

## Azaleas

Greetings everyone, I hope you are all doing well. I really wanted to give this talk in person since now that we are not meeting I have to type the darn thing out and I well, it's a lot to go over.

Azaleas are a sub-genus of *Rhododendron*. Yes the same *Rhododendron* that anyone that's driven the northern parts of the east coast has seen blanketing the sides of the Appalachian Mountains. There are two sub-genus here for Azaleas, the evergreen *Tsutsuji* and the deciduous *Pentanthera*. *Rhododendron indicum* is a cultivar group of evergreen azaleas that is more commonly known as the Satsuki pronounced "sat-ski" azalea. For just about all varieties you're going to find in the nurseries be it Bonsai or Home Depot the evergreen variety is what you will turn up for our growing zone. Being that Azaleas have been in cultivation for the better part of 300 years this leaves you the grower to choose from over 10,000 cultivars and new ones are being found every year.

Ok so you got your azalea from the nursery, now what? Right now is the perfect time to work, collect from the wild, trim, hard cut, wire or re-pot your tree. It's also a good time to view them, my local varieties commonly referred to as "landscape" azaleas have just finished up with their flowers and are moving into the vegetative growth phase. This should make sense, just think pollinators can't get to the flowers if they are covered up with tons of new leaves. This brings me to my first point of interest which revolves around growing azaleas and their flowers. Spicy topic warning- I'm sure at some point in a conversation you have heard someone say the following "if you want a healthier azalea remove the flower buds before they set so the tree can put its energy into growing and not flowers" or "in Japan the pros don't let the azaleas flower for the first 10 years during cultivation". Well, they are not wrong...the first law of thermodynamics kinda reinforces that for a plant to produce a flower that energy had to come from somewhere. My argument with this statement is just how much energy are we talking here? I've completely removed every bud from a large azalea of mine for a few years back to back to see what the results were. This tree by the way is over 4ft tall, it took several 3-4 hour sessions to de-bud everything and in the end I saw no increase in growth or over all vigor of the tree. What I did find is when I removed the flower buds prior to the flowers opening (late fall or winter) that tree started vegetative growth phase months earlier than air layers I had taken from this tree that had not had their flower buds removed. What removing the flower buds do for us is tell the tree "now it's time to grow branches and stretch out its limbs". So by removing the flower buds you're not exactly getting a health boost in the tree but a head start in the growing season.



Here is our subject for today's topic

Aint it cute? It's the smallest leaf azalea I have in my collection. I don't know what the cultivar is but the flower looks like coral bells but smaller. While it's stable in the pot before I re-pot this now is a good time to clean up, trim and wire. Well I'm going to trim and clean out its "cluster like" growth from inside to open up light throughout the tree.



Here's a sign that the flower has done what it needs to do and is now time to remove from the tree. Any flower that is damaged or wilted will be removed; this is an ongoing process throughout the flowering stage. It not only helps the tree look its best but it also helps keep any fungal growth from setting up shop in your tree.



With the spent flowers removed you want to go in and clip out the remaining flower "parts". Rose growers will know this practice is called "dead heading" and what we are doing is removing what would be a seed if left on its own. With azaleas your unlikely to develop a seed it would just dry up anyway but we want to remove the end as its still suppressing vegetative growth until it dries up.



These scissors are specifically made for working with azaleas, they are very narrow with a very fine point and are razor blade sharp. The way the handle is designed it makes sure your hand isn't any further into the tree than it needs to be to make the cut. For a tree like this that I'm working on having the right tool for the job certainly makes it much easier and reduces "accidents" like cutting the wrong branch. While I'm talking about cutting branches, when you make your cuts on hard wood with azaleas always make a flat cut. Never ever use a concave cutter as your final cut on azaleas, the bark on azaleas is so thin when they heal over there is no need to have the scooped out cut in the first place. After you make your cuts, seal them. Don't matter what you use, you can use the Japanese goop in the tubes either the grey or the orange goop (the orange is sold often as azalea cut paste as it has anti-fungal properties in it. This is fungicide, don't get it on your skin.) Plain old Elmers glue works very well too! The point here is to just make sure you are sealing any cuts on woody material. If the tree you are working on is worth taking care of for 10+ years what is an extra 3 or 4 minutes sealing cuts? I hear people argue about the values of

sealing or not sealing cuts but I've never heard anyone say "I killed my tree because of cut paste".



What I want to do here is remove this inner growth as its taking energy from the branches I'm trying to grow. It's also so tightly packed in there that it makes a great hiding place for critters like scale and mites and provides the perfect atmosphere for fungal issues like powdery mildew and black spot fungus. So as part of the cleaning and trimming we want to go over the whole canopy and decide what we don't want to keep and thin out cluster growth like this to one or two main branches.



Here is a larger azalea of mine I will demonstrate what I'm talking about a bit clearer. What we see is the vegetative growth AFTER the flower has bloomed and cast off. With azaleas this is a very typical 5 shoot star pattern, you want to choose 2 of these shoots and remove the rest. Sometimes you will get 4 or 3 shoots too, treat these the same and remove the ones you don't want and leave 2.



So here's what's left, a long shoot with two new shoots on the end. We have successfully thinned out the upper canopy and allowed light to get to the younger shorter branches below it. If the branch is really long, you can just go back to hard wood from years prior and chop there and a couple weeks later if you did everything right that shoot will be covered in little fuzzy new buds pushing out in 360\*. The harder chop back is useful for new material that has been left unattended for many grow seasons and allowed to grow long spindly branches that are not ideal for bonsai use.



Same tree, different branch here we can see only 4 shoots formed after the flowers were done. This is an easy way to develop branching in your tree, since the branch is growing more or less horizontal all we need to do is remove all shoots growing strait up and any growing down. Josh I hope you didn't want your recycling bin back, still works it just holds less.



1...2...3...Bam! Easy way to get your branches to fork on your azalea. If your design incorporates a lot of movement in your tree now is when you would apply wire and place the bends and curves into these very flexible branches. Don't wait too long to put wire on an azalea, 2 or 3 year old branches are about as old as you're going to be able to bend with any large degree of change without snapping the branch right in half. Old azalea wood is very very rigid, and will not bend or move. Your only options if you don't like the trunk line you have is to make a hard chop back to create some taper or interest. A healthy azalea bush will pop back all over if chopped back, emphasize on "healthy". If you're unsure if your tree is healthy feed it well, wait a year and check again then. Remove your wire by June, the branches will start to really fatten up and we don't want wire scars. A quick note about azalea styles, the main focus is generally put toward the flowers which can lead to some "rule breaking" when it comes to overall shape and proportions.



Notice the trunk width to height ratio is thrown out the window in favor of more surface area to display flowers, so for those of you who have young tall and skinny material, don't trunk chop it. Put some bends in that trunk and your well on your way to a fabulous show tree.



I'm unsure how accurate this is but it's been fairly consistent for me, Satsuki's will generally only have one flower at the end of each shoot. Whereas others will have multiple flower buds per shoot. See below.



Typical azalea root ball will look like this, very fine roots that resemble steel wool. Mine is potted in a Japanese volcanic soil called "Kanuma", it's the yellow stuff you're seeing in the

picture...no it's not planted in Cheetos. You don't have to use this kind of soil for your azaleas, our clubs mix works just fine too. Spicy topic warning- Yes, I'm going to touch on bonsai soil. Everyone get your pitchforks! I've heard both sides of this argument, "the pros in Japan use it so, so do I" and the "it breaks down too fast and turns to mud" side. Again...both are right! Kanuma and Akadama are used widely in Japan because it is cheap there, they are literally digging it up in their back yards so its plentiful and abundant almost kind of sounds like somethings we use here, "turface". How about that it breaks down too fast, well...that is part of how this stuff is intended to work. As it breaks down it holds more and more water which is supposed to be on a similar time frame as the tress demand for water from re-pot to established root ball filled with fine feeder roots. This is actual what sparked my interest in trying the soils is for their reported high water holding abilities since anyone that's lived in Florida for one summer has learned it gets hot here. I thought to myself that maybe I could use these soils for some of my trees that just can't take the heat like azaleas, maples and a few other soft leaf plants. Well the verdict is still out on that as I'm only 3 years in on this test and some summers are "milder" than others. I can tell you I've noticed that roots grow right into this stuff because its soft, which tells me I can fit more root in my pot since the available space in the pot is finite every inch is valuable real estate.



Azalea roots are generally very shallow, if your digging into a nursery can azalea for the first time a big saw is going to help a lot with getting that block of roots cut down to a more manageable size. If you're unsure of what is under the soil of your tree, as in if it has major tap roots use a long chop stick or something you can poke around to see if there are any large obstructions 4 or 5 inches below the trunk. If it seems clear of large roots a good first cut parallel to the soil surface 1/3 to 1/2 way up the root ball will get you started. Also doesn't hurt to have a hose handy with a jet spray to help wash out any chunks of dirt or pine bark. This step is more important than you may think, even if you don't get ALL the old soil out on the first try its vital to the success of your re-pot (even more so when changing the type of soil medium from nursery mud/pine bark to bonsai soil) is to get an even disruption of old roots and old soil moved out so your new soil can be worked in its place. Failure to thoroughly incorporate your new soil into the older root ball will cause major watering problems down the road, and your tree will dry out even though you water every day. What happened is water will always take the path of least



resistance, and since the old root ball with its finely packed roots was not loosened up enough water hits it and runs off and down the sides into the new loose soil that also doesn't have any roots in it yet. This is THE number one killer for azaleas, poor initial re-potting. As a good rule to go by, when night temps are stable in the 60\*'s (F) is your green light to start re-potting azaleas, either before or after flowering. I like to wait, because why not, the flowers are nice.



After working the bottom and sides of your root ball, you want to clean out the soil surface. Be gentle where you dig, for open areas a chop stick or some bent tweezers will work just fine in teasing out the surface roots. Working from the center and pulling strait out to the end of the root ball, don't go side to side. The goal here is to get the roots growing in a radial shape evenly fanning out from the trunk. In the years between re-pots you will perform this step yearly, in Japanese it's called "soji" which translates in English to "foundation" which makes sense because we are ensuring the surface roots are growing the way we like them and thus building a good foundation. The "soji" is roughly a spring cleaning as well you can see how dark the surface is from all the fertilizer and moss that has built up over the past year.



For areas that have larger surface roots it's wise to tread lightly as azalea bark is very thin and hard metal tools are going to damage the roots. I find a nylon brush or cheap toothbrush work perfect for cleaning up the debris between the surface roots. Don't forget to floss.

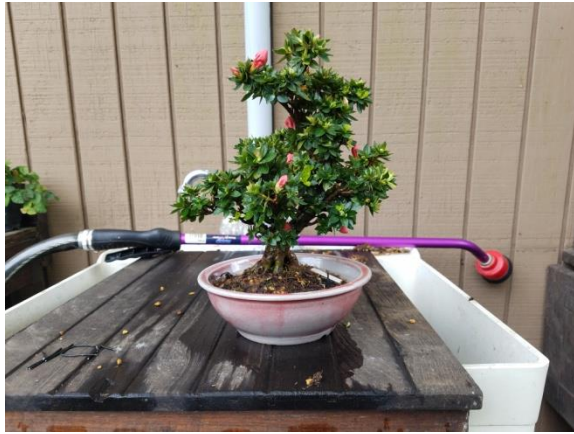


Here we have a cleaned up root surface. Though I didn't get a picture of them you can see them out of focus in the background of this picture, you'll notice a heavy pair of scissors. Yeah, I don't stick my good and expensive tools in the dirt. I keep an extra set of cheaper tools to do dirt work, no point in dulling a sharp blade in the soil. Get it? No point...because it's dull... just like this joke.



Ok so I've picked out this Rob Addonizio white clay body pot with a subtle red glaze as this trees new home, for now. Being we are working with evergreens, the standard would be an unglazed pot. However this evergreen flowers, so we can also use glazed pots to accent or compliment the flowers shape and color. As you can see from the photo the tree is firmly wired into place. Keeping your tree firmly planted in its pot is key to allow the fine little root hairs to make their way into the new soil. There should be virtually no wiggle at all when the tree is moved. Again in keeping the tree wired down I've had to add a small piece of bamboo wood over a large surface root to keep from scraping away the thin bark when the wire is tightened up.

Plastic fish tank tubing, tape, foam, just about anything that is somewhat soft can be used here to protect the tree bark from the wire.



And finally after all that work the new soil is filled into all the new voids we created. When working with Kanuma you chop stick it in just like you would any other bonsai soil. However after you have finished filling all the air pockets in the pot you want to go over the entire surface with either your thumb or three fingers held together and pat down the Kanuma with a firm push strait down into the pot. Not so hard you crush the pot! Seriously though Kanuma is very light and just poking it around with a chopstick will not lock it into place, by giving it a firm press you'll hear and feel it give just a bit and this will help ensure you don't wash all your new soil out on the first watering. Regular bonsai soils (not Japanese dirt) the firm press doesn't need to be as firm at all, just go over the surface and make sure you didn't miss any pockets. After a thorough watering a white bag, synthetic tea bag (plastic fabric) filled with Holy-tone an organic acidic fertilizer is added. Organics take some time to break down before they are turned into nutrients available to the tree so it's ok to put them down right after re-pot. If you plan to use chemical fertilizers like miracle grow or slow release please wait a week or two before applying these as the salts can hurt the fresh roots (fertilizer burn). You will know it's time to add your fertilizer when you can see new bright green growth coming out, this is also the signal to take your freshly re-potted azalea back to its resting place out on your benches. Don't stick your azalea out in full sun right after a re-pot, unless you hate it. But my guess is if you made it this far through this write up you probably don't and want your tree to have the best fighting chance it can get.

I hope in all of this that there's something you can learn from here. As always I welcome anyone that has questions or clarification on anything to email me. This is a weird time to be alive right now, keep your head up and your tools sharp. I miss you all and look forward to our next meeting.