*Add rows as necessary and duplicate the feature class table if you are including multiple feature classes.*

*https://www.deeproot.com/blog/blog-entries/13-simple-steps-to-evaluate-trees*

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| --- | --- | --- | --- | --- | --- |
| **Feature Class: Trees** | | | | | |
| **Field Name** | **Alias** | **Type** | **Length** | **Domain** | **Notes** |
| Location | Location | Text | 50 | N/A | This is XY Coordinates |
| TrunkWounds | Trunk Wounds | Text | 100 | TrunkWounds | What percentage of the trunk is intact? |
| Mushrooms | Mushrooms | Text | 50 | Mushrooms | Are mushrooms visible? |
| Co-dominantBranches | Co-dominant Branches | Text | 50 | Co-dominantBranches | Are co-dominant branches present? |
| AnnualBranchExtension | Annual Branch Extension | Float | 25 | N/A | Every branch contains a small scar that indicates how much it grew the previous year. Measure between terminal bud scars in centimeters to determine annual growth. |
| AnnualTrunkDiameterGrowth | Annual Trunk Diameter Growth | Float | 25 | N/A | Using a diameter tape (or the formula diameter = circumference/pi if using a regular tape measure) calculate how much the tree grew in centimeters (\*this assumes you have made the same measurement in the previous year). |
| TrunkFlare | Trunk Flare | Text | 25 | TrunkFlare | Can you see the trunk flare? |
| SurfaceRoots | Surface Roots | Text | 50 | SurfaceRoots | How do the roots appear at the surface? |
| SoilDrainageRate | Soil Drainage Rate | Float | 25 | N/A | Using a hand spade, take a small hole about the size of a drinking glass in the soil at the base of the tree, taking care not to cut any healthy roots. Fill this hole with water and allow it to drain through. Refill the hole and time how long it takes to drain completely. Divide the number of centimeters that drained by time in hours to calculate the infiltration rate. |
| DensityOfCanopyLeaves | Density of Canopy Leaves | Text | 50 | DensityOfCanopyLeaves | Can you see through the canopy? |
| CanopyPerimeterShape | Canopy Perimeter Shape | Text | 50 | CanopyPerimeterShape | What is the shape of the canopy? |
| LeafColorAndAppearance | Leaf Color and Appearance | Text | 25 | LeafColorAndAppearance | How do the leaves appear? |
| TrunkAndTrunkBaseBranches | Trunk and Trunk Base Branches | Text | 100 | TrunkAndTrunkBaseBranches | Are there branches sprouting from the base or lower trunk? |
| Mulch | Mulch | Text | 100 | Mulch | If mulch is present, how does it appear? |

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| **Domain Name** | **Domain List** |
| TrunkWounds | 100% of the trunk bark is present and firm = Healthy tree, ~80-90% of the trunk diameter is missing = Unhealthy tree, ~40%-80% of the trunk diameter is missing = Unsafe tree, Spiral of bark missing from the trunk from high up in the tree = Unhealthy tree, Numerous woodpecker holes on trunk = Unhealthy tree |
| Mushrooms | None visible = Healthy tree, Visible on large branches = Unhealthy tree, Visible on main trunk = Unsafe tree |
| Co-dominantBranches | Strong central leader (no co-dominants) = Healthy tree, 1-2 co-dominant branches = Unhealthy tree, >3 co-dominant branches = Unsafe tree |
| TrunkFlare | Visible = Healthy tree, Buried = Unhealthy tree |
| SurfaceRoots | Radiate from trunk like spokes on a wheel = Healthy tree, Wrap around trunk and each other = Unhealthy tree |
| DensityOfCanopyLeaves | Cannot see through = Healthy tree, Can see through = Unhealthy tree |
| CanopyPerimeterShape | Continuous round or oval = Healthy tree, Large holes (almost like bites) = Unhealthy tree |
| LeafColorAndAppearance | Dark green (large) = Healthy tree, Yellow and small = Unhealthy tree, >50% leaf scorch = Unhealthy tree |
| TrunkAndTrunkBaseBranches | No small branches visible on main trunk or base of tree = Healthy tree, Small branches sprouting from the trunk that are relatively new = Unhealthy tree, Small branches sprouting from the base of the trunk (looks almost like a shrub) = Very unhealthy tree |
| Mulch | Mulch forms a dish with thin layer (<2”/5cm) over main roots = Healthy application, Mulch forms a thick mound and touches trunk = Unhealthy application |