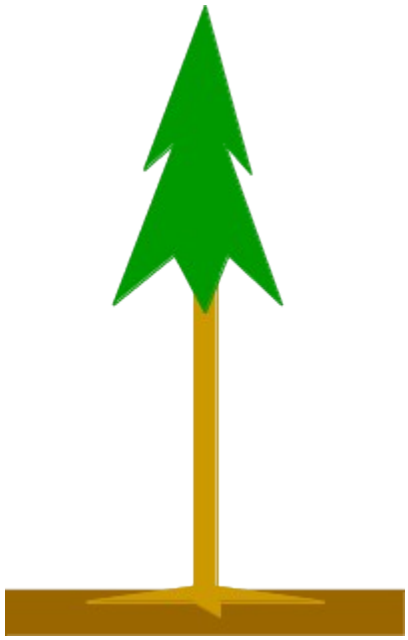
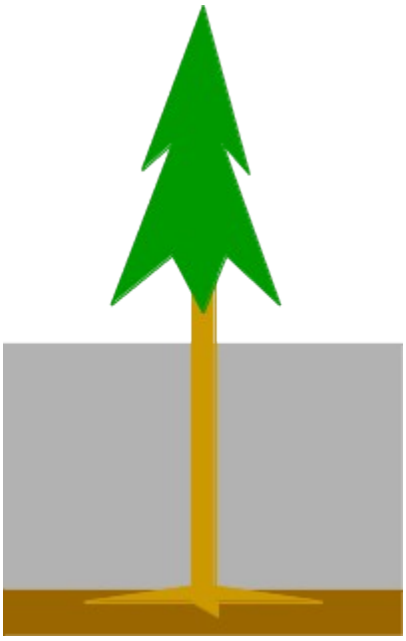
Mount Saint Helens Tree Wells

In 1971 I attended a summer camp on the shores of Spirit Lake near Mount Saint Helens. Prior to doing any hiking in the area, we were warned by our counselors about “tree wells”, cylindrical holes in the ground that could be as much as 100 feet deep, usually situated under overturned trees. Presumably, these counselors were working off materials provided by the U.S. Forest or National Parks services. Original materials have not been located. These tree wells were formed by the following process:

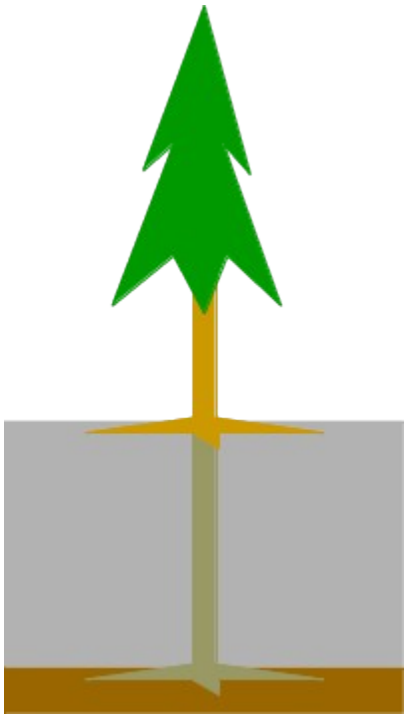


Prior to the 1800s eruptions of Mount Saint Helens, tall trees stood in the area.

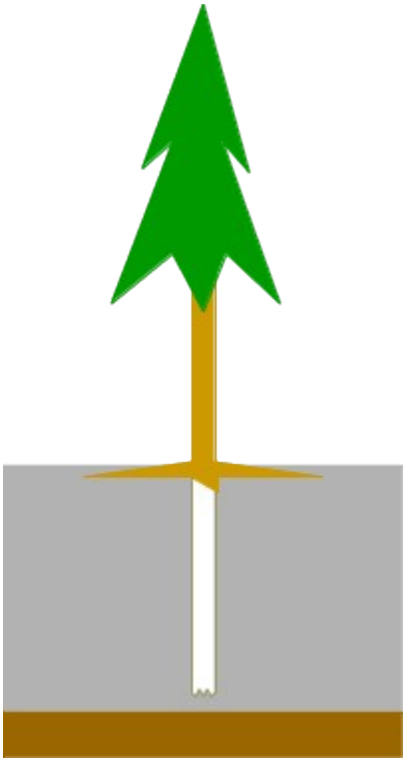
Note that fir tress do not have a tap root, instead their roots spread out near the surface. When a fir tree is blown down, it does not disturb the ground beneath it as much as a deciduous tree would.



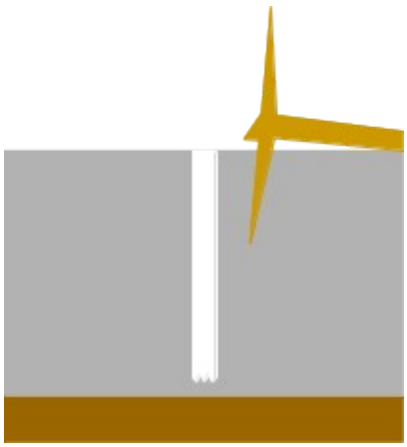
During the eruptions, ash and pumice were deposited over the area, raising the ground level but otherwise not affecting the taller trees.



The trees continued to grow, developing new root systems at the new ground level and discarding the buried trunks, which died and decayed.



The abandoned trunks rotted away completely, leaving a void. The porous nature of the ash/pumice ground aided in the complete disappearance of the old trunks.



If such a tree falls, it exposes the “well”, a deep hole with straight sides. This is not only a hazard to animals, but also humans. During the Columbus Day Storm of 1962, a tremendous number of these trees fell. This created a significant hazard to hikers, likely prompting the Forest Service and/or National Parks to issue warnings. Since there were a number of youth camps in the area, it would have been particularly important to train the camp counselors about the hazard.

I recall our camp counselor pointing out a few of these tree wells during some hikes, and being very cautious while allowing us to approach them for a closer look.