TENTSILE

Visual Tree Assessment & Anchor Selection Guide

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Visual Tree Assessment

We're often asked whether you need 'three perfect trees' to pitch a Tentsile, meaning 'do they have to be in a perfect triangle?'

The answer is they don't, but you do need good, healthy trees to anchor your tent. Here are some things to look out for when choosing your anchors, using Visual Tree Assessment (VTA) to rule out defective trees and choose good ones.

Knowing a little tree anatomy is essential for safe Tentsile camping. When assessing trees before pitching a Tentsile, start from the base of the tree and work upwards. Trees respond to environmental pressures with patterns of growth.

We can use these patterns to diagnose tree strength and health.

Common signs of defects in trees

- **Damaged & exposed roots:** These may make the tree unstable.
- **Soil cracks:** When a tree with an unstable root system moves in the wind, ground heaves and cracks.
- **Cavities/hollows at base:** Could undermine the trunk foundation.
- **Deep, v-shaped stem or branch forks:** These are structurally weak and associated with internal decay.
- **Unnatural-looking bends in branches:** Could be regrowth on previously damaged limbs. A regrown limb never has the strength of the original.
- **Fungus:** Strong indications of decay.
- **Insect nests:** May indicate internal cavities and weakness and unstable.
- **Break out cavity:** Indicating decay in wound by snapped branch.
- **Die back from canopy tips:** Could mean stress in other parts of the tree, so it may be dying. Also, look out for an unusually thin canopy, unusually small leaves for species, or large sections of dead wood.
- **Loose, flaky bark or wounds:** May indicate dead wood underneath the bark.
- **Yellowing leaves:** Not to be confused with the Autumn colours.

Anchor Selection

Anchors are used to suspend your Tentsile Tree Tent and sometimes redirect the straps to improve the angles for the pitch. It is crucial that you select anchors that are strong enough to take the forces placed on them and allow appropriate positioning of the tent.

A checklist for anchor trees

- Are there any signs of decay or ill health?
- Is the anchor tree deep rooted and stable?
- Is the anchor greater than 15 in/38 cm (DBH) Diameter at Breast Height
- Is the anchor unquestionably sound and strong?
- Does the anchor use the tensile strength of the trunk and not put large leverage loads on branches away from the main stem?

Linked Ring Photography

The Lever Effect

This is very important for safe anchor selection. For example, a branch connected to the stem at one end and supporting foliage at the other is a lever which multiplies mechanical force. A Tentsile full of people attached to this branch is a *'mechanical force'*.

The force applied where the branch connects to the tree is directly related to the mechanical force of the Tentsile, which is multiplied by its distance from the stem. The further out along a branch we anchor our straps, the more force is acting where the branch meets the stem.

Any force acting on the base of the branch when a Tentsile is anchored immediately next to the stem is much smaller than the force if the same Tentsile is anchored six feet out along the branch. Bear in mind that a Tentsile full of moving people represents a dynamic load, not a static one. If the branch is too small or weak in the first place, such force may result in failure.

We do not recommend anchoring your Tentsile on branches, and to only use the main stem of trees with a diameter greater than 15 inches/40 centimetres at breast height.

Some Basic Tree Anatomy

We could spend a lifetime learning about trees and never know enough. If you want to know more, we will gladly recommend some further reading for your inner tree hugger. Why is tree anatomy relevant? Looking at the body language of how a tree grows allows us to identify structural weaknesses, and to avoid either harming the tree or establishing an unsafe pitch. These are some of the less common terms used:

Branch collars

The branch collar is the swollen ring formed around the base of a branch by successive layers of growth. It is similar to a laminated joint and is stronger than any other part of the branch.

Compression forks

Compression forks are formed where two stems grow at an acute angle (less than 90°), pressing against each other with included bark. The bark becomes enclosed where the stems grow and flatten against each other. This forms a weak union which remains susceptible to tensile, and Tentsile, stress. Acute and v-shaped branch forks are significantly weaker than wide-angled crotches and trunks with u-shaped forks.

Decay

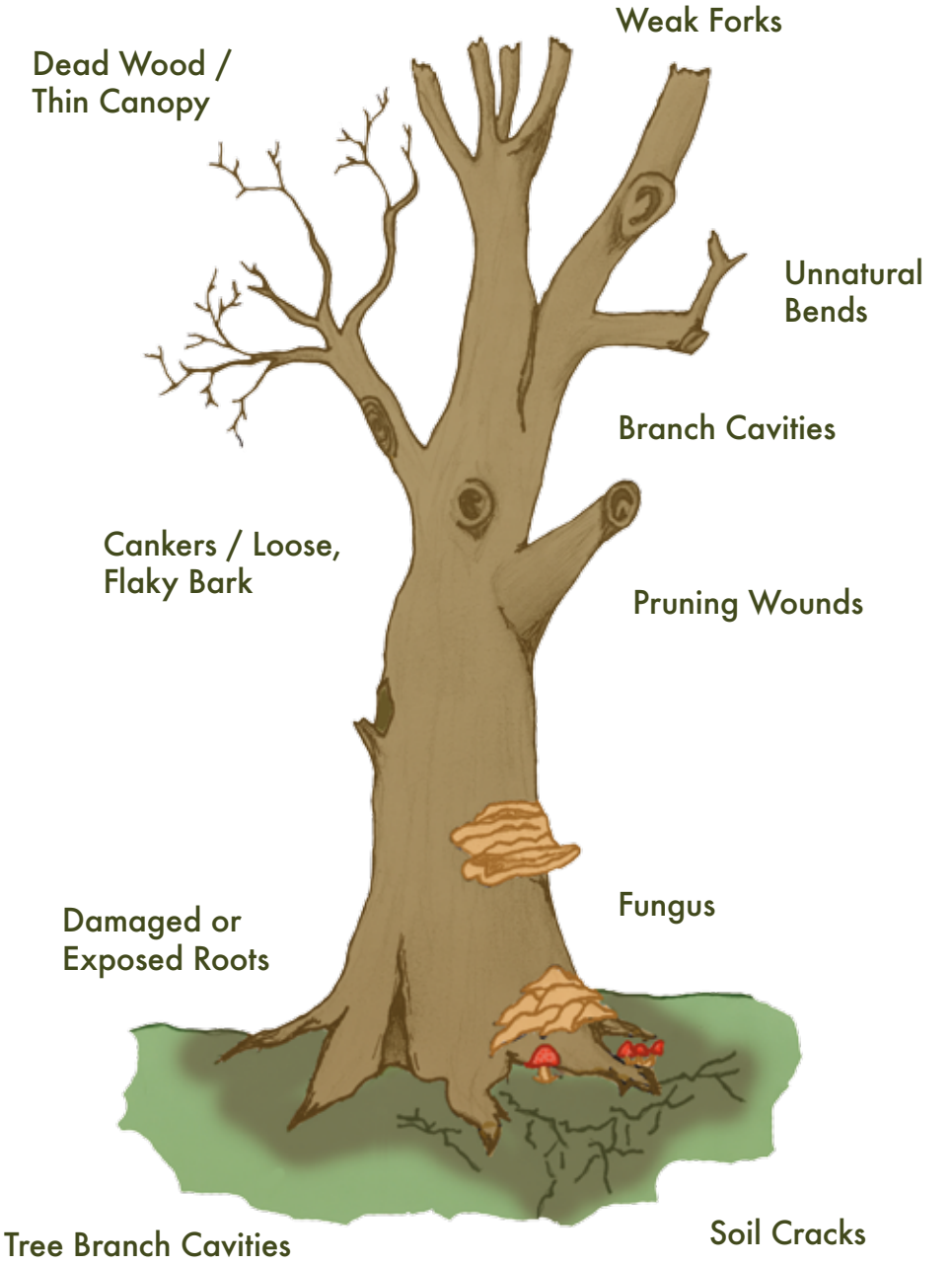
Decay can occur in roots, stems and branches. Signs of decay should be considered in the overall assessment of the tree's health and suitability for anchoring your tent. Some indicators of advanced decay are:

- Oozing, staining or loose bark: This may have rotten wood underneath.
- Cavities: Trees don't heal like we do. They compartmentalise wounds, growing around the damage. These compartments can rot into cavities and reduce the strength of the tree. If they are over a third of the diameter of the trunk, taking it below 15in/ 38cm of healthy wood, the tree should not be used for anchoring.
- Cankers: Wounds created by fungi. They are a sign of weakness.
- Fungal fruiting bodies: Obtaining a field guide to fungi for the area you are camping in and advice from a competent person is strongly recommended.
- Bulges and swellings: If these extend beyond the smooth line of the trunk taper, there may be internal decay. They are produced by uneven stress from the loss of strength in rotten wood. Bulges may be due to one-sided decay. Swellings may be due to symmetrical decay.

Epicormic growth

These shoots arise from latent or dormant buds, often in response to injury or stress. They are weak, lacking the 'laminated joint' of a branch collar.

Avoid these signs when selecting the anchor points for your Tentsile Tree Tent



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