

# Pot Bound! Handling Overgrown Container Plants

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Azaleas and other plants grown in containers often become “pot-bound” when they are long overdue for transplanting. Pictured is a flat of 32 rooted, deciduous azalea cuttings photographed in late spring that had reached a desperate stage. These cuttings were approaching 30 inches tall and were still in two-inch pots! They should have been repotted at least a year ago, but that didn’t happen. The root systems were too small to support plants of that size, so those cuttings needed to be watered twice a day just to keep them from wilting. A quick inspection of the roots showed a mass so dense that it looked almost like compressed coconut fiber. New roots had no place to grow and continued to wrap around inside those small pots. These azaleas were definitely pot-bound!

One of the most common problems with plants grown in containers is that people often do not know how to transplant them correctly. Many gardeners carefully take the plant out of its pot and place it directly into garden soil without disturbing the root system at all. That is actually bad for the plant in the long term. The container plant often will behave as though it is still in the pot. The roots continue to grow in the porous potting medium surrounding them and never venture into the surrounding soil. Plants can sometimes languish for years or even die if they do not become established. To encourage roots to grow into the new soil, the surface of the root ball should always be “roughed-up” with a fork or a trowel to get those roots started into the new soil. That will help the plant establish more quickly in its new location.

Plants that are pot-bound need special attention in order to grow well and become established. With very dense root systems such as those of the native azaleas illustrated in this article, the root systems may need some drastic treatment to break them apart. It may seem ruthless, but it is important for long-term success.

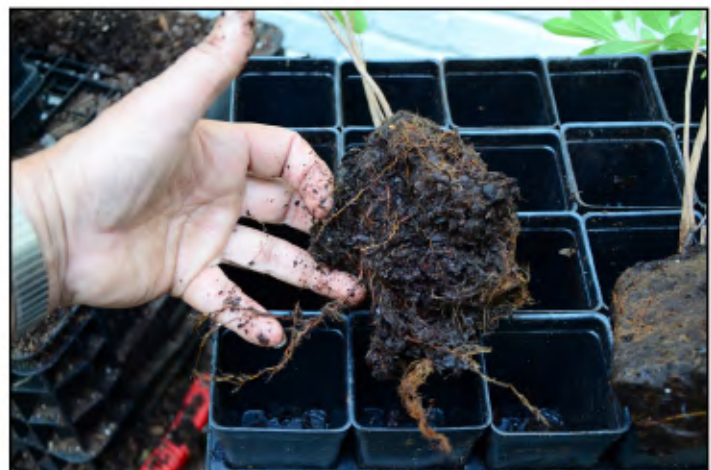
The first stage is to remove the plant from the pot and carefully inspect the root system. There will usually be some larger roots visible near the surface, so try to tease those out with a fork, or try to unwind them with your fingers in order to separate them from the root ball. This is not an easy task, and requires some careful study to decide which way the roots are growing. Undoubtedly, there will be some damage to roots. Often, it cannot be helped. By separating larger roots and spreading them as widely as possible in the fresh medium, the resulting root system will be much larger, closer to what it should be at the plant’s current stage of growth.



Flat of 32 overgrown native azalea cuttings



Pot bound azalea has dense tangle of roots



Roots are teased apart so they can establish in new soil



The smaller roots will be able to grow back quickly, even if they were damaged. Be forewarned that some root systems will be so dense that it may be necessary to use a saw or knife to try to break them apart. It may seem like it will kill the plant, but to do nothing is guaranteed disaster. The roots would stay in that tight mass and might never work their way into the surrounding soil.

Those severely pot-bound azaleas in the two-inch pots would have had a difficult time if they were planted directly into the garden. They were moved up to gallon pots filled with a porous, well-drained medium consisting of equal parts of peat moss, perlite, and pine bark fines. A little

### Cut Back the Top

Whenever there is damage to a root system, it is important to cut back some of the top branches to keep the plant in proper balance. The greater the loss of roots, the more of the top should be pruned. Most of the native azalea cuttings in this original flat needed to be cut back by almost half, and some needed even more severe pruning than that. Heavy pruning is preferable in late winter to early spring (before new growth starts), but when rejuvenating a pot-bound plant, there may be little choice. When people try to rescue large plants from a construction site, there is usually significant root loss because only a fraction of the full root system is dug up. For native azaleas, some people just try to get the crown of the plant and cut back all the main branches to stumps. The plant is "heeled in" by placing it in a bed of well drained, rich, porous soil to recover for a couple of years before planting it in a new location. Native azaleas will branch freely from old canes, especially if pruned when dormant. Be careful pruning evergreen azaleas and large leaf rhododendrons, since many of them will not regenerate well from bare trunks and will need some of their foliage in order to grow and become established.

coarse sand was added to improve soil texture. They needed time to recover from their transplanting ordeal while they were forming new roots, so I initially placed the pots in a location with high open shade but no direct sun. They no longer needed watering twice a day since they did have some roots, and those could draw moisture from the surrounding potting medium. While they were forming new roots, I did mist the foliage once or twice a day, similar to the way cuttings are treated during the rooting process. The medium was kept moist but not wet since too much water can encourage root rot.

It is wise to avoid fertilizer at first since it can burn those delicate new roots as they begin to grow. After a month or two, it is

OK to apply a dilute fertilizer solution or some slow-release fertilizer pellets to the surface of the soil to encourage growth, but be careful. Always err on the light side with fertilizer, especially while the plant recovers, and never apply fertilizer late in the season since it may initiate late-season growth that can lead to winter damage. As the plants begin to send out stronger new growth, the amount of direct sunlight can be increased. After several months, they can be treated like any other container plants.

Some of those native azaleas were ready to plant out in the garden by fall, but most were held over until spring. They are now ready to plant in the landscape, or will be moved up to larger containers as needed. They could probably stay in those gallon pots for two years if necessary, but they will eventually need to be transplanted. If not, they could become pot bound again, and it would be necessary to repeat the process once more!



Repotted azalea cutting, ready to grow

*Don Hyatt is a retired teacher who has maintained an interest in plants of all kinds since the age of 3. In recent years, he has focused his efforts on documenting and preserving our native azalea species, and enjoys sharing his passion for rhododendrons, azaleas, and wildflowers through his writings, lectures, photographs, and his website ([www.donaldhyatt.com](http://www.donaldhyatt.com)). He is co-chair of the joint convention of the ASA and ARS planned for April 20-24, 2016, in Williamsburg, VA.*