

Tree-Ring Dates of Vigas in Casa Blanca, Jemez Springs, New Mexico

Thomas W. Swetnam
Jemez Mountains Tree-Ring Lab
Laboratory of Tree-Ring Research
University of Arizona
June 17, 2018

On June 12, 2018 I obtained 5 core samples from 5 vigas in the Casa Blanca, rental house of Roger and Linda Sweet, located in Jemez Springs, New Mexico.

The cores are 3/8 inch in diameter and range in length from about 1 ½ inches to 5 inches long.

Three vigas were cored in the living room, and two in the kitchen. Cores were labeled #1 to #5, and corks with those numbers written on them will be inserted in the holes.

All cores were mounted and sanded, then ring-width patterns were crossdated with skeleton plots and visual matching of ring characteristics with a Jemez Mountains ponderosa pine composite master tree-ring width chronology.

All specimens were Douglas-fir. Two of the three cores from the living room were broken off due to decay inside the viga, and so these cores were only about 1 ½ inches long. The other cores were intact, or had one or two breaks, but were complete sequences from outer rings to the pith, or near pith.

Crossdating was good with specimens #1 and #5 and was fair to somewhat problematical for others. Dates and notes listed below:

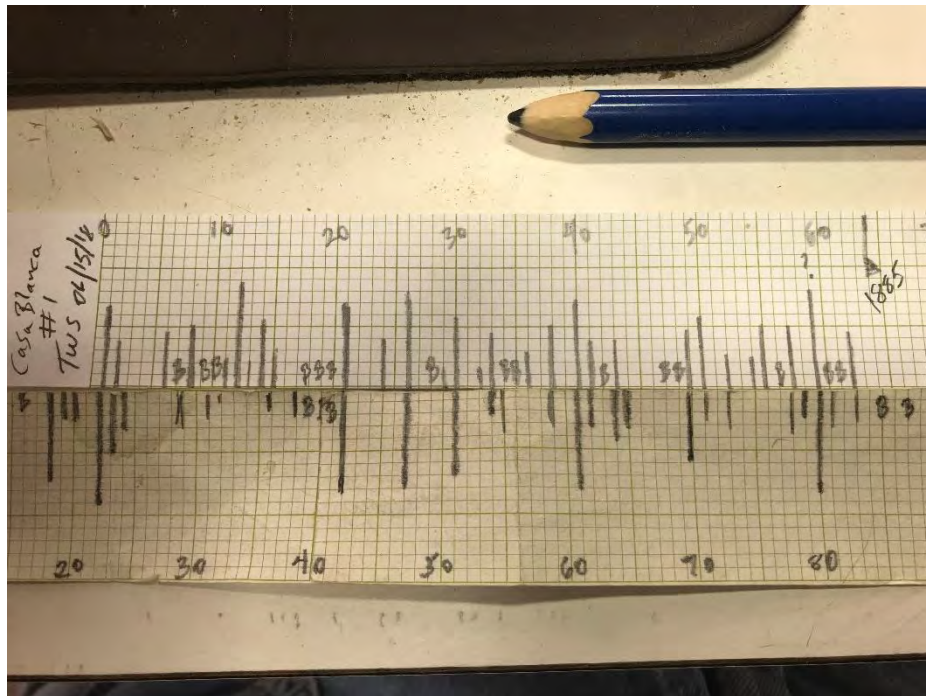
Specimen #	Inner Date	Outer Date	Notes
1	1821 pith	1885v	- A few latewood cells visible in 1885; good crossdating
2	1846 far from pith	1877vv	-short core, broken off inside & out
3	1865 far from pith	1885b	-Short core, broken off inside only; probable bark on outside
4	1813 pith	1886++	-Core broken in 2 places after 1860, ring counted only after that
5	1851 near pith	1888v	-Crossdates well visually with master & with #1

In summary, if the viga timbers were cut soon before construction, the living room building appears to have been constructed in late 1885 to early 1886, and the kitchen portion in late 1888 to early 1889.

Various photographs and notations follow:



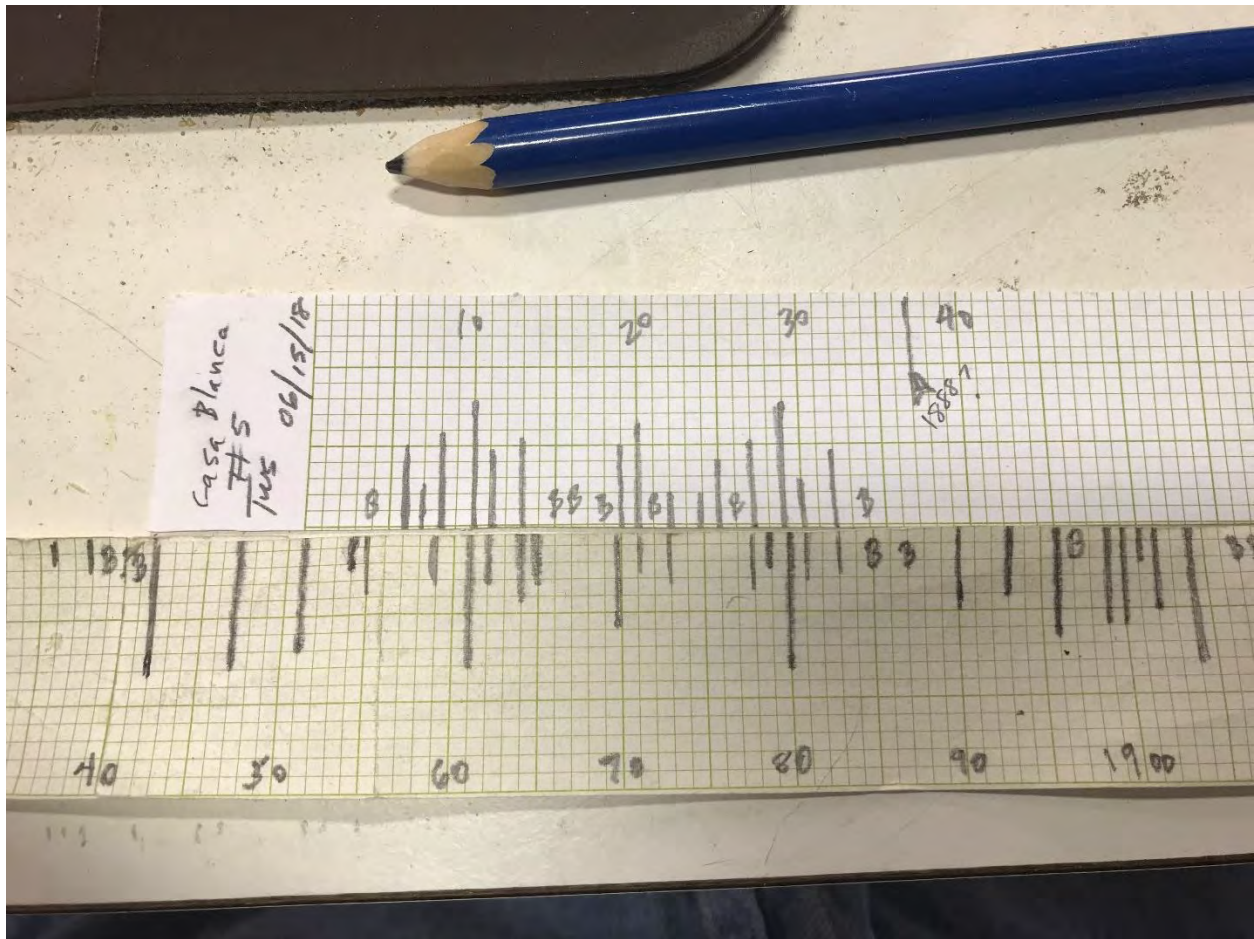
Viga #1 was cored right above the basket on the wall above the left window.



Skeleton plot from specimen # 1 (top) compared with the master composite plot bottom. Good correspondence of the smallest rings (long pencil lines) and most big rings (B). Anomalous small ring in 1833 may be an injury.



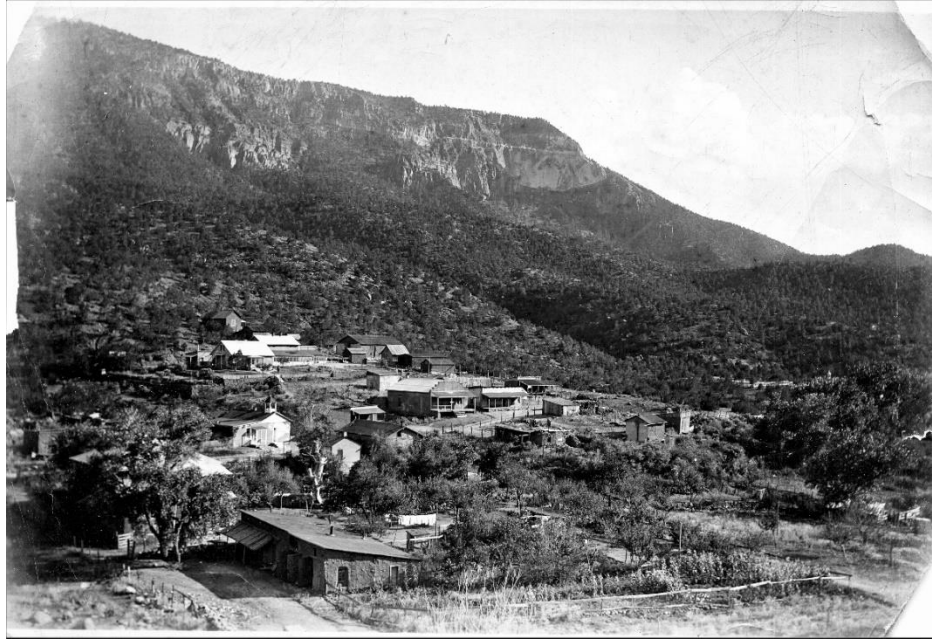
Outermost rings on specimens #3 (top) and #1 (bottom). Note very small ring in 1880, marked with two pin prick holes on either side of the ring. Note very faint lighter colored cells just after the latewood of 1885 in #3. At first, I thought these were earlywood cells from 1886. On closer examination, however, I think they are bark cells. Hence, #3 has a cutting date of 1885.



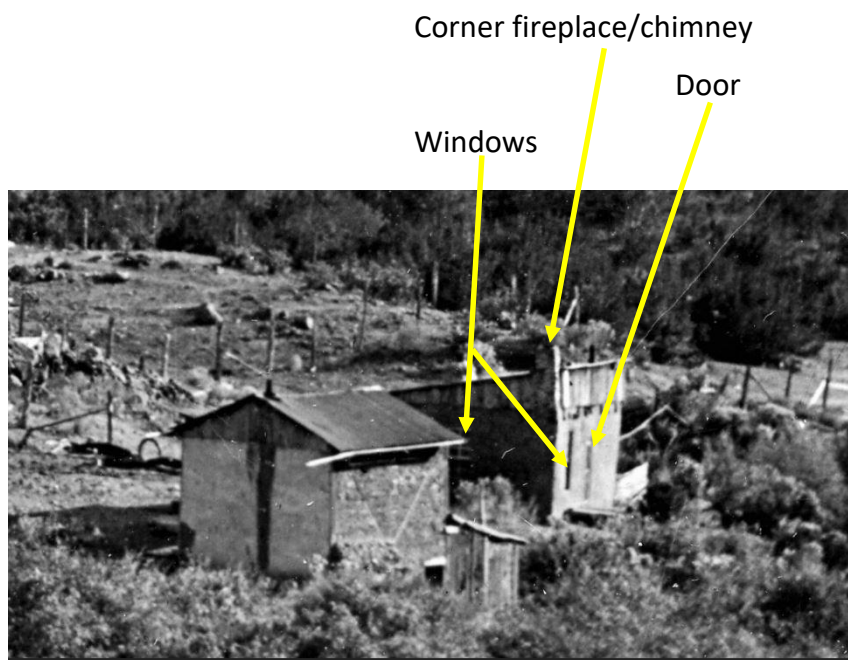
Crossdating of specimen #5 from the kitchen (upper plot) with the Jemez Mountains composite (bottom). This is a good match, but a short sequence. Visual comparison of the ring characteristics in this specimen with longer dated sequences in specimens #1 and #4 is convincing though.



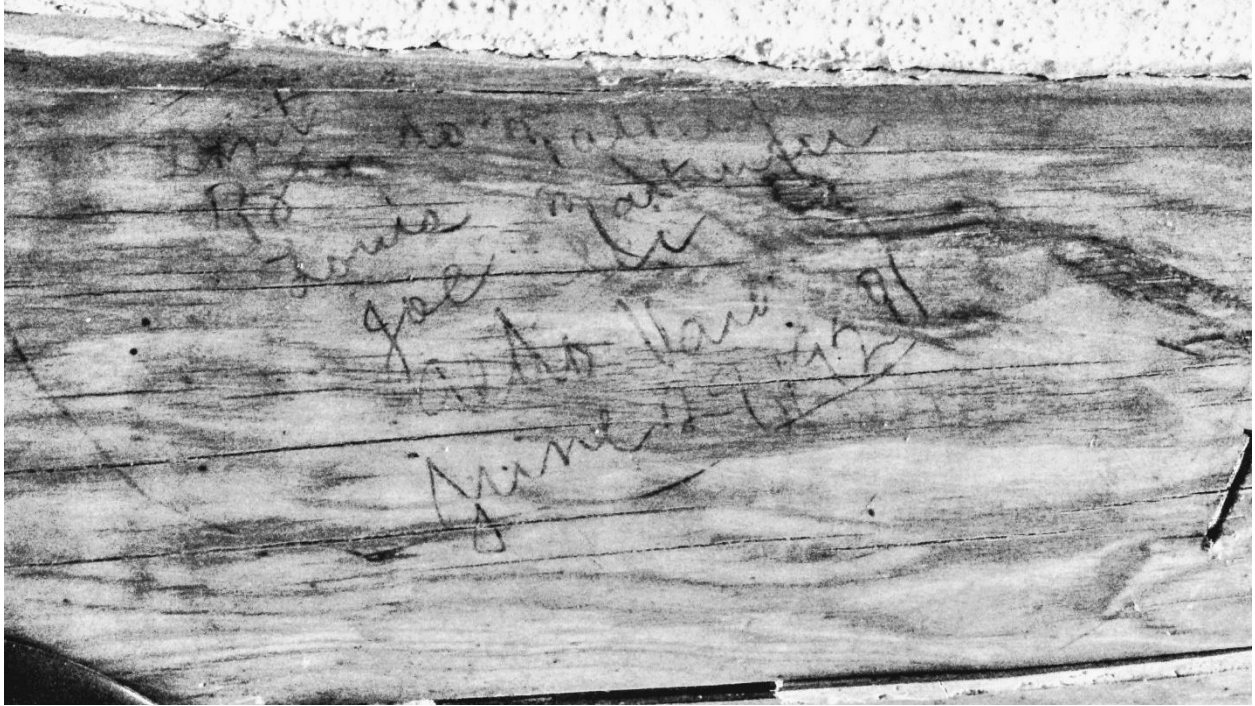
Specimen #5. Note the very small ring in 1880, with a single pinprick hole in it.



This is a view of the Jemez Springs Village (Jemez Hot Springs, as it was known then) probably taken between circa 1900 and 1910. The large Abouselman house is visible in the lower left behind trees, and I think that was constructed around 1900. Other landmark buildings that are still visible in this photograph and still in existence include the Presbyterian Church, the Miller house and compound, and the mercantile later known as the “Laughing Lizard”. The Casa Blanca living room area is probably the buildings at right center.



Zoomed in view from the larger photo showing the likely Casa Blanca living room.



Pencil markings on center viga in living room. These appear to be names, and a date. Perhaps as follows:

Dante no(?) Martinelli (or Martinez? But I don't see a "z")
Rosa(?)
Louis Martinelli
Joe ler(?)
Aedo(?) Varo
June 29, 1929



I can't make these out, but it looks like some more names. A family name repeated 3 times:
Gra????