

Hello, I'm Rebecca, I'm the plant fanatic. And the owl fanatic, and the bird fanatic. So, have any of you guys been down there? We were curious how many of you have actually gone through the trails. About half of you? Have you noticed the little yellow stakes in the ground? So those are plants that I marked recently, and there's about 23 of them I think. About half of those are on the west side of the creek, and about half on the east side. The trails on the east side are relatively new, I think they were just recently cut, more recently than the west side, so if you haven't been on the east side yet, you should go check that out.

So, first I just wanted you guys to think back about the Vision Statement that Susan talked about earlier: *Parkwood Park is a historical, urban, forested sanctuary with trails designed for the enjoyment of the native plants, wildlife, and creek.* So obviously since the plants, wildlife, and creek play a big part in this Vision Statement, they're very important, and I just wanted to make sure that you all know WHY they're important. Not everybody realizes that there are native species and exotic species and that they're very different and play very different roles in the environment, and not everybody realizes how important it is to preserve and protect native species, and those are things that we haven't done very much lately in the past couple of centuries.

Very briefly -- I have to talk very fast because I'm supposed to get through this in only 5 minutes, even though I could talk for hours about this -- so Native Plants: Why should we care about them and why should we preserve them in our Park? There are a lot of reasons, and the first 3 reasons on this slide have more to do with people-centered reasons and then the last ones are more for environmental reasons. Natives use less resources, like less water, less fertilizers. They're adapted to our climate already, and if you grow them in your yard, they require less of those and also in the Park too, they need less to thrive than exotic species. So they're more environmentally friendly that way.

Usually they're not invasive. They're usually controlled by natural predators. They evolved with them and keep them in check -- and vice versa. Some native species can become invasive if a lot of exotic invasives are growing nearby that wipe out all of their competition like the English Ivy has just wiped out all the native plants that would otherwise compete with some natives that could become a little bit invasive -- like the Virginia Creeper and such. But once the invasive exotics are gone, then there will be other natives to grow up and take their place to compete with the natives that could be potentially invasive. And a healthy ecosystem is all balanced out.

They're beautiful and productive -- they have fruits, berries, nuts. Oaks have acorns, Hickories have nuts, Beech have Beechnuts. Dogwoods have little red fruits on them. Native plants are just filled with berries and all kinds of fruits that wildlife need and insects need, and that ultimately we need as well.

So they're essential for a healthy ecosystem, and diversity is really important. If you have a Park full of nothing but invasives, you're not going to have any diversity. The insects can't feed on them. The exotic plants introduce all kinds of exotic pathogens that

can take over and destroy native plants that haven't evolved with them and can't protect themselves against them. So when you have a lot of natives in a Park, it increases the diversity, and that's necessary to keep things in balance and not let things get out of balance and have just a few species just take over the whole Park, sort of like it is now.

Native plants are in decline due to development. Georgia is very fast growing -- it's one of the fastest growing states in the nation. All over the place, huge acreages are just getting wiped out by shopping centers, condominiums being built, housing developments, and native species are just chopped down. All those plants in the back on that table that I brought in -- I rescued them with the Georgia Native Plant Society from sites that are going to be destroyed by housing development. We go in and we dig those up and take those out before the bulldozers destroy them.

And they belong here, they were "Made in the USA." As Sally Sears said, they were here long before we were, they evolved here, they belong here. They make the environment healthy. Without them, we'd just be full of invasive species all over the place. They would just take over everything. Any they're enjoyable, you can enjoy them. You don't have to have a yard full of ornamentals or a Park full of ornamentals to have a beautiful Park.

So I just want to show you a few of the plants I labeled so you'll know what to look for ahead of time when you're walking the paths. I labeled about 10 trees. The top two pictures are Devil's Walkingstick, so it's a very small understory tree. It doesn't get very big, maybe 25 feet, 30 feet high. You would think that each one of these little leaves is a separate leaf, right? But actually each one of these is not a separate leaf -- each one of these is a leaflet! This entire thing right here is the whole leaf of this plant! What's special about this tree, and it is in our Park, is that it has the largest leaf of any temperate plant species in North America. The palms are kind of a tropical family and they have leaves that can be bigger, but of the temperate species this has the biggest leaf. They can be 4 feet long and 2-3 feet wide, and this is one whole leaf right here. And these are the berries. Last October when we had a Park Cleanup Day, you probably noticed some of these on the west side of the Park. The berries are kind of black and the stalks are pink. Those are not the flowers. The flowers are white but these are actually the stalks that the berries are on.

This is Elderberry, and this isn't a very good picture. These are the blooms about to open a few weeks ago, but right now if you go and walk the trails you can see the blooms wide open and they're cream colored, kind of whitish, they're really pretty. They attract tons of insects, tons of pollinators, and when they develop berries later on in the late summer and fall the wildlife eats 'em and the birds eat them.

This is Hornbeam. This is a tree in the Birch family, so it's related to River Birches, trees like that. I haven't actually seen any birches down in the Park except for this one. And these are the nutlets. And these aren't leaves. These are actually little bracts that are attached to each little nutlet. So this is the fruit and it hangs down in little tassels like this, and you can't mistake this tree for any other tree when it has the nuts on it,

because no other tree has little nutlets like that. It's also called Ironwood or Musclewood, because the bark looks like a big muscle that's coming up out of the ground, like someone's muscley arm is coming out of the ground, so that's why it's called Musclewood.

This is Basswood, and I've only seen one of these trees in the whole Park. There should be tons of them. There would be more if all those invasive species weren't there. The leaves look a lot like mulberry leaves, and it's easy to mistake it for mulberry leaves, but they're all consistently the same size and shape, whereas the mulberry leaves are all different sizes, different shapes, different lobes, etc. They all look like big hearts, and I think I did label it. I labeled that one, too, on the west side.

These are two bushes. I only labeled two bushes. There aren't a whole lot of bushes because it's mostly like Ivy covering the ground and then huge tall trees and lots of vines and all kinds of crap and not a lot of bushes. So this is Spice Bush and it's a native and in the fall it has this gorgeous yellow color -- did y'all notice that last fall? They look like trees, they're almost dogwood size but they're actually shrubs, but they can get really big. This is the host plant for the Spicebush Swallowtail Butterfly. That's why it's called Spicebush Swallowtail. It needs this plant to survive to feed on the leaves, so if it weren't for this plant we wouldn't have those nice pretty butterflies around. So it's pretty important to conserve those and we have quite a few of those in the Park, they're just really tiny, and they can't get much bigger with all that Ivy and invasives and other vines that are just kind of crowding them out.

And this is Sweet Shrub. Y'all probably know this. This is sort of grown and sold as an ornamental as well. Have y'all seen this before? The flowers are supposed to smell like strawberries and the crushed leaves are supposed to smell like strawberries and people plant them around windows and doors and they're supposed to be really fragrant. There will be lots of these beautiful flowers in the Park once we get the invasives out. This one I labeled but it's really hard to see on the west side trail because it's just covered in a huge tangle of vines. And I put this little stake, and you see this huge tangle of Muscadine and Ivy and Smilax and Vitis, which is a native grape species and stuff, and you see this one tiny little flower down in there just trying to grow up and just trying to push through, and it's really pathetic to see it, but there are a few others in the Park but they didn't have flowers so that's why I labeled this one with a stake so you probably won't find it, but it is there, I promise.

And then this is American Holly. Most people don't realize there's about 12 species of native hollies that grow in the Southeastern United States. A lot of them are deciduous -- a lot of them don't even have leaves that stay on all year like this. This is one of the evergreen hollies and it's different from the English Holly and the Japanese Holly and the Chinese Holly. You notice the shape is very different -- it's not square or rectangular -- it doesn't have those huge, deadly spears that are very painful that make it sort of impossible to sit down on the ground in the Park without getting stuck in the butt.

Question from audience: It's a lighter color, too, isn't it? It's a lighter green than the ones you can buy?

Um, they are kind of light, yeah. It's not really a good way to differentiate them because the color is so variable. On the younger plants they're probably lighter, and on the older ones they're darker and they get really thick and leathery. Some of these in my backyard are like 10 or 15 feet high. There are some in the Park that are trying to grow and get big, but they get berries too and the birds love them and the wildlife loves them, and they're very important to have.

Next slide. Am I taking too long? These are very easy to overlook. Have y'all ever seen these before? Little Brown Jugs? Karna said they're called...? What did you call them when you were little?

Karna: Piggies. We called them Piggies.

They're in the ginger family. And have y'all seen these leaves before? They're all over the place really. They're shaped like arrows. They're related to ginger. This is the flower. It's only about an inch high and the stalk is about an inch long, so it's under the leaf litter. You have to find the leaves and then you move away the dead leaves on the ground and then you'll see the flowers. They're pollinated by ants and beetles -- that's why they're under the leaf litter -- they don't need the bees and butterflies to see them.

And this is Jack-in-the-Pulpit. We have a few of those in the Park. It's a really really good native plant to have, and we'd have a lot more once the invasives are all gone. This is the beautiful flower in March or April. These are the leaves, and the native Americans used to eat the roots of these things, it used to be a big food for them, but I don't recommend you do that now!

Paul Thompson: How do you differentiate it from Poison Ivy?

Well the growth habit is different -- the location is different. It's hard to see in this photo but I have other photos on the website you can see, but it comes as a single stalk out of the ground, and then it branches into two equal -- like a big "Y" shaped thing -- and at the top of each fork is this set of three and this set of three. And they face away from each other; it's very symmetrical. It always looks like that. Poison Ivy isn't symmetrical -- the leaves are alternate on the stem -- these are opposite leaves, completely opposite. It has a little spathe like this -- in the spring it'll look like this. Right now it's all withered but it's still there. Ivy doesn't have that kind of thing on it. Ivy tends to be more bushy, or trailey, or it'll grow up a tree.

Karna: Doesn't it have a red dot in the center of the 3 leaves?

Which one?

Karna: Poison Ivy.

A red dot?

Karna: A little red dot.

Hmm...I've never heard of that. Maybe?

Sheri: Well here's the poison ivy.

Yeah, so here's the poison ivy. So it's growing on the side of a tree which it usually does. There is a lot of it on the ground too, but the Jack-in-the-Pulpit has really thick stems -- they're about 1/2 inch thick -- and the ivy is really slender stems right here. The petiole is the stalk attached to the stem. It has little rootlets that come out of the stem -- I mean you don't want to get that close enough to it to try to see all those details, but it has the two leaves that are attached very close together right here and then a long stalk and then this big leaf right here.

Paul: I'll just look for the sparring husband and wife pair that are facing away from each other and I'll know it's Jack-in-the-Pulpit.

Yes! This is Great Ragweed, this is an annual herb that is really ubiquitous, it's all over the place and there's no getting rid of it. It causes hay fever. So if y'all have fall allergies, this is the reason. There's quite a bit of it in the Park -- there are some pure stands of it actually on the west side, and the leaves look like this. They don't really look like any other leaves we have in the Park. It's not going to hurt you. You just might want to stay away from it if you have allergies in the fall. Don't go up and stick your face in it! But other than that, you know, it's native, it's supposed to be there. It's part of the ecosystem, the insects love it, the pollinators need it so we're going to leave it there.

This is Virginia Creeper, it's another vine that's a ground cover. And in some places it's a little out of control because of the invasive exotic species that have wiped out all of its competition. Once those are gone, then the native plants can pop up and compete with this, and it won't get out of control. It's kind of taken over the Park in certain areas right now but it is native, and it's a vine so it climbs up trees like this but it doesn't hurt the trees, and it's labeled.

Oh, I didn't mention that. The Fringed Loosestrife is just a flower that grows right by the stream right where the stream crossing is -- you can't miss it. It's in the Primrose family and they're just really pretty. It was used in early medicine as a tranquilizer, although I'm not sure there's any scientific evidence that it really was so.

And then ferns -- we have lots of ferns in the Park and then two other ferns that aren't on this screen -- New York Fern and Southern Lady Fern. And 7 species is a really good number of species to have in the Park. That is a very healthy fern population and fern diversity in the Park. Everyone in the Native Plant Society is like "Wow! That's a lot for 3.2 acres, to have seven species and maybe even more that will come up after all the Ivy's gone.

And labeled plants -- this is the Basswood I was talking about. Most stakes are pretty self-explanatory and they're easy to find but a few are a little tricky like -- can you see that stake right here in the middle of all that Muscadine? That's a native grape species that can become invasive if it's not kept in check. These are the Little Brown Jugs right here, and these are the leaves and this is the stake. And this is a shrub, so if you find the leaves and then follow the leaves to the base you'll find the stake so it might be a little bit hidden in all the Liriope and monkey grass there, but it's there.

And to help you find all these plants, I made this map. This is a satellite image of our Park. This is north. This is Ponce right here. This is the south end, so this is the cut through. So the blue line is -- I mapped the creek with GPS by walking the creek, being careful not to disturb the creek bed too much. And the red lines are the trails that Joe made, and they're very approximate because the GPS is not that accurate at this small scale it's not that accurate all the time, and it jumped around a lot, and the trees were in the way also.

So like here's one trail. Here's a loop trail right here. Here's another trail here in this corner. And all these yellow dots are the plants I labeled. So this is on the website. And you can click on this map and enlarge it on the website so you can actually read all of these names, and then you can print it out and take it with you next time you want to go walking on the trails, and you can see where every single plant is that I marked, and what it looks like. So, that's it!

Oh! And I just wanted to tell you all about this book. If you want to learn more about native plants and why they're important to conserve, I highly recommend this book -- it's called Bringing Nature Home. If you want to know more about native species, this book has 54 five star reviews on Amazon.com. It's awesome. It's for laypeople, for people who aren't scientists or botanists, and it just explains why native gardening is the way of the future!