

UNDERCUTTING - HOW YOU BENEFIT

JASON BIZON, OCTOBER 2020

As soon as the fall planting wraps up and the last of the budding tape has been removed from the trees, our diggers prepare for one of our nurseries' most mandatory tasks. If you guessed digging you would be half right. Each year in the fall, some of our bareroot diggers are fitted with a large U blade for a short three-week window of undercutting. Undercutting is the process of conditioning, cutting, and lifting, next year's trees and shrubs roots for future harvest, but it also has other beneficial attributes that enhance the quality and livability of those plants for years to come.

The trick is to balance the amount of root to cut off below the soil to achieve your goals. They say football is a game of inches, well so too is undercutting. Once that sharp blade enters the soil the operator must set the depth to first clear the metal stake and drip tape, but more importantly determine how much cutting the variety needs to be a success.



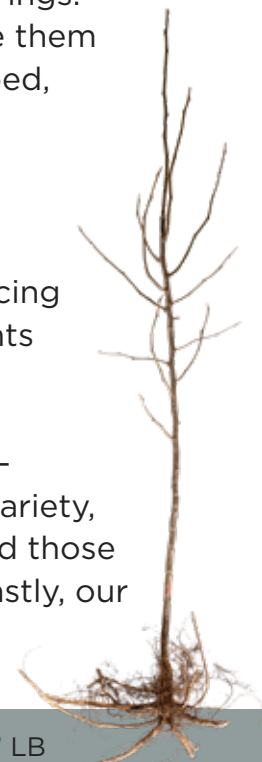
Those depth ranges can vary from 12"-20".The deeper the blade goes; the less the roots are cut. As a grower, you know every growing season is different, therefore every year may vary how much of the roots we want to remove. However, after years of trialing and testing, we have developed guidelines for our depths before the tracks hit the dirt. Each year we look for the proper moisture from our fall rains to soften the soil, review our plan, and execute.



In the early years, our goals were to reduce transplant losses on certain tree varieties that were getting too big in our production fields, and to diversify our size offerings. The heads and roots were getting so large we had to find a way to balance them out for size. What we found was an overall better root system was developed, more feeder roots and finer water roots were encouraged.

The shape, internode spacing, caliper, and size of the plants were more conducive to harvest, storage, freight, and planting. Most of these benefits directly impacted our customers, specifically freight and planting. By reducing the overall head size and increasing caliper we were able to ship more plants per truck than in the past.

The closer internode produced a more compact head, thus becoming a no-touch liner that often outperformed the non-undercut plants in the same variety, and had significant labor savings for our growers. The undercutting allowed those roots to be manageable for planting into pots and for field planters. And lastly, our claims went down. Meaning our customers had greater transplant success.



Skyline[®] Honeylocust 6' LB

Below is a list of varieties that most commonly benefit from this practice for your reference. If you have questions about our process, please feel free to reach out to your Bailey sales representative or visit our website for more information.

<i>Acer cacinatum, ginnala, ginnala</i> 'Flame', <i>griseum, truncatum</i> 'Pacific Sunset'	<i>Gled. tria.</i> 'Imperial', <i>tria in.</i> 'Skyline'	<i>Prunus</i> 'Spring Wonder'
<i>Aesculus hipp.</i> 'Baumannii', 'Ft. McNair'	<i>Juglans regia,</i> 'Carpathian'	<i>Pyrus</i> 'Autumn Blaze', 'Trinity', 'Aristocrat', 'Red Spire', 'Jack', Korean, 'Cleveland Select'
<i>Carpinus betulas, bet.</i> 'Fastigiata', 'Frans Fontaine'	<i>Koelreuteria paniculata,</i> 'Golden Candle'	<i>Quercus imbricaria, muehlenbergii, rubra,</i> 'Regal Prince', 'Kindered Spirit', 'Heritage, <i>palustris</i> 'Green Pillar', 'Pacific Brilliance', 'Admiration'
<i>Carpinus caroliniana, car.</i> 'Firespire', 'Fire King'	<i>Liquidamber</i> 'Worplesdon', 'Moraine', 'Happidaze', 'Slender Silhouette'	<i>Robinia</i> 'Purple Robe'
<i>Cercidiphyllum japonicum, jap.</i> 'Hannah's Heart', 'Pendulum'	<i>Liriodendron tulipifera,</i> 'Arnold'	<i>Styrax japonicus</i>
<i>Cladrastis kentukea</i>	<i>Malus</i> 'Firebird', 'Sargent', 'Tina'	<i>Taxodium distichum,</i> 'Debonair', 'Lyndseys Skyward', 'Shawnee Brave'
<i>Cornus kousa,</i> 'Milky Way,' <i>chinensis,</i> 'Venus'	<i>Metasequoia glyptostroboides,</i> 'Amber Glow'	<i>Tilia cordata,</i> 'Corinthian', 'Harvest Gold', 'Greenspire', 'Silver Lining', 'Sterling'
<i>Crataegus mord.</i> 'Toba', <i>inermis, ambigua, phan.</i> 'Lustre', <i>virid.</i> 'Winter King'	<i>Ostrya virginiana</i>	<i>Viburnum lentago, opulus</i>
<i>Fraxinus am.</i> Autumn Purple®	<i>Populus tremula</i> 'Erecta', 'Summer Shimmer'	<i>Zelkova ser.</i> 'Burgundy Vase', 'Mushashino', 'Green Vase', 'Village Green'