

Problem	Description	Solutions
<p>Needle Loss</p> 	<p>Conifers will naturally shed needles every year on the interior of the tree. It is important to identify needle loss due to the exposure to sun and wind on the exterior of the tree. When trees become excessively dry, they lose their rich green color. Branches and bark shrivel. Needles become brittle and break off easily. Very dry trees may not take up water.</p>	<ul style="list-style-type: none"> ▪ <u>Reduce or eliminate exposure to sun and wind.</u> ▪ Water soil or mulch under stored/displayed trees. ▪ <u>Use a mechanical shaker</u> to remove any needles that shed naturally. ▪ Cull problem trees.
<p>String Burn & Sunscald</p> 	<p>String burn occurs when string-baled trees are exposed to direct sunlight. Needles adjacent to the string will become red or brown. It can occur in as little as an hour of severe exposure. Sunscald is very similar to string burn, but the whole side or top of a tree can turn red or brown.</p>	<ul style="list-style-type: none"> ▪ Reduce or eliminate exposure to sun. Partial exposure may still result in areas of string burn or sunscald. ▪ <u>Store trees under full shade in a cool place.</u>
<p>Trunk Split</p> 	<p>A tree trunk may split any time rapid moisture loss occurs. A crack will not affect water uptake.</p>	<ul style="list-style-type: none"> ▪ Minimize factors that contribute to moisture loss. ▪ <u>Display trees in water if possible.</u> ▪ Use hose clamps or lag screws if desired. ▪ <u>Use tree stands that screw into the outside of the trunk.</u> ▪ Avoid tree stands that use a spike.
<p>Failure to Take Up Water</p> 	<p>Only very dry trees fail to take up water. Resin can also seal the trunk and limit water uptake.</p>	<ul style="list-style-type: none"> ▪ <u>Make a fresh cut</u> off the base of the trunk (1/2 inch or more). ▪ Maintain water availability to the tree. ▪ <u>Fresh water is the best.</u> Do not use any additives. ▪ Do not allow water to drop below trunk inside tree stand. If this occurs, add hot water. This enhances water uptake by softening the resin that may have sealed the trunk again. Boiling water is not necessary.