



Natural Resources Conservation Service

Selection and Use of Wood Utility Poles in Fence Systems

Alabama Guide Sheet No. AL382A



In order to meet the national and state NRCS conservation practice standards (CPS), fencing materials shall be durable and of high quality. Wood utility poles may be used in fencing in limited circumstances and primarily for gate posts, pull assemblies, and bracing.

The section from the wood utility pole (called utility fence post) used in fencing must be of high quality, without rot, structural damage or damage from insects or woodpeckers. Additionally, it must be free of drilled holes, non-fence related appurtenances, or visible cracks into the heart wood of the post.

To check the utility posts for internal rot strike the post in question with a hammer to detect voids or rot in the wood. Voids will make "hollow sounds" when the post is struck by the hammer. Typically hammers will rebound more from a solid post than when hitting a section with an internal decay pocket. The internal decay pocket may also cause a sound that is dulled compared to the crisp sound of a solid pole section.

When internal rot is detected in the utility pole, either replace the pole or trim the pole as needed to ensure the section used for the post is rot free.

Due to their high risk of rot, sections of older utility poles that have previously been used at ground level and below shall not be used as a fence post.

The heartwood of the utility fence post must equal or exceed the diameter of the planned post in the NRCS Fence standard. See examples in Figures 1 and 2. The non-heartwood or outer shell of the post must be of sufficient quality to properly hold appurtenances needed in fencing, such as staples, nails, stand-off insulators or gates.

Used wooden utility fence posts will be a minimum of class 10 American National Standards Institute (ANSI) or about 12 inches in diameter.

Utility fence posts shall be installed according to instructions in Alabama CPS, Fence, Code 382, and related guidance documents. For example, the length of the utility fence post must equal or exceed the designed post length. In addition, all installed posts will have an impervious barrier placed on top of post to keep water from entering into the post.

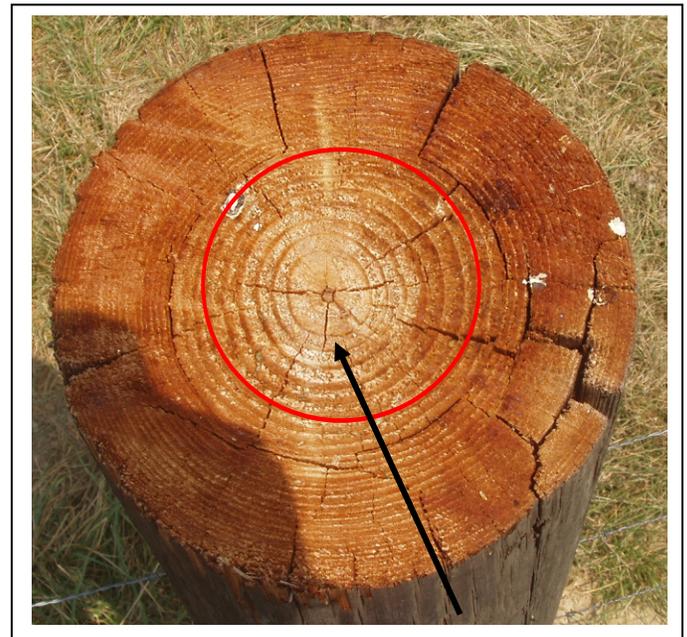


Figure 1. Suitable Utility Post. The red circle shows the approximate boundary of heartwood. Wood splits are mostly from outer edge of post to the edge of the heartwood.



Figure 2. Non-suitable Utility Post. The red circle depicts the approximate boundary of heartwood. Numerous cracks penetrate into the center.

References

USDA RUS Bulletin, 1730B-121, Wood Pole Inspection and Maintenance,
http://www.rd.usda.gov/files/UEP_Bulletin_1730B-121.pdf

Standard Specifications for Wood Poles, USDA Forest Service,
<http://www.fpl.fs.fed.us/documnts/pdf1997/wolfe97b.pdf>