# Aerial Rigging Safety and Trees: An Arborist's Perspective

I can't not weigh in on this rigging an aerial apparatus in trees issue. I am a Certified Arborist with 12 years in the tree industry, a Qualified Tree Risk Assessor, a safety trainer in arboriculture, and a tree care business owner/operator/climber/rigger/arborist. I am also an aerialist and have learned to rig at my local studio. I am very familiar with load forces generated on trees. When we perform climbing removals, often times we rig tree parts off the trees themselves. And through the training I have attended and taught, we have used load cells to calculate how much force is being generated at different rigging components in the system. I have seen a 100 lb piece of wood generate 3,000 lbs of force (actually measured in kN, since it is force, but I'll stick to the topic) when being dropped into a system, not unlike we drop ourselves into our apparatus. Research (and experience) has shown that most tie-in-point failures occur on the ascent (the climb). So it isn't just drops here generating load forces.

So, rigging in trees: is it a good idea, yes or no? It is not that simple. Many factors play into this equation including, but not limited to: tree species, age, vigor, health, time of year, water availability, pathogens present, wood decay present, tree defects, current soil saturation, tree and site history, previous pruning, wind speed and direction, rigging system used, tie-in-point location, branch angle, branch attachment, rope angles, load forces generated by type of tie-in, the list goes on. That being said, is it safe to rig from a tree? Are you a qualified person who can effectively, and confidently evaluate all of the above factors mentioned, be able to recognize additional safety factors that may or may not be present, and be able to identify a metric for the force you're going to be exerting? If you answered no to any of those questions, then you are not qualified to rig your apparatus from a tree.

It can be done. But, not just any tree will provide the proper scenario. The property I live on has hundreds of trees that vary in height, diameter, species, structure, and health. And not one single tree on it's own have I evaluated to be safe to rig from. I can build a system that is safe from two trees, but it is complex, will take time to set up, requires a professional tree climber and experienced rigger (both of trees and aerial equipment), qualified tree risk assessor with knowledge of all the above factors, and will take a lot of expensive, properly rated equipment. I happen to be or have all this. If you do also, or want to hire said person and their equipment, then right on! I would also like to meet you because we lots to talk about. If not, consider acquiring a rig that is of good quality and has been built by a reputable manufacturer.

I am sharing this knowledge with love for the aerial community, love for trees, and a passion for safety in all of this. It is great to see that many of you have shared excellent articles and stories on this topic. I am not very active on social media, but it seems I have a bit of extra time on my hands these days and I am happy to share my experience with you all. Be well, spread love (at a socially acceptable distance), get outside, enjoy trees and aerial, just maybe not together. 🤍

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