Transplanting Native Azaleas

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It has been said that transplanting native azaleas successfully is difficult. The fact is it is probably no more difficult than transplanting most native plants.

I love our native deciduous azaleas which locals sometimes call wild honeysuckle or bush honeysuckle. In 1680 clergyman John Banister sent seed of *Rhododendron viscosum*, the swamp azalea, back from Virginia to Bishop Henry Compton in England. Banister's drawing called the plant "Cistus virginiana flore et odore Periclymeni." In other words (English instead of Latin), "Virginia rock rose with flowers and odor of honeysuckle."[1]

Deciduous azaleas belong to the wonderful family *Ericaceae* (Heath family) and genus *Rhododendron*. The Heath family includes heaths and heathers, magnolias, camellias, blueberries, cranberries, leucothoe, pieris, mountain laurel, and rhododendrons. Botanists will continue to make adjustments in what they think are azalea species. Currently North America is fortunate to have 17 deciduous azaleas species. In fact, all North American native azaleas are deciduous. Eastern Europe has one species and Asia 11. Of the 17 American species, 16 are native to the eastern United States. *R. occidentale*, the western azalea, is only found west of the Rocky Mountains. The southeastern U. S. is *the* place as far as the lovely wild honeysuckles go. Fourteen species grow and hybridize naturally there. Table I lists deciduous azalea species and their native origins. You can find more about them in Galle's book listed in Reference 1.

Native azaleas bloom from late March into September if you choose your species and hybrids carefully. The blooms range from white, pink, lavender, yellow, orange, red and in between. Some have fragrance. Some do not. You will find the American species in all heights, from 2′ to more than 20′. Many have a good fall color. Most are hardy and do well far outside their native range. They combine well with other members of the Heath family, especially the evergreen azaleas. They are relatively free of disease and insect pests. It is a bit of irony that deciduous azaleas are more popular in Europe where they only have one native species than in the United States where all our indigenous species are mostly ignored. Europe and New Zealand are noted for their spectacular deciduous azalea hybrids (e.g., Ghent, Exbury, Knap Hill, and Ilam).

Our native treasures are becoming less and less common in the wild because the wild is being destroyed at a rapid rate. The most efficient way to build a subdivision or shopping center is to destroy everything alive with bulldozers and begin construction on a cleared wasteland. That includes destroying trees hundreds of years old and native azaleas.

If you get an opportunity with the owner's permission to save native plants from destruction, you certainly should do so. The following suggestions may increase your success. If you just want native azaleas for your landscape, nursery-grown plants with well-developed root balls would be the recommended approach. Never dig plants without permission. The best time to move native azaleas is when they are dormant, without leaves. Of course, when you are saving some from destruction, you may not be able to pick your time. These suggestions are for the typical soil conditions of the southeastern United States where most American species are found. Adjust your technique to your personal conditions.

Duplicating Native Azalea Habitat

Acid Soil: Azaleas are acid-loving plants like most members of the Heath family. They like rich, organic soil with a pH of 4.5 - 6.0. In the clay soils of the Southeast, the pH is usually acidic but not very organic. Use fine pine bark mulch (coin size) in quantity. Some North Georgia specialists believe our soils can be too acidic and actually use some lime occasionally.

Moisture: These natives like moisture, but most native azalea species (and all evergreens) perform poorly in soggy soil.[2] This is because they get both oxygen and water from their roots. The feeder roots are normally within the top 4″ of the ground, traveling sometimes a dozen feet or more from the base of the plant. They need not too dry, not too wet. Obviously older, well-established plants can take more drought stress than new arrivals. Another reason native azaleas do not like hard clay soil: it is hard to breathe in dry or wet clay. Water your new azaleas regularly during the first two to three years and during periods of drought although the emphasis should be on watering thoroughly and not frequently.

Sun: The common advice is to place native azaleas in the shade. In reality, even in the heat of the Mid-South, you will have more flowers with more sun. Except for the late-blooming species (see Table I)[3], they can take full sun. Very light shade is perhaps best.

Planting Hole: A mistake we all have made is to dig a hole too small. Dig a wide hole, 3′ *or more* in diameter, no more than 8″ deep. Make sure the edges of the hole are vertical and roughed up to allow roots to easily grow into the surrounding soil. If it is mostly clay, it would not hurt to blend in a dozen shovelfuls of sand. Also blend in 16 to 24 shovelfuls of fine pine bark mulch depending on how clayey it is. This is not a typo. Use 16 to 24 shovelfuls of fine pine bark! Dump on about eight at a time and use your mattock to turn it in. Your well-dug hole will be about 6″ to 9″ above the surrounding level with plenty of organic material in the soil. In clay soils, you want to plant native azaleas (in fact all *Rhododendron*) above ground level. Put the plant underground no lower than it grew previously. You now have a hole that will absorb water easily but drain well. Don't skimp on the hole. A small hole is a death sentence for your plant.

Fertilizer: Fertilizer is not very important but a little will enhance growth. You can fertilize annually in the early spring with a slow release (nine months') fertilizer like Osmocote® or apply an acid-based fertilizer like Super Rainbow® 16-4-8 with micro nutrients twice a year in spring and late summer or very early fall (to help bud growth). We use the latter approach, which is much less expensive than slow release fertilizers.

Mulch: Mulch your plants with 3″ or 4″ of a mulch like pine straw, keeping the mulch away from the base of the plants. Mulching is important. It will help retain moisture and keep the soil friable. Add extra mulch yearly. We replenish the mulch layer after we fertilize in the spring.

Transplanting Secrets

When transplanting native azaleas from other locations, we suggest you dig your holes before you dig up the established plants. Azalea roots are fragile and can dry out quickly. As an alternative, you can heel in the dug plants in well-moistened, pure pine bark until time to replant.[3] Here is our proven successful transplanting method, along with techniques for successfully moving a large number of natives.

My mother told me that to get a wild honeysuckle to live when transplanting it you had to keep it in the same north-south orientation as it was originally. I did not believe her then, and I do not believe her now. The secret is pruning, protecting the roots, and pine bark. These three things are all related to the fact that deciduous azaleas grown in the wild do not have good root structure in the best of times, and after we dig them they have almost no roots left.

If you are moving the plants with a truck, you cannot get many plants with 3′ pancake-shaped root balls in the truck. We had to transplant or lose forever hundreds of beautiful natives that we had observed and photographed for more than 15 years. Most were *R. flammeum* (Oconee azalea), *R. canescens* (Piedmont azalea), and natural hybrids. Many of these azaleas were large, more than 8′ tall and many with 2″ diameter stems. We had previously tagged, numbered, and logged the plants in my journal. We filled the bed of the pickup truck two thirds full of fine pine bark and moistened it thoroughly. We also placed a 30-gallon trash can full of water in the back corner of the truck bed and secured the lid.

At the digging site, we moved the wet pine bark toward the tail end of the truck, planning to load the plants first against the cab and then work our way to the rear as we stacked more plants and moved the pine bark forward on top of the root balls.

Each plant before it was dug was severely pruned, to 6″ or less from the ground. Do not be afraid to prune them like this. After all, you are about to remove 95% of their feeder roots. Most will die if you do not cut them back to the ground. This is the main secret to success. It also makes it easier to dig if they have been pruned. My neighbor could not bring herself to cut that beautiful orange flame azalea and transplanted it without any pruning. Even with regular watering, the plant

Table I: Deciduous Azalea Species
In Approximate Order of Bloom Time

North American Deciduous Azaleas	Native Origin	European & Asian Deciduous Azaleas	Native Origin
R. austrinum Florida azalea	Northern Florida, southern Georgia, Alabama, Mississippi	*R. luteum* Pontic azalea	Eastern Europe, Asia Minor
R. canescens Piedmont azalea	North Carolina to Florida to eastern Oklahoma & Texas	*R. molle* ssp. *japonicum* Japanese azalea	Japan
R. vaseyi Pinkshell azalea	Western North Carolina (at higher altitudes)	*R. molle* ssp. *molle* Chinese azalea	China
R. flammeum (*R. speciosum*) Oconee azalea	Georgia, South Carolina	*R. nipponicum* Nippon azalea	Japan
R. periclymeniodes (*R. nudiflorum*) Pinxterbloom azalea	Massachusetts to Ohio, northern South Carolina to northern Alabama	*R. schlippenbachii* Royal azalea	Korea, China
R. alabamense Alabama azalea	Alabama, Georgia, Mississippi	*R. albrechtii* Albrecht's azalea	Japan
R. atlanticum Coastal azalea	Southern New Jersey to Georgia coastal plains	*R. pentaphyllum* Five–leaf azalea	Japan
R. prinophyllum (*R. roseum*) Roseshell azalea	Southwestern Quebec, New England to western Virginia and Tennessee (at higher altitudes); disjunct populations in Missouri, Arkansas & eastern Oklahoma	*R. quinquefolium* Cork azalea	Japan
R. calendulaceum Flame azalea	Pennsylvania to Ohio, south to northwestern South Carolina & northern Georgia (at higher altitudes)	*R. farrerae* Farrer azalea	China
R. canadense Rhodora azalea	Labrador to Quebec, northern New Jersey to northeastern Pennsylvania	*R. amagianum* (now considered a form of *R. weyrichii*) Mt. Amagi azalea	Japan
R. eastmanii May white azalea	South Carolina	*R. mariesii* Maries azalea	China
R. colemanii Red Hills azalea	Southern Alabama, southwestern Georgia	*R. reticulatum* Rose azalea	Japan
R. viscosum Swamp azalea	Maine to Ohio, south to Florida, west to eastern Texas	*R. weyrichii* Weyrich azalea	Korea, Japan
R. occidentale Western azalea	Southwestern Oregon to southern California	*R. sanctum* (now considered a form of *R. weyrichii*) Shrine azalea	Japan
R. arborescens Sweet azalea	New York & Pennsylvania to Kentucky, Tennessee, Georgia & Alabama (at higher altitudes)	*R. nupides* Nupide azalea	Japan
R. cumberlandense (*R. bakeri*) Cumberland azalea	Kentucky to western North Carolina, Tennessee to northern Alabama & Georgia (at higher altitudes)		
R. prunifolium Plumleaf azalea	Southeastern Alabama, southwestern Georgia		
R. viscosum var. *serrulatum* Hammock-sweet azalea	Southern Georgia & Florida west to southeastern Louisiana		

died in two months. It did not have enough roots to support a 7′ tall plant full of leaves. If you prune them taller, say 2′ to 3′, the resultant plant will not look as attractive.

We dug shallow root balls as stated above and immediately took them to the truck. We shook off excess dirt from the roots and swirled them in the trash can of water for 5 to 10 seconds. Then we packed them tightly in the truck with plenty of wet pine bark covering the bare roots.

Using this bare root method, we got more than 60 plants in a small short bed pickup per load. We carried them immediately to the heeling in area where we had beds of pure pine bark 12″ deep already prepared. This bark was also well moistened. The bare root plants were quickly moved from the truck to the bark beds, placing them about 3″ to 4″ deeper than they had been in the ground. We put them deeper in the bark because the top inch or so of the bark dries out. We then placed a soaker hose on top and with regular watering kept the bark moist for the rest of the year. We were interested in getting a new root system quickly developed, and pure pine bark will do the trick. Pure pine bark is an excellent medium for native azaleas. It will stay moist but readily allows oxygen to get to the roots.

During the year in the pine bark beds they, with the help of slow release fertilizer, put on 12″ to 24″ of new growth with healthy stems. Almost all developed flower buds in the first fall. Some plants had new stems with 4 or 5 flower buds on their tips. Just one year after digging them and pruning them back to the ground, we had ball-trusses of 25 to 35 flowers since each bud contains 5 to 7 flower blossoms.

While we waited a year to move the plants from the heeling in beds to permanent places in the landscape in order to regrow a good root structure, you can move them directly if you move them in late fall or early spring and if the holes are well prepared. Just make certain that throughout the transplanting process the few remaining roots are protected and stay moist. Fine feeder roots will dry out in minutes. We would definitely recommend the raised pine bark beds for the rest of the year (or longer) if you have to dig during the summer. (See "A Useful Raised Bed" on p. 66-67.)

In addition to the excellent information in Galle's book and booklet and in Bir's book, you can find valuable information on deciduous azaleas in other references.[3,4,5,6,7]

Summary

- ► Prune transplants back to within 6″ of the ground.
- ► Dig a 3′ pancake-shaped root ball.
- ► Keep roots moist and protected at all times while transplanting.
- ► Heel plants in with well-moistened pine bark if necessary.
- ► Move them to a wide, well-prepared hole.
- ► Plant slightly above ground.
- ► Water regularly for the first two years and during periods of drought.

References and Notes

1. Galle, Fred C. 1987. Azaleas. Timber Press. P. 65. This is the definitive book on azaleas, evergreen and deciduous.
2. Bir, Richard E. 1992. Growing & Propagating Showy Native Woody Plants. University of North Carolina Press. P. 134. Richard Bir identifies *R. vaseyi* (pinkshell), *R. arborescens* (sweet), *R. atlanticum* (coastal), and *R. viscosum* (swamp) azaleas as thriving in damp soils. Ron Miller reports *R. viscosum* var. *serrulatum* thrives along the Gulf Coast, often inundated with salt water for long periods of time.
3. Plant Info and subsequent pages [Internet] Azalea Chapter ARS. Available from <http://www.azaleachapter.com/index.php/plant-info>
4. Foote, Leonard E. and Jones, Samuel B. 1989. Native Shrubs and Vines of the Southeast: Landscaping Uses and Identification. Timber Press. Pp. 104-108.
5. Galle, Fred C. 1974. Southern Living Azaleas. Oxmoor House. Pp. 63-73.
6. Ottensen, Carole. 1995. The Native Plant Primer. Harmony Books. Pp. 277-286.
7. Wasowski, Sally. 1994. Gardening With Native Plants of the South. Taylor Publishing Co. Pp. 84-85.

Charles Andrews is a retired engineer, whose life-long hobby of trout fishing in the mountains of Georgia introduced him many years ago to American azaleas, a subject about which he wants to learn everything possible. Charles is currently working on two books about native azaleas: one on historic illustrations from 1690 to the present and another on the history and characteristics of our American azaleas.