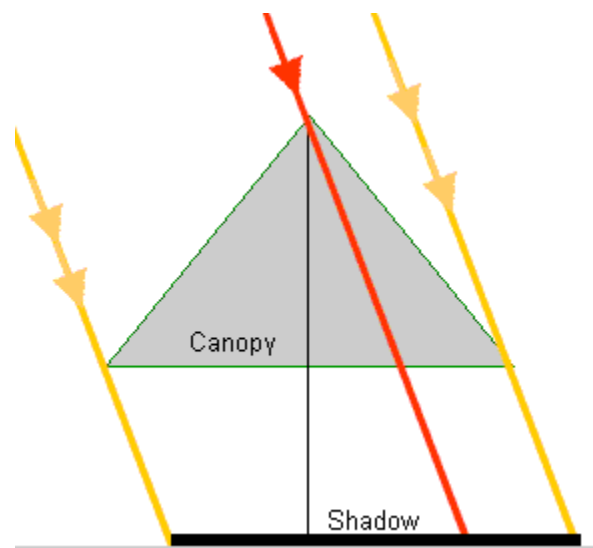


Shadow Projection by Chris Skellern

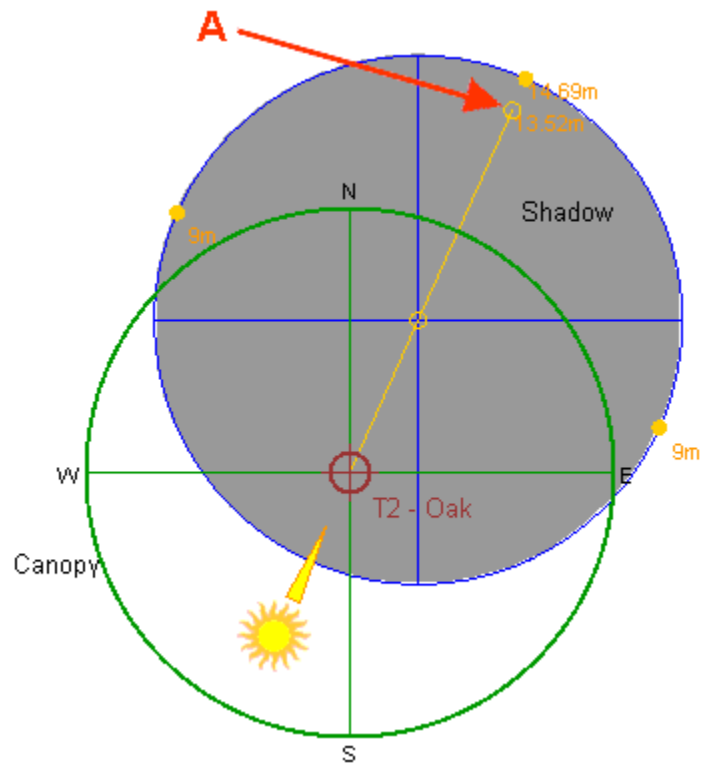
In some situations a projected shadow will simply mirror the extents of the lower crown canopy. This will normally occur when the tree has;

- a narrow (or zero upper crown spread)
- the sun holds a high altitude
- and the lower canopy spread is fairly large

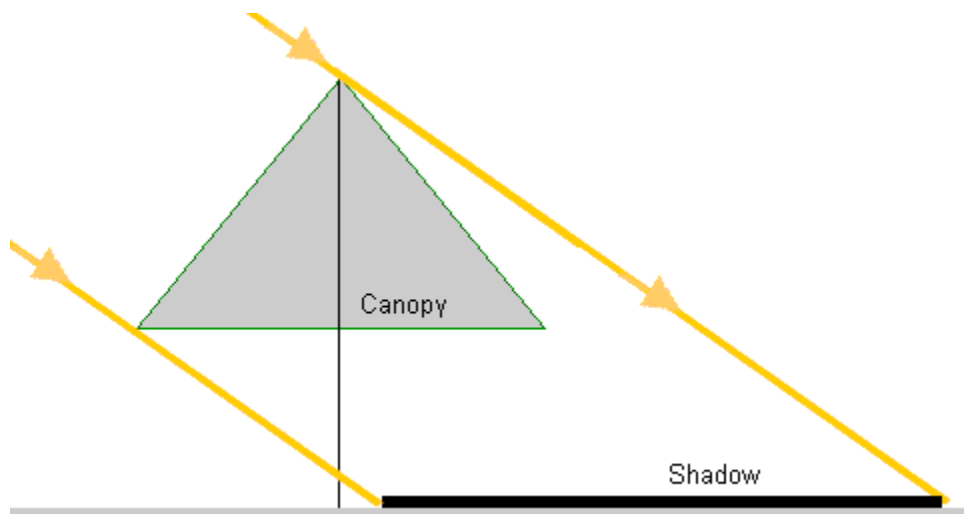
In the following picture the tree has no upper canopy spread (cone shaped) and the sun holds a high altitude in the sky. The tree height has no influence on the shadow length as the projected shadow for the top of the tree (red line) lies within the lower canopy projection. Subsequently, only the lower canopy is projected to form a mirror of itself.



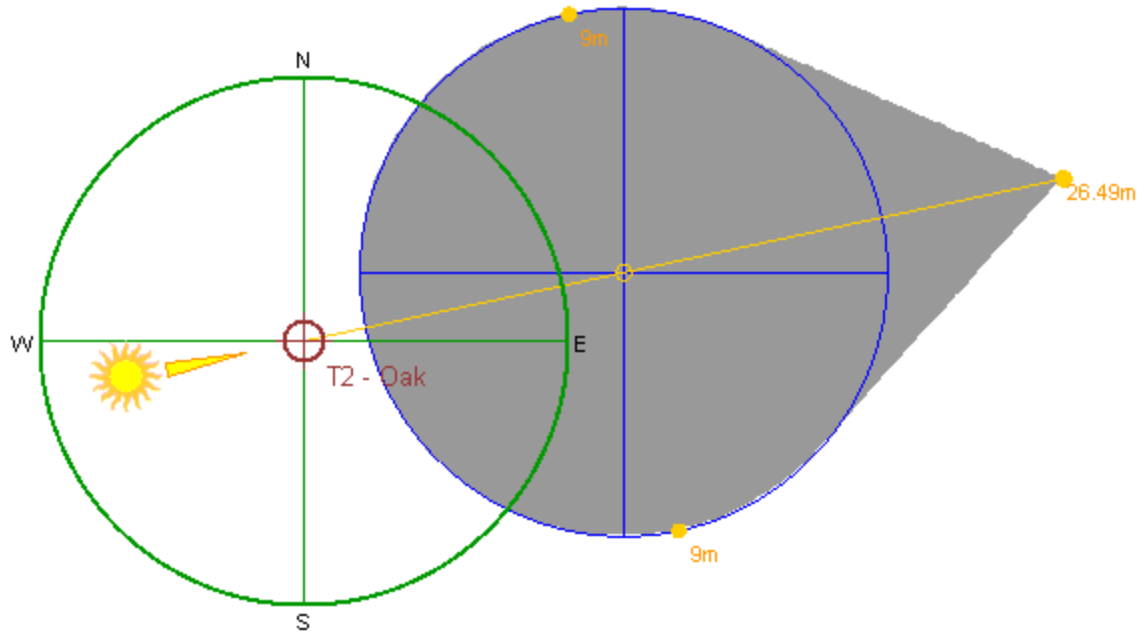
The same situation is shown below on an ArborShadow display. The 'A' indicates the position of the tree top projected within the projected lower canopy.



As the sun's altitude decreases, so the tree top will begin to influence the shadow length (see below).



And the ArborShadow representation below.



The following photograph illustrates how the shadow is offset below the tree canopy when the sun is at a low altitude in the sky. The shadow starts at the tree stem base. This is similar to the ArborShadow representation shown above although in the above image the sun is slightly lower because the shadow is slightly further from the tree stem.



Copyright © 2011 Chris Skellern. All Rights Reserved.