circle representing Greenscape. Congratulations to this Commission; it has been needed for a very long time. Greenscape has been planting trees in Jacksonville since 1975. We have planted over 300,000 trees in Jacksonville. We are currently involved in collaboration with the Duval County School Board and City Council to plant a tree at each school which we are seeking funding from the Tree Fund. Ms. Dooley handed out a tree resource guide produced by Greenscape for Jacksonville citizens (Attachment E). Ms. Dooley said the creation of this Commission validated the importance of trees and how much Jacksonville appreciated their trees. This Commission is another layer of security for our trees and tree canopy. There is currently legislation in Tallahassee which would negate any local jurisdiction on tree ordinances. Greenscape has started a program, jaxdigstrees, to unite the whole state to defend trees. We are also reaching out to other organizations in the state. The City Council has already passed a resolution proclaiming our need to retain our tree ordinance. Ms. Dooley requests the Tree Commission take that on as their first order of official business. She thanked the Commission for their service.

John November, 536 South St, representing Public Trust. Mr. November expressed his passion for the trees and tree canopy in Jacksonville. Public Trust brought a lawsuit in 2015 to challenge the enforcement and expenditure of tree funds. In June 2016, a more collaborative approach was taken. At mediation in November, meetings were scheduled every other week with Department Heads, John Pappas, members of the community here, Tracey, Tom, Warren, Tom Goldsbury, Ricky (Leon), Jason (Teal), Sondra (Fetner) a large group, to make this happen. Through that approach we created an enhanced urban forestry department, the Tree Commission was born. This Commission was the number one item on everyone's settlement terms; we need community engagement in the planting of trees in the City of Jacksonville. We are very proud of this Commission and how the City has responded. Now we have the opportunity to revolutionize the tree canopy. You actually can see the embodiment of what the settlement did in the new staff, Kathleen (McGovern) and Dalton (Smith). There was 1 City staff member, Ricky (Leon), and he was overloaded. In other communities across the southeast, like Savannah, there are 12 urban foresters, just as a comparison. Now he has the opportunity to be your staff member, to really work with City Council and take a high level approach to ensure that planting happens in the most impactful way possible throughout the City. This is a once in a generation opportunity. This would be much different if we didn't have 20 million dollars built up in the tree fund. We now have an opportunity to plant those trees over the next 5 years. This is going to be a big endeavor. Thankfully, we can build upon the approach taken in previous years to get those trees in the ground by taking a more systematic strategic approach using a Plan-it Geo tool I want to tell you more about at the next meeting. The Public Trust in collaboration with Greenscape, was given a grant from the EPB to develop this tree survey and the associated outreach program. So we'll be doing that over the next year. I've already told you about

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the tool itself (Plan-it Geo) but I look forward to each of you taking ownership of this important tool and I'll be available to support each of you in using this tool. Over the next month I'd love to sit down with each of you and walk you through the tool. Show you how it works, answer your questions, get you hands on experience using the tool because it really is easy to use but it's important that you get to it. In closing, I don't want you to get mired down in the procedural aspects of the Tree Commission. Instead, I want you to proactively take advantage of the skill set you came in with. You were chosen because you are experts in what you do, whether it be environmental remediation, or GIS, to take a proactive approach and not just be reactive in nature. Create that overall plan and also be reactive but most importantly develop the way that we engage the public in the public process. I, along with a number of stakeholders, Tracey Arpen, Tom Larson and others are developing a way that hopefully will save the City money in the way that we plant trees and get community engagement. *Time extended 30 seconds.

Tom Larson, 887 Marshside Court. What an exciting day for me. Several years ago I began asking about our tree programs in the City and had trouble finding out what was going on and how much money was available. Through my friends in the community including the Public Trust, we had to get involved with a legal approach to it but then we got into a great settlement process that I think is something we should all be proud of because it's become this body being part of the approach that we all can take through our City to advance the tree planting. 300,000 through Greenscape over the last 40 years. I'd like to see us do another quarter million in the next 10 years. We've got a lot of money we've got a lot of interest in community groups. I hope some of us can help bring you proposals which are originated in neighborhoods, by merchant associations or friends of a park or other places and stakeholders that would share in the opportunity to invest in our future. We've got one of the world's largest park systems here in Jacksonville, some of which could use trees. We've got neighborhoods in this community which could use more attention to their beautification and protection from all the different elements. While I speak to you presently as a citizen, I've been involved in a lot of civic processes; I'm also an active leader member of the Sierra Club. Our mission is to enjoy, explore and protect the outdoors. One of the things about protecting our tree canopy is that it adds to the ecological value of our whole community. Birds pass through, we've got all kinds of creatures including bobcats and lots of critters that we don't see much that are in the wetlands. Trees are a big part of providing for that value in our community. I look forward to engaging with you and community groups around the city to bring to you proposals that would be supported by our new tool. I encourage you to go look at jaxdigstrees.org which is a great portal not only to the Plan-it Geo tool but also to the City's own data. The values that are being posted as accretions to the fund and withdraws from the fund are linked to through that website. We've got a lot of opportunity to support you with information and engage in dialog. Thank you for coming this morning.

Leslie Pierpont, 4157 Ortega Blvd. I live in Ortega where we had a lot of damage from Irma not only to our trees but to our homes. I'm the current president of the Late Bloomers Garden Club and 2 of our members formed Greenscape 40 years ago, Ann Baker (deceased) & and Susan Fisher. Our garden club is very interested in providing trees for scenic beauty. Obviously I echo their sentiments too about the environment. Personally I want to encourage you to use native trees and I'd be glad to help, I have a lot of expertise in that. I'm looking forward to meeting Ricky (Leon) and Kathleen

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(McGovern) and Dalton (Smith). I want to thank you for your service. I'm glad the City formed this Commission; I think it's been needed for a long time.

Susan Caven, 2775 White Oak Lane. I live in San Marco. I was born in Winter Park where the tree canopy was really important. They saw the economic, environmental and scenic value in having a tree canopy and they still do. You cannot cut a tree even in your own yard without getting permission. I moved to Jacksonville and became very interested in the tree issues here. I've been president of Greenscape and Scenic Jacksonville. I was on the Landscape Commission and was a petitioner for the Tree Charter Amendment. I am so excited and so thrilled to see the cooperation exhibited today. Thank you so much. The City and the City Council and the School Board and all these environmental groups and neighborhood groups are together and standing shoulder to shoulder and you all are the representatives of that. We are all grateful for your time, for your energy, and your expertise. Listening to Jason (Teal) tell you all the things that are going to happen to you and I want you to know that we are here to stand shoulder to shoulder with you, to help you and give you hurrahs. We thank you so much. This is an absolutely unique situation and I've never seen anything like it. We were battered by Irma and Matthew and as you well know those were older trees that were taken. We need a new canopy going up and you're going to give us the direction. I thank you. I'm just here to say we will help you in anyway, we are here at your service.

D. Information

CM Crescimbeni was reminded by Ms. Dooley to pass onto the Commission information regarding the legislation in Tallahassee she mentioned. We're here today to talk about appropriating funds from 2 mitigation accounts that are contributed by people who are required to mitigate protected trees when they are removed in the development process. There are 2 bills pending in this year's legislature, one in the house and one in the senate. They're both companion bills that would preempt local government; it's preemption at the State level, that would prohibit local governments from regulating tree removal in any shape, form, fashion or requiring any mitigation, etc. The City Council adopted a resolution at our only meeting in December; we took it upon an emergency basis. It was unanimously approved and sponsored by all 19 Council Members. I'm in the process of mailing that to all the Representatives and Senators that will touch that bill if and when it comes to any committees. I think Ms. Dooley was suggesting this body might want to consider taking a position on that. The 2 bills are House Bill 574 and the Senate Bill is 521. It's pretty simple language, they are pretty short bills. I probably should have brought a copy with me today so the Commission could look at them. Essentially it just preempts local government from implementing any kind of tree regulations or requiring any kind of mitigation. If that were to pass at the State level, they tinker with preemptions every year, there is always a preemption that comes out of Tallahassee, some more severe than others, but if that were to pass what would that do to our current tree protection rules that generate the mitigation funds? Mr. Teal noted that it would not automatically strike them from our books but in essence it would make them unenforceable. It wouldn't touch the money we already have; it would be on a go forward basis. CM Crescimbeni further said that the resolution from the Council was basic and talked about the esthetic economic benefits of trees. It talked about how this community had amended our charter in 2000 with a specific article that dealt with nothing but tree protection. It talked a little about the fact that this Tree Commission had been born and last year the Council approved 5 separate pieces of legislation all focused on hiring

Jacksonville Tree Commission
Meeting Minutes January 9, 2018
Approved on February 8, 2018

new additional people to monitor the planting of trees, I think we increased our penalties for mitigation. So if you want to do something today, the Chair will entertain a motion. I doubt that when we come back and revisit this issue at our next meeting, my guess is the legislature is scheduled to conclude at the end of February. We might have a chance to opine. If you want to think about it, I will have Staff distribute the Council resolution, the House and the Senate bills.

Commissioner Robinson provided copies of an article from Arborist News titled Understanding the True Costs of Growing and Planting Urban Trees for informational purposes and a copy was given to each Commissioner at the meeting (Attachment F). No discussion of the article took place.

Next Meeting 1:00pm, February 8th, Conference room 3C.

Parking validation – CM Crescimbeni volunteered the City Council office to validate the parking for the Library garage on the corner of Laura and Main. Take your parking ticket to the 4th floor City Council reception desk and they will give you a green ticket and instructions.

E. Adjournment

Tree Protection and Related Expenses Trust Funds

Charter Fund 15(N):

Sec. 25.04, City Charter: All monetary contributions paid to the City of Jacksonville's Tree Protection and Related Expenses Trust Fund pursuant to section 25.03(c)(ii) of this article shall be used exclusively for the planting or replanting of mitigation trees, and for their maintenance, along the public rights-of-way and on public lands within Duval County, Florida, so as to mitigate for the loss or destruction of protected trees during development.

Monetary contributions to the Charter Fund are required as follows:

24.03(c), City Charter: To the extent that the developer is unable to, or fails to, plant the required number of replacement trees on the development site, the developer shall complete the mitigation requirements: ...

(ii) by paying a monetary contribution to the City of Jacksonville's Tree Protection and Related Expenses Trust Fund for the total caliper-inches of required replacement trees that are not planted on the development site or at some other site in Duval County. For each caliper-inch, the contribution amount shall equal the lesser of (x) eighty-five dollars or (y) one-half of the median wholesale price, published by North Florida nurseries located within Duval, St. Johns, Clay, Baker and Nassau Counties, for a container grown two-inch caliper Live Oak calculated as of October 1 of the prior calendar year. The contribution amount shall be recalculated annually by the City of Jacksonville's Landscape Architect at or before the beginning of each calendar year.

Ordinance Fund (15F):

Sec. 111.760, Ordinance Code: There is created within the General Trust and Agency Fund a trust fund account to be known as the Tree Protection and Related Expenses Trust Fund, hereinafter referred to as the Fund, into which shall be deposited all contributions and fines collected or imposed, together with any donation, gift, grant, or other sum of money as may from time to time be appropriated by Council, and all monies recovered by the City as civil fines pursuant to Section 656.1208; provided, however, that monies collected as administrative costs or attorneys' fees or costs of litigation shall be paid directly to the City. The funds deposited in this trust fund, together with any

interest accrued thereon, shall be expended for providing trees and incidental landscaping, and maintaining trees, within City rights-of-way and on other lands owned by the City, its agencies or authorities, or upon which other ownership control may be exerted by the City, its agencies or authorities, including parks, public areas and easements, and also along all other public rights-of-way and on all other public lands in Duval County. The funds deposited in this trust fund may also be used to pay the salary and benefits of one City Arborist position. The City Arborist position authorized herein shall be exclusively focused on the planting of trees and other activities directly supporting planting projects in the City which utilize monies from this trust fund. The Director of Finance and Administration is authorized and directed to make disbursements from this fund, after Council appropriation, upon written requisition for such purposes signed jointly by the Director of Public Works and the Director of Parks, Recreation and Community Services.

656.1206(g)(14), Ordinance Code: If the applicant demonstrates to the satisfaction of the Chief that the site cannot accommodate the total number of required replacement trees as a result of insufficient planting area, the applicant shall provide a monetary contribution to the Tree Protection and Related Expenses Trust Fund. The amount of such contribution shall be determined as follows: For every two caliper inches, or fraction thereof, of replacement trees which would otherwise be required, the contribution shall be equal to the retail value of a planted two-inch caliper nursery grown shade tree. The retail value shall be calculated by taking the average of the median current wholesale price, published by North Florida nurseries, for a container grown, and a balled and burlapped two-inch caliper live oak, multiplied by two. The retail value shall be recalculated and adjusted annually on October first.

1 Introduced by the Council President at the request of the Mayor:

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ORDINANCE 2017-397

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AN ORDINANCE CREATING A NEW CHAPTER 54 (TREE

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COMMISSION), *ORDINANCE CODE*, TO ESTABLISH A

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TREE COMMISSION TO STUDY AND MAKE

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RECOMMENDATIONS TO THE COUNCIL REGARDING THE

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PLANTING OF TREES AND THE HEALTH OF THE CITY'S

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TREE CANOPY; PROVIDING AN EFFECTIVE DATE.

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WHEREAS, through the combined efforts of the City and numerous environmental and interest groups, Jacksonville has been blessed with a plentiful number and variety of trees; and

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WHEREAS, Jacksonville's tree canopy has beautified our City and improved the lives of our citizens and visitors by bringing nature to our urban environments and preserving environmental sanctuaries for connection with the natural world; and

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WHEREAS, trees improve water quality, reduce erosion, increase property values, provide shade, cleanse the air, create habitat for wildlife and add beauty to our City; and

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WHEREAS, in order to promote and support efforts to conserve and enhance Jacksonville's tree canopy, it is advantageous to establish a group of individuals knowledgeable about this subject matter to advise the City and other interested groups; now therefore

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BE IT ORDAINED by the Council of the City of Jacksonville:

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Section 1. Creating a new Chapter 54 (Tree Commission), *Ordinance Code*. Chapter 54 (Tree Commission), *Ordinance Code*, is hereby created to read as follows:

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CHAPTER 54. TREE COMMISSION.

1 **Sec. 94.101. Intent.**

2 It is the intent of this Chapter to create an advisory body to
3 encourage and coordinate the efforts of the various public and
4 private entities that are concerned with the conservation and
5 enhancement of the City's Tree Canopy. The City could become known
6 for its innovative and effective tree planting and stewardship
7 programs.

8 **Sec. 94.102. Establishment.**

9 There is hereby established an advisory commission to be known
10 as the Tree Commission, hereinafter referred to as the Commission.
11 The Commission shall be subject to all applicable public meetings
12 and public records laws.

13 **Sec. 94.103. Membership; Terms; Composition.**

14 The Commission shall be composed of seven members selected as
15 follows:

16 (a) *Membership.*

- 17 (1) One member of the Council designated by the Council
18 President.
19 (2) The Director of the Public Works Department, or his or
20 her designee.
21 (3) Three members of the general public appointed by the
22 Council.
23 (4) Two members of the general public appointed by the Mayor
24 and confirmed by Council.

25 (b) *Composition.*

26 To the extent possible, each of the members appointed by the
27 Council and Mayor should possess specialized knowledge about trees,
28 the Tree Protection Ordinance, Article 25 of the Charter, and/or
29 the impact of construction activities on trees. To the extent
30 possible, the Commission's membership shall consist of the
31 following persons:

- 1 (1) One member from each of the Council's At-Large residency
2 areas, to the extent possible.
- 3 (2) One member shall be appointed who is a landscape
4 architect.
- 5 (3) One member shall be appointed who is a member of an
6 environmental organization.
- 7 (4) One member shall be appointed who is a residential
8 builder, a representative from the local builders
9 association, a real estate professional, commercial
10 developer, or industrial developer.
- 11 (5) One member shall be a practicing attorney or urban
12 planner.
- 13 (6) One member shall be appointed who is either a botanist,
14 certified arborist, forester, or horticulturist.

15 (c) *Terms.*

16 The five members appointed from the general public shall serve
17 for a term of two years or until a successor has been
18 appointed/confirmed by the Council; provided that, of the initial
19 appointments of the general public members, one member appointed by
20 the Council and one member appointed by the Mayor shall serve for a
21 three-year term and the remaining three members shall serve for a
22 two-year term. Members of the Commission may be appointed for
23 consecutive terms consistent with general laws regulating service
24 on city boards and commissions.

25 **Sec. 94.104. Organization.**

26 (a) The Commission shall meet at least monthly at such times and
27 places as are fixed by the rules of the Commission. Special
28 meetings shall be called in accordance with the rules of the
29 Commission. At its first regularly scheduled meeting each
30 October, the Commission shall elect from among its members a
31 Chair and Vice Chair, who shall assume their positions

1 immediately upon election.

2 (b) The Chair shall preside at all meetings of the Commission and
3 shall appoint the members of the various committees, task
4 forces, study groups, and other bodies authorized by the
5 Commission in furtherance of its purposes.

6 (c) The Commission shall be staffed at each meeting by a
7 representative of the Office of General Counsel, the City's
8 Senior Urban Forester and a member of the Accounting office.
9 The Director of Public Works shall designate a Public Works
10 employee as the staff person who shall be responsible for all
11 meeting notices and minutes. The Vice Chair shall preside if
12 the Chair is absent.

13 (d) The Commission may adopt, amend, and rescind procedural rules
14 of the Commission to aid in implementing the provisions of this
15 chapter. All reports, studies, and recommendations made by or
16 at the direction of the Commission shall be approved by the
17 Commission before the same may be presented to the Council.

18 (e) The Commission may establish such committees from among its
19 membership as it deems necessary to perform its functions. The
20 Commission may also, from time to time, authorize the
21 establishment of task forces, study groups, and similar bodies
22 to carry out specialized and detailed projects within the scope
23 of its purposes. Any such body may include persons who are not
24 members of the Commission, but the Chair thereof shall be a
25 Commission member. The committee shall report on its progress
26 to the Commission at such times as the Commission shall
27 require. No report, study, or recommendation, favorable or
28 adverse, may be made by any such committee unless the matter is
29 approved by the Commission.

30 **Sec. 94.105. Purpose.**

31 The Commission is established for the following general

1 purposes:

- 2 (a) To study and make recommendations to the City Council, Mayor's
3 Office, City Staff, and community stakeholders with respect to
4 the planting of trees and the health of the City's tree canopy.
- 5 (b) To formulate an overall plan for the planting of trees and the
6 health of the City's tree canopy and thereafter to annually
7 review the plan and report recommendations to the Mayor's
8 Office.
- 9 (c) To act as a motivating and coordinating body to encourage joint
10 public and private participation in the planting of trees and
11 the health of the City's tree canopy.
- 12 (d) To review and make recommendations, if necessary, to the
13 Council concerning the City's tree protection and landscape
14 regulations.

15 **Sec. 94.106. Duties.**

16 In implementing the purposes under this chapter, the
17 Commission shall have the following duties:

- 18 (a) To act as a coordinator for programs, projects, and activities
19 related to planting projects and the health of the tree canopy
20 between all public and private entities;
- 21 (b) To review expenditure proposals and plans for planting
22 projects;
- 23 (c) To prioritize, with the input of District Council members,
24 proposed planting projects based on established criteria for
25 recommendation to the Council, and, when requested, the
26 Commission may also make recommendations on other proposed tree
27 planting projects;
- 28 (d) To formulate a recommended priority project list, including an
29 estimated implementation cost for each item, for tree planting
30 and canopy maintenance, and to thereafter annually review the
31 priority project list and report recommendations to the Mayor's

1 Office,;

2 (e) To help coordinate the maintenance of an inventory of the urban
3 tree canopy with an emphasis on historic trees, exceptional
4 specimen trees and other unique environmentally significant
5 trees within the City;

6 (f) To assist in the establishment of educational and outreach
7 programs to encourage proper management and maintenance of
8 trees on private property in the City;

9 (g) To conduct research studies, collect and analyze data and
10 prepare maps, charts, and plans for the accomplishment of its
11 purposes;

12 (h) To identify issues relative to the health and protection of
13 public trees and recommend solutions to problems identified;

14 (i) To recommend to and help develop opportunities for the City's
15 grant writing office for grants and solicitation of donations
16 to support the City's tree canopy;

17 (j) To perform an annual audit of funded projects, the status of
18 the inventory, and tree permits submitted to the City to be
19 included in an annual report to the Mayor's Office and City
20 Council; and

21 (k) To develop and maintain a tree canopy and existing tree
22 inventory.

23 **Section 2. Effective Date.** This Ordinance shall become
24 effective upon signature by the Mayor or upon becoming effective
25 without the Mayor's signature.

26 Form Approved:

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28
29 _____
Office of General Counsel

30 Legislation Prepared By: Jason R. Teal

31 GC-#1108637-v2-Tree_Commission_Legislation.doc

Current / Future Tree Planting Projects 2018

- **Harts Rd/Dunn Ave (District 7) - Date Palm planting in medians at Harts Rd. and Dunn Ave.**
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- **King Street Median Planting – (District 14) – Median replanting (9) from College to Park St.**
- **Old St. Augustine Rd. and Bartram Park – (District 6) – Large Median Plantings at Bartram Plaza**
- **Avondale – (District 14) – Community-wide right of way planting and tree removal and replacement planting in Avondale**
- **Southside Estates/Patton Rd.(District 4) – Buffer/Right of Way Planting**
- **Harlow Blvd. (Districts 9 and 10) – Median plantings from Blanding to Mother Hubbard Dr.**
- **Argyle Forest Blvd. (District 14) – Median Plantings on Argyle Forest Blvd.**
- **Edwards Park (District 7) Park and Right of Way Plantings**
- **San Jose Blvd. (District 6) – Median Renovation**

Smaller Projects

- **Livingston Ave. and Hickorynut Street– (District 10)- Median/Island Planting**
- **Rogero Rd.(District 1) – Replacement Plantings**
- **Oak Harbor/Montreal St. – (District 13)- Median/Island Planting**
- **Swamp Owl Lane (District 6)– Median/Island Planting**
- **Monument Rd. and Hidden Hills (District 4) – Median Plantings and Replacements**

IN THE CIRCUIT COURT, FOURTH
JUDICIAL CIRCUIT, IN AND FOR
DUVAL COUNTY, FLOIRDA

CASE NO. 16-2000-CA-06409
DIVISION CV-A

MONTGOMERY LAND COMPANY, a
corporation, THE COLLINS GROUP, INC.,
a corporation, NORTH FLORIDA BUILDERS/
W. HOWARD WHITE, INC., a Florida
corporation, NORTHEAST FLORIDA
BUILDERS ASSOCIATION, INC., a Florida
non-profit corporation, SSZ JOINT VENTURE,
a Florida general partnership, and CHARLES
BOSTWICK, individually and as Trustee of the
William C. Bostwick Trust, and as Trustee of
the Charles W. Bostwick Trust,

Plaintiffs,

v.

THE CITY OF JACKSONVILLE, FLORIDA,
Defendant.

and

ANN BAKER, an individual, SUSAN FISHER,
an individual, AUDREY GIBSON, an individual,
SUSIE SCOTT, an individual, TRIP STANLY,
an individual, as the Petitioners' Committee; THE
CITY OF JACKSONVILLE BEACH, FLORIDA;
and THE TOWN OF BALDWIN, FLORIDA,

Intervenors.

**ORDER DENYING PLAINTIFFS' AMENDED
MOTION FOR SUMMARY FINAL JUDGMENT
AS TO COUNTS II AND III OF PLAINTIFFS'
FIRST AMENDED COMPLAINT FOR
DECLARATORY RELIEF**

This cause was heard on April 5th, 2004, upon Plaintiffs' Amended Motion for Summary Final Judgment on Counts II and III of Plaintiffs' First Amended Complaint for Declaratory Relief. The Court also considered Plaintiffs' Motion to Strike the affidavit of Kimberly Stewart.

In Count II Plaintiffs allege the on-site and off-site tree mitigation requirements of the City's Charter Amendment and Ordinance are arbitrary and capricious and deprive

landowners of property without due process of law in violation of Article I, Section 9 of the Florida Constitution.

In Count III Plaintiffs allege the tree mitigation requirements of the Amended Charter and Ordinance constitute a taking of property without compensation in violation of Article X, Section 6 of the Florida Constitution.

Plaintiffs make a facial challenge to the off-site mitigation requirements of provisions of Article 25 of the City Charter and to Section 656.1206 (h) of the Code of Ordinances of the City of Jacksonville (Code) contending that under no circumstances can those provisions of the Code and Ordinance be constitutional. Plaintiffs argued further that the facts alleged in the affidavit of Kimberly Stewart filed by City are irrelevant to a facial constitutional challenge. The Court agreed with the Motion to Strike the affidavit and granted Plaintiffs' Motion to Strike.

Plaintiffs contend that the off-site mitigation provisions are the same in principle as the "exactions" at issue in Hollywood, Inc. v. Broward County, 431 So.2d 606 (Fla. 4th DCA 1983) and similar Florida cases because the Code and Ordinance require as a condition precedent to issuing a permit that the applicant pay money or dedicate property to the government or for public use. Plaintiffs further argue that it is the burden of the City to prove that the Code and Ordinance meets the requirements of the dual rational nexus test of Hollywood, Inc. v. Broward County, supra, to justify the imposition of exactions.

A party asserting a facial challenge to a legislative enactment must establish that no set of circumstances exist under which the enactment would be valid. U.S. v. Salerno, 481 U.S. 739, 745, 107 S.Ct. 2095, 95 L.Ed.2d 697 (1987); State v. Efihimiadis, 690 So.2d 1320 (Fla. 4th DCA 1997); Vole v. State, 457 So.2d 541 (Fla. 4th DCA 1984), rev. den., 464 So.2d 556 (Fla. 1985). In order to succeed in their facial challenge, Plaintiffs must show that the "ordinance does not substantially advance legitimate State interests...or denies an owner economically viable use of his land." Agins v. City of Tiburon, 447 U.S. 255, 260, 100 S.Ct. 2138, 2141, 65 L.Ed.2d 106 (1980).

The Code and Charter contain declarations of the public purpose regulating the removal of protected trees from development sites. Those declarations of public purpose are presumed valid and are to be considered correct unless patently erroneous.

In addition the City previously submitted the affidavit of Christopher J. Luley, Ph.D. documenting and quantifying the environmental impacts of urban vegetation and the necessity to maintain an urban tree canopy. Dr. Luley's affidavit also makes clear that mitigation through the planting of replacement trees is critical and that the negative effects of tree removal are offset regardless of whether mitigation occurs on-site or off-site, even where the off-site mitigation occurs some distance from the location where the trees are removed.

The dual rational nexus test is not applicable to a determination of the validity of the City's tree protection Code and Ordinance provisions.

The dual rational nexus test is a test used to determine whether a payment or dedication requirement is a user fee or a tax. The tree protection legislation is a legitimate exercise of the City's police power which includes the authority to address environmental concerns. Graham v. Estuary Properties, 399 So.2d 1374, 1381 (Fla. 1981); cert. denied, 454 U.S. 1083, 102 S.Ct. 640, 70 L.Ed.2d 618 (1981); Department of Community Affairs v. Moorman, 664 So.2d 930, 932 (Fla. 1995); Section 163.3194 (2) (b), Florida Statutes.

The City's tree protection regulations are intended to prevent, a public harm, the destruction of Duval County's tree canopy, a legitimate State interest. As noted by the City the regulations are designed to maintain the status quo at best. The alternatives available to the developer are part of a regulatory scheme to provide incentives to preserve protected trees and on-site mitigation. Without off-site mitigation requirements, there would be little reason to preserve existing trees or to replant trees on a development site. The regulations are applicable to all developers, there is no physical taking nor a requirement of dedication in every case. The regulations provide a uniform set of rules for replacing trees removed for the purpose of development. The Charter nor the Ordinance destroy the Plaintiffs' ability to develop their land.

As further noted in the Court's order of April 4, 2004, requiring the City to measure the impact of a single protected tree from the tree canopy in Duval County would impose an impossible burden on the City. Experts are not required to testify to what common sense tells us. The tree canopy can be destroyed one tree at the time. Removal of a protected tree or even five protected trees may do no measurable harm. It

is the cumulative effect of removing protected trees by a number of developments over a number of years which the City is attempting to mitigate.

The goal of protecting the tree canopy in Duval County is a legitimate exercise of the police power of the City and the off-site mitigation requirements of the Ordinance and Code are reasonable land use regulations addressing environmental concerns.


Plaintiffs have not met the burden to show that the challenged provisions have no valid application under any circumstances.

It is therefore,

ORDERED

Plaintiffs' Amended Motion for Summary Final Judgment on Counts II and III of Plaintiffs' First Amended Complaint for Declaratory Relief is denied.

DONE AND ORDERED in Jacksonville, Duval County, Florida, this 26th day of April, 2004.


Richard O. Watson, Senior Circuit Judge

Copies to: 4/26/04 kj

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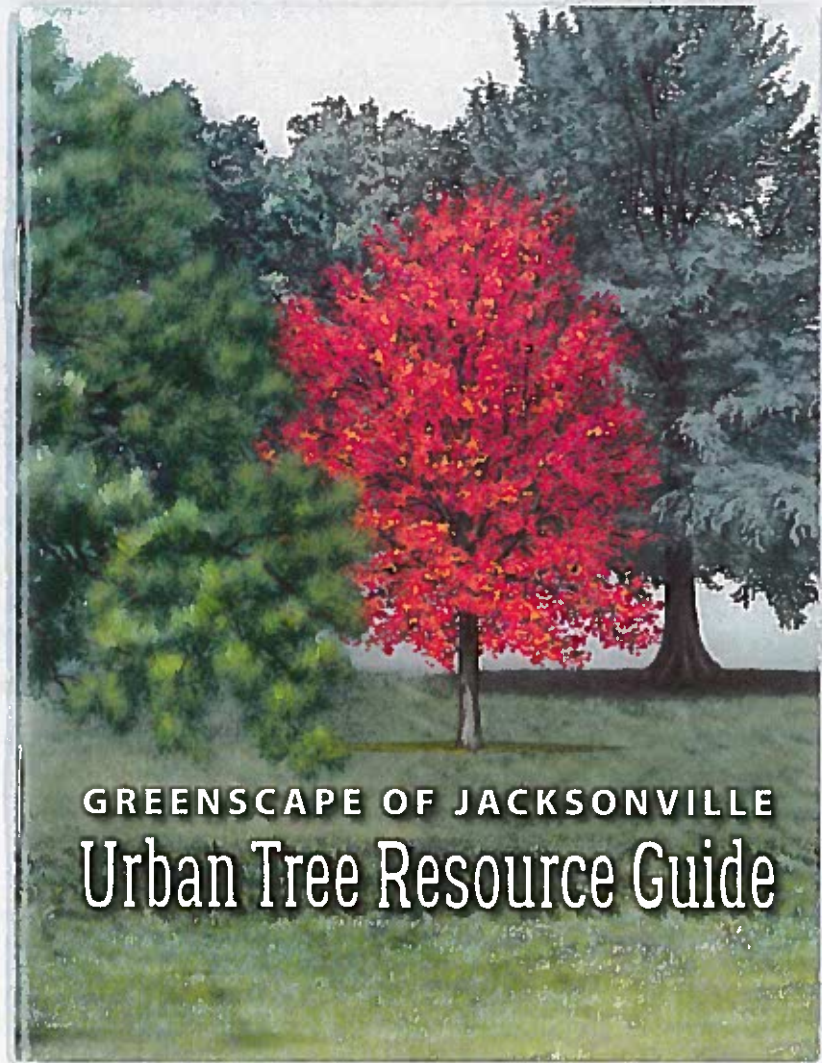
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Understanding the True Costs of Growing and Planting Urban Trees

By Ashley McElhinney, Richard W. Harper, and Daniel A. Lass

Results from root morphology research (Neal and Lass 2014) of landscape trees grown in pot-in-pot (PiP) containers, balled-and-burlapped (B&B), and in-ground fabric containers (IGFC) have provided useful insights into the way urban trees are grown and respond in a nursery setting. The results from related research provided an analysis of the costs and returns associated with these production systems (Lass and Neal 2014).

Trees from each of the three production systems were then transplanted to an urban environment and used in a third study (Green et al. 2015) to evaluate differences in tree planting times and associated costs. Differences in tree size, root-ball weight, and root morphology were all determined to be important factors in the costs of planting different types of nursery-grown trees in the urban landscape.

Tree Root Morphology and Production Systems

The root morphology research (Neal and Lass 2014) was conducted over a three-year period, and aimed to demonstrate how differing production systems might impact root growth and development, and influence overall quality of a finished, nursery-grown tree. Up to 100 specimens of three tree species—swamp white oak (*Quercus bicolor*), river birch (*Betula nigra*), and crabapple (*Malus* × *Prairiefire*)—were planted in Amherst, Massachusetts, and Durham, New Hampshire, U.S., in April 2010. When the specimens were finally dug, measured, and weighed, it was found that tree height and trunk caliper did not differ across the production systems and tree species, except for river birch, where IGFC and PiP trees were notably smaller than their B&B river birch counterparts. Root defects believed to limit tree survival and growth, like circling, bent, and girdling roots, were found to be minimal in B&B trees and severe in PiP trees, across all tree species. Tree roots from IGFC trees were found to be modified by their fabric bags, often forming root nodules against the sides and bottom of bags. Although all

methods produced medium-sized roots, PiP trees had mostly fine, lower-order roots, while B&B trees generally featured large, higher-order roots, since most fine roots were left in the field as part of the digging process.

To see how the trees performed in a new growing site, 12 harvested river birch trees from each of the three production systems were transplanted in the spring of 2012 and left for two growing seasons. The following November (2013), their roots were exposed with an air spade. PiP roots were found to feature a north-south cardinal spread of 3.57 meters (11.7 ft), IGFC trees also featured 3.57 meters of roots, and the B&B root spread was 4.05 meters (13.3 ft). This finding seemed to indicate that B&B transplanted trees responded by producing the highest volume of healthy tree roots, compared to other production systems, over two growing seasons.

Costs and Production Systems

Research was also conducted with the objective of estimating the costs and returns for the production of the same river birch trees. Researchers tracked the installation costs for each production system, including time, machinery, labor, supplies, and irrigation required to plant each river birch tree in the nursery. Harvest costs were measured after two full growing seasons, during the autumn of 2011. Each production system employed a different method of harvesting, which necessitated different machinery, number of laborers, supplies, and time. These costs added to planting costs, initial price of trees, general maintenance, herbicides, and various other expenses comprising the total production cost. Subsequent analysis found that PiP trees featured the highest production cost, while IGFC trees costs were the lowest.

Cost variations (\$USD) were also explored. Average production costs for B&B trees were estimated, with 95% confidence, to be contained by the interval of \$60.37 to \$65.33 per tree. PiP average costs per tree were estimated to be from \$73.10 to \$74.92 per tree, and IGFC average costs were estimated to be \$54.46 to \$55.55 per tree.

Figure 1. A row of heeled-in swamp white oak, over-wintering (Amherst Nurseries in Amherst, Massachusetts, U.S.)



From an economic standpoint, each production method features its own strengths and weaknesses. For example, B&B trees had an advantage in planting costs per tree; however, B&B costs increased substantially after harvest due to affiliated machinery and processing expenses. The PiP system offered a low harvest cost, but had a high initial planting cost. IGFC trees, although having a slightly higher planting cost than B&B trees, featured a lower harvest cost, making it the lowest cost and greatest net income method per (river birch) tree.

Costs and Tree Planting in the Urban Environment

Researchers wanted to build on the two existing studies and develop a scientifically-based understanding of the average cost of planting trees in an urban environment and to measure how those costs vary. Trees grown using an additional fourth production system (bare-root, BR) were added to the transplant study. This critical information may be useful to urban foresters/tree wardens, municipal arborists, and community foresters who routinely identify budgetary constraints as a limiting factor in relation to the management of urban trees.

Planting Process

This third study began with 24 research swamp white oak (*Quercus bicolor*) trees from the Woodman Horticultural Research Farm in Durham, New Hampshire, U.S. (courtesy of Dr. Cathy Neal) (Figure 1). An additional 24 red oak trees (*Q. rubra*) were also acquired from Amherst Nurseries in Amherst, Massachusetts, U.S. The swamp white oak trees were grown at the research farm using three production methods: field-grown B&B (8), containerized PiP (8), and IGFC (8). All red oak trees were grown at



Figure 2. Loading B&B trees onto landscape trailers using a tractor (top); BR trees were loaded by hand, requiring only one individual to lift and another to secure the trees on the trailer (bottom).



Figure 3. Bare-root trees awaiting planting.

PiP (8), and IGFC (8). All red oak trees were grown at Amherst Nurseries using three methods: field-grown B&B (8), IGFC (8), and field-grown BR (8).

B&B trees were loaded onto landscape trailers using a tractor (Figure 2, top); the trees were secured by three individuals. PiP and IGFC trees were loaded and secured onto the trailer by three individuals. BR trees were loaded and secured by hand in like manner, requiring only two individuals (Figure 2, bottom). The roots of all BR trees were moistened and loosely covered with burlap to help protect against desiccation (Figure 3).

Once the loading was completed, three employees unloaded the B&B trees at the planting location, with the assistance of a utility vehicle (Figure 4). PiP and IGFC trees required two employees, consisting of an operator to drive and an employee to walk beside the trailer, thus unloading each tree at its planting location. BR trees were kept on the trailer, under the protection of the tarp, and were then carried to their respective planting holes. To minimize the number of external factors affecting planting costs in this study, the same crew, using the same equipment, planted all of the trees in Amherst in three workdays (14–16 May 2014). All trees were planted by two employees using the same approach, except in the preparation of the root ball, which differed in accordance with the trees' respective production system.

When the proper planting depth was determined, the sides of the planting hole were scarified to facilitate root penetration, while dead or damaged branches on the tree were removed. Then, the root ball was prepared in accordance with the respective production method. For B&B trees, the wire cage and burlap were removed from the root ball; PiP trees had their containers removed from the root balls, and the roots were pruned with hand pruners and a saw; IGFC trees' fabric bags were removed from the root ball; and BR trees were root pruned to remove dead or damaged roots, if needed.

Each root ball was then placed into its prepared hole, back-filled, watered, and finished with a 5.1–7.6 centimeter (2–3 in) layer of bark mulch, applied in the vicinity of the lower trunk.

Planting Time

Planting times and costs varied by production system. Planting time is a key factor in determining the costs of planting a tree, as it determines both labor and equipment requirements. Data for the two species of oak were pooled and statistical tests were conducted to determine if differences in the average planting times across species and production system were significant or purely random. Results showed that planting times varied according to the size of the tree and the production system, but differences between the two tree species were not significant. With these differences across types of trees and differences in tree weights and root-ball sizes, variation in the time required to plant the trees was also observed.

The greatest average planting time per tree was for the B&B trees at 902 seconds or just over 15 minutes per tree (Figure 5). The BR trees, on average, were planted in less than half of this time, at 429 seconds (approx. 7 mins, 8 secs). IGFC trees averaged 517 seconds per tree (approx. 8 mins, 36 secs), and PiP trees required an average of 675 seconds per tree (11 mins, 15 secs) to plant. The average planting time for the B&B trees was significantly greater than all other tree types—a difference that could not have occurred by chance. The average planting time for BR trees was significantly lower than all other trees, and the average planting time for PiP trees was significantly greater than the mean time for IGFC trees. The data provided a confidence level of 95% for these tests of average planting-time differences. Figure 5 shows these differences in average planting times by the vertical lines marking the centers of each distribution.

Planting-time variances were also compared for the B&B, PiP, IGFC, and BR trees. B&B trees had planting-time variances that were significantly greater than IGFC and BR trees. Variances for B&B and PiP trees were not statistically different; both standard deviations were virtually equivalent at 182 seconds—3 minutes, 2 seconds. Although the variance for PiP was much greater than that of the IGFC trees, the difference was not significant.

Similarly, the variance for IGFC trees was greater than the variance for BR trees, but not significantly greater. While these statistical results seem odd, they reflect the effects of having smaller samples of PiP and BR trees (only eight trees for each).

These differences are reflected in the planting-time distributions in Figure 5 for the four types of systems. As shown in Figure 5, the distributions for the B&B and PiP trees had the same variances and are identically shaped. Location along the horizontal axis of the center of the distribution for PiP trees shows they were planted much faster, on average. The distribution for the IGFC trees is much more compact (taller and skinnier) than the B&B and PiP trees, illustrating less variance and a shorter mean planting time per tree. Finally, the distribution for BR trees features the shortest mean planting time and the least amount of variance.

The estimated planting-time distributions in Figure 5 illustrate how much variation there was around the average planting time for each tree production system. Using these distributions, probabilities can be calculated that help form expectations about time requirements for various planting projects.

For example, a manager with a crew of two employees and 20 oak trees to plant might ask: "What are the chances these trees can be planted in a four-hour block of time?"

To complete the task, the crew will need to plant 5 trees per hour, or one every 12 minutes. The probability they can plant 20 B&B oak trees in that amount of time, assuming they are all the same size and weight, is 0.16—they have a 16% chance of completing the task. If they had PiP trees to plant, the probability improves to a 60% chance of completing the job within four hours. If the oak trees were grown at the nursery using an IGFC production system, the probability increases to 96%, and they could be virtually certain (100% chance) they would be about to plant 20 BR trees. These probabilities are useful in forming expectations about planting-time requirements for the different types of trees considered in this study.

Planting Costs

To compute planting costs, all holes were assumed to be in a line along the road with equivalent minimal travel time between holes. The time to dig the holes varied depending on the soil and amount of sod. To focus on how costs differ across types of trees, all trees were assigned the same mean costs for digging holes. On average, the cost of digging a planting hole with an auger 91.4 centimeters (36 in) wide was \$1.06, and included 63 seconds of equipment and operator time. Because planting sites for towns may be widespread, travel time was not considered in this study, nor was the purchase price of the trees relative to the differing production systems.

Planting costs per tree were estimated using the data collected for time unloading, digging holes, and planting. This included the labor and equipment required to dig the holes, to place the tree at the site, and to complete the



Figure 4. Three employees unloaded the B&B trees, requiring the aid of a utility vehicle to lift and move the trees.

planting process. The costs to dig all holes included the rental costs for a \$35/hour machine with an auger attachment, as well as a \$26/hour equipment operator. These rental and labor costs reflect rates and wages around Amherst, Massachusetts, U.S.

The costs of unloading and placing each tree at the planting site included the costs of a pickup truck at \$10/hour, trailer at \$3/hour, operator labor (\$26/hour), and an employee at a wage of \$13/hour.

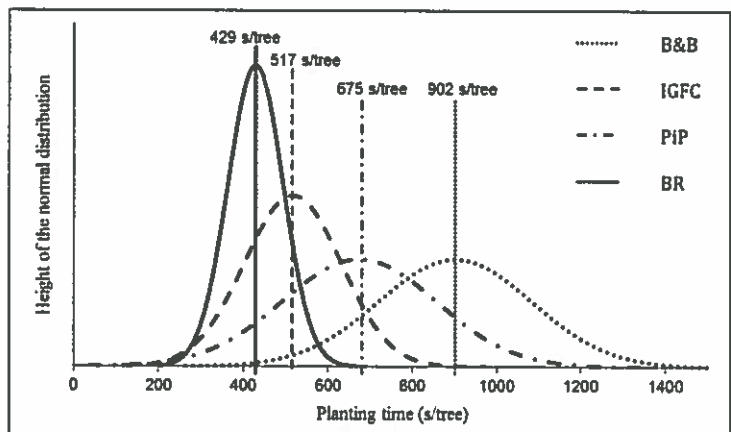


Figure 5. Comparison of average planting times and planting-time distributions for oak trees from balled-and-burlap (B&B), in-ground fabric container (IGFC), pot-in-pot container (PiP), and bare-root (BR) production systems. Taller distributions indicate less variation in planting times per tree for that production system.

The costs of unloading the trees and moving them to the holes differed by tree production type. The costs of the pickup truck and trailer were included for all trees. The B&B trees also required a machine to move them to the holes. The costs for all trees included operator labor and an additional employee to help move the trees—a machine was not needed to carry the trees to the holes. The unloading cost per tree for B&B trees was \$3.43, the cost of the IGFC and PiP trees was \$0.58/tree, and the BR trees cost \$0.22/tree.

The final component of costs was planting the trees. The planting times for B&B trees were greater than the times for all other types of trees because of the time required to remove the basket and burlap and position the relatively heavy tree in the hole. That time is reflected in the average planting cost per tree of \$6.51. The average planting cost for PiP trees was \$4.88 per tree (\$1.64 lower); also, PiP trees were found to require more time to account for root pruning. IGFC trees cost \$3.73 per tree, on average, to plant. The BR trees cost the least at \$3.10 per tree, on average.

Total average costs per tree (Table 1) included the cost of digging the holes (\$1.06 per tree for all trees), the costs of unloading, and the planting costs. These costs do not include the price paid per tree or the transportation costs to the site (the focus of this study was on differences in planting the trees once they were on site). Combining these three costs gives an average total cost per B&B tree

of \$11.01. The PiP trees were the next most expensive at \$6.52 per tree, on average. The average total cost of IGFC trees was \$5.38 per tree, and the BR trees had the lowest total costs at \$4.38 per tree, on average. Results of the study indicate substantial differences in costs per tree. B&B trees costs more than IGFC trees by \$5.50 per tree, and more than PiP trees by \$4.50 per tree. There was a \$6.63 difference in total costs of planting B&B versus BR trees.

Total planting costs per tree varied due to the variation in planting times. The relative amounts of variation in total costs are shown in Figure 6. The average costs are shown by the vertical lines and variation in costs by the spread of each distribution. As with the planting-time distributions, B&B and PiP have distributions with virtually the same variation but different average costs. IGFC trees have lower average costs and less variation than B&B and PiP trees. BR trees had the lowest average costs and the least amount of variation.

Given the cost distributions estimated in this study, we ask, for example: "What is the chance (probability) that trees can be planted for less than, say, \$6.00 per tree?" A two-person crew would be virtually assured of planting BR trees at a cost per tree of less than \$6.00 (Table 2). The same crew would have a 75% chance of planting IGFC trees at less than \$6.00 per tree. For PiP trees, the probability falls to just over 35%, and there is virtually no chance of planting B&B trees for less than

Table 1. Summary of planting costs for red oak and white oak trees from balled-and-burlap (B&B), pot-in-pot container (PiP), in-ground fabric container (IGFC), and bare-root (BR) production systems. All currency is in \$USD.

Activity	Costs per Tree			
	B&B	PiP	IGFC	BR
Preparation — dig holes				
Mean time (s/tree)	63	63	63	63
Preparation costs (\$/tree)	\$1.06	\$1.06	\$1.06	\$1.06
Unloading at site — move trees to holes				
Mean time (s/tree) ^a	142	40	40	15
Unloading costs (\$/tree)	\$3.43	\$0.58	\$0.58	\$0.22
Planting — position tree, root prune, and backfill				
Mean time (s/tree)	902	675	517	429
Planting costs (\$/tree)	\$6.51	\$4.88	\$3.73	\$3.10
Total preparation, unloading, and planting costs (\$/tree)	\$11.01	\$6.52	\$5.38	\$4.38

^a Machinery and equipment costs are based on daily rental: skid-steer loader with auger (\$35/hour), pickup truck with trailer hitch (\$10/hour), and 6 foot x 12 foot (1.8 m x 3.7 m) trailer (\$3/hour).

Notes: Wages for the machinery operator and laborers were \$26/hour and \$13/hour, respectively. Hole positions were along a suburban road and trees were not placed randomly. PiP, IGFC, and BR trees carried by hand to holes, B&B trees placed at most easily reached holes using the skid-steer with auger. Equipment costs include the allocated costs of a skid-steer auger, pickup truck, and trailer for the time required to move the tree to the prepared hole. The operator is assumed to drive the truck and trailer and skid-steer auger. The laborer is assumed to assist with unloading, positioning trees and back filling holes.

Table 2. Estimated probabilities that total planting costs per tree are less than the given value. All currency is in \$USD.

	Total Planting Costs per Tree							
	\$5.00	\$6.00	\$7.00	\$8.00	\$9.00	\$10.00	\$11.00	\$12.00
B&B	0.000	0.000	0.002	0.014	0.072	0.231	0.496	0.763
PiP	0.135	0.353	0.636	0.858	0.964	0.994	0.999	1.000
IGFC	0.340	0.750	0.961	0.998	1.000	1.000	1.000	1.000
BR	0.839	0.995	1.000	1.000	1.000	1.000	1.000	1.000

\$6.00 per tree. The probability of planting a B&B tree exceeds zero at \$7.00 per tree and above, and reaches a probability of 0.763 at \$12.00/tree. At a cost per tree of \$9.00 or less, virtually all BR, IGFC, and PiP trees can be successfully planted; 7.2% of the B&B trees could be planted for less than \$9.00.

Summary

There are substantial differences in the costs of planting trees, and in the third study, it was shown that these costs can differ significantly due to nursery production methods. Mean or average comparison showed that when hole preparation was complete and all trees were placed next to the holes, the mean planting time for B&B trees was significantly longer than mean times for PiP, IGFC, and BR trees, and the mean BR planting time was significantly shorter than all other treatments. The mean cost per tree for B&B trees was also estimated to be the most expensive, followed by PiP and IGFC, with BR being the least expensive.

Although it has been the long-reigning method of nursery production, the B&B method may not necessarily be considered the most cost-effective or most efficient approach. Although the precedent research of nursery production methods suggested that harvesting trees using the B&B method produces the highest quality tree, and that the IGFC method featured the lowest overall cost and risk, it is important to also consider that the BR method was not included in either of these first two studies; findings of this study suggest that BR trees are the fastest and most cost-effective trees to select for planting. Further research worthy of consideration would include observing and analyzing the trees' relative survival rates and long-term maintenance costs (e.g., watering, mulching, pruning, and weed management).

Additional Reading

Arnold, M.A., G.V. McDonald, D.L. Bryan, G.C. Denny, W.T. Watson, and L. Lombardini. 2007. Below-grade planting adversely affects survival and growth of tree species from five different families. *Arboriculture & Urban Forestry* 33(1):64–69.

Ferrini, F., and F.P. Nicese. 2006. Effect of container type nursery techniques on growth and chlorophyll content of *Acer platanoides* L. and *Liquidambar styraciflua* L. plants. *Journal of Food, Agriculture, and Environment* 4(3–4):209–213.

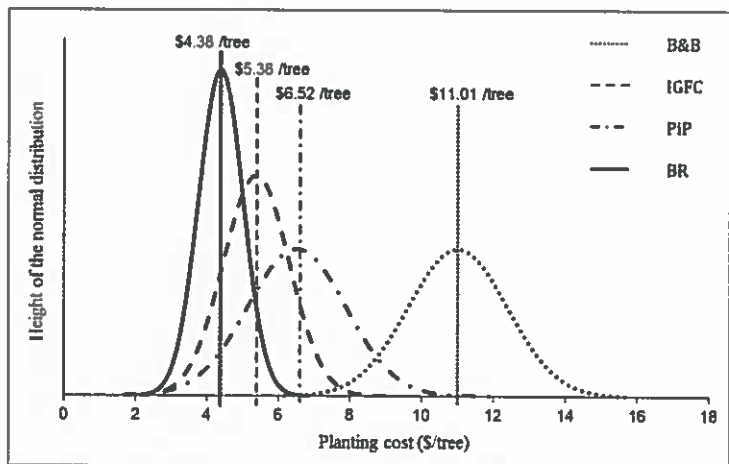


Figure 6. Comparison of total planting cost distributions for oak trees from balled-and-burlap (B&B), in-ground fabric container (IGFC), pot-in-pot container (PiP), and bare-root (BR) production systems. Taller distributions indicate less variation in cost per tree for that production system.

Gilman, E.F. 2001. Effect of nursery production method, irrigation, and inoculation with mycorrhizae-forming fungi on establishment of *Quercus virginiana*. *Journal of Arboriculture* 27(1):30–38.

Green, B.L., R.W. Harper, and D.A. Lass. 2015. Differing nursery production systems impact cost of planting oak species in the urban environment. *HortTechnology* 25(5):651–656.

Lass, D., and C. Neal. 2014. Production effects on tree root growth and morphology. *American Nurseryman* 214(8):10–14.

Levinsson, A. 2013. Post-transplant shoot growth of trees from five different production methods is affected by site and species. *Arboriculture & Urban Forestry* 39(5): 201–210.

Neal, C., and D. Lass. 2014. Getting to the roots: Costs of growing river birch in different production systems. *American Nurseryman* 214(8):12–18.

Richardson-Calfee, L., J.R. Harris, R.H. Jones, and J.K. Fanelli. 2004. Seasonal effects of transplanting on northern red oak and willow oak. *Journal of Environmental Horticulture* 22(2):75–79.

Stobbart, M., and M. Johnston. 2012. A survey of urban tree management in New Zealand. *Arboriculture & Urban Forestry* 38(6):247–254.

- Struve, D.K., L. Burchfield, and C. Maupin. 2000. Survival and growth of transplanted large- and small-caliper red oaks. *Journal of Arboriculture* 26(3):162-169.
- Watson, G.W., and E.B. Himelick. 2013. *The Practical Science of Planting Trees*. International Society of Arboriculture, Champaign, Illinois, U.S. 250 pp.
- Wells, C., K. Townsend, J. Caldwell, D. Ham, E.T. Smiley, and M. Sherwood. 2006. Effects of planting depth on landscape tree survival and girdling root formation. *Arboriculture & Urban Forestry* 32(6):305-311.

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To view research specimen trees and compare root systems from the different nursery production methods, go online (www.urbanforestrytoday.org—click on “publications”).

Plant I.D.



Did you correctly identify this tree from page 9?

Pterocarya fraxinifolia

A tall shade tree with a rounded, broad-spreading habit, often with several stems near the base. Valuable for large areas, such as parks,

schools, and golf courses. The aggressive root system needs copious space, meaning the tree is not particularly conducive to residential or street tree use. Easily grown in average, medium, or well-drained soils in full sun. Prefers consistently moist soils but tolerates drought. Also tolerates hard, compacted soils. Tendency to sucker.

Botanical name: *Pterocarya fraxinifolia*

Common name: Caucasian wingnut

Mature size: 30-60 feet (9.1-18.3 m) height, 30-60 feet spread

Foliage: Dark green, alternate, compound leaves grow to 18 inches (45.72 cm) long. Each leaf contains 7 to 27, ovate to oblong-lanceolate, sharply-toothed, glossy dark green leaflets, 2-5 inches (25.1-12.7 cm) long.

Fruit: After spring flowering, small green winged nutlets develop in the female catkins in early summer, forming pendulous strings to 20 inches (50.8 cm) long. Nutlets ripen from green to brown in late summer to early autumn, often persisting on the tree into winter.

Growth rate: Medium

Autumn color: Dark green turning to yellow-green.

Geographic range: Native range includes the Caucasus, eastern Turkey, northern Iran.

USDA Hardiness

Zone: 5-8

Pests and diseases: None serious.

Content sources: Ebben Nurseries, Missouri Botanical Garden, and *Dirr's Encyclopedia of Trees and Shrubs*.

Jacksonville Tree Commission
Tuesday, January 9, 2018
Sign-In

Name	Organization
Dalton Smith	COJ
Richard Leon	COJ
Jeremy Cooper	Florida Forest Service
Tracey Arpen	Greenscape, City Beautiful Jax
Curtis Hawk	Neighborhood
Aaron Quick	
Kyla Doolley	Greenscape
Joel Provenza	COJ - Accounting
Alice Checowski	COJ - Public Works
John Novakowski	Public Trust
John Crescimbeni	City Council
Rhodes Robinson	Environmental Services, Inc
John Pappas	COJ - Public Works
Jason Cameron	Sierra Club
Jason Teal	COJ / OGC
Courtney Wilson	Greenscape
Tom Larson	Sierra Club
Leslie Pierpont	Late Bloomers Garden Club