

TREE-RING DATES FOR THE GALLINA AREA, NEW MEXICO

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The dated specimens reported in Table 1 are from four sites representing three localities in the Gallina area, north central New Mexico. All specimens were collected by Dr. Frank C. Hibben of the University of New Mexico. This area is drained by the Gallina River, the Rio Chama, and the Rio Grande and varies in altitude from 6500 to 8000 feet.

The original dating work on the Nogales Cliff House material was done by Frederick H. Scantling in November, 1939, and is reported by Hibben.¹ Dating of the Cuchillo House was done by Terah L. Smiley in early 1950. The opportunity to make use of this dated material is greatly appreciated. The Bg specimens were dated by the writer early in 1950.

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¹Hibben, *American Antiquity* 14: 32-36, 1948.

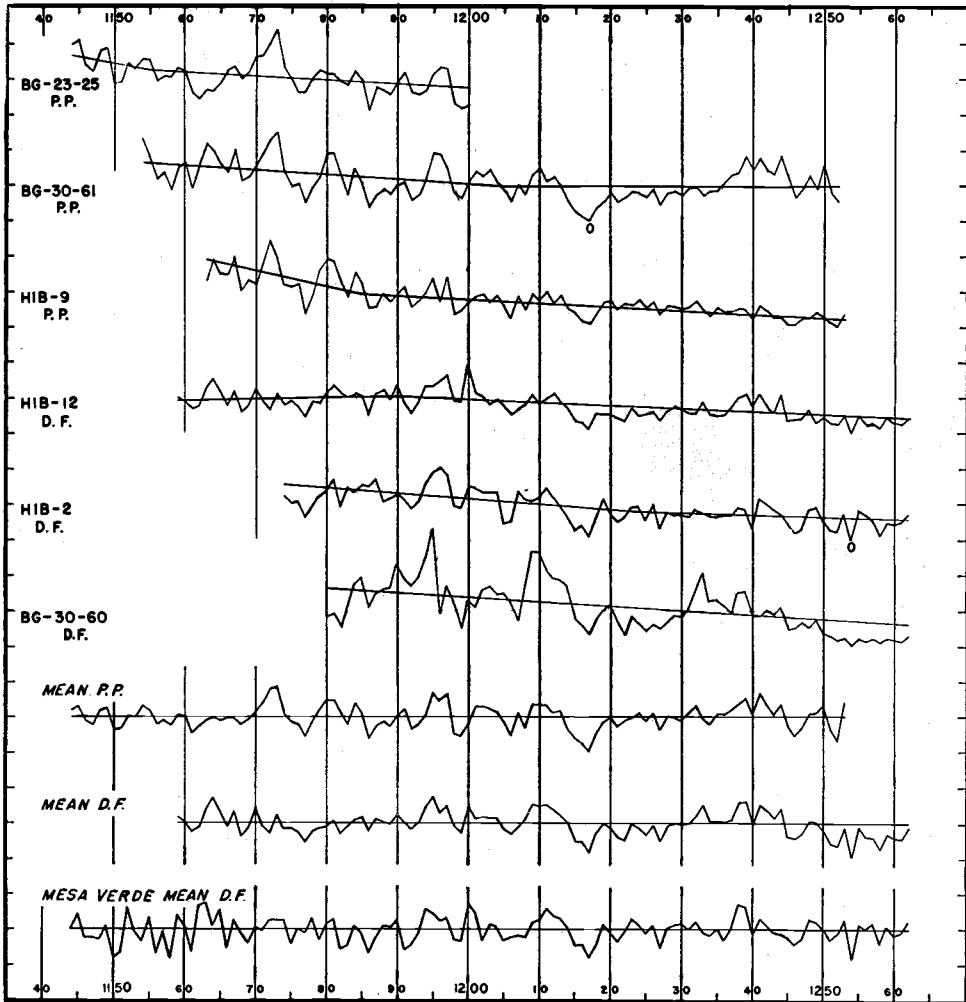


Figure 1. Measured ring-widths in dated beams from the Gallina area. Trend lines (by E.S.) are superposed on the growth curves; zeros below the curves indicate locally absent rings.

Table 1. Dated Specimens from the Gallina Area¹

Specimen Number	Site	Form	Species	Mean Ring-Width, mm.	Plot Scale	Inner Ring, A.D.	Outer Ring, A.D.
Bg 23-25	Rattlesnake Point ²	Ch. sec.	PP	.56	1	1143 p	1201 v
Bg 30-60	Llaves ³	Wd. sec.	DF	1.05	2	1179 p	1266+vv
Bg 30-61	Llaves ³	Wd. $\frac{1}{8}$ s.	PP	1.14	2	1153 p	1255+vv
HIB - 2	Nogales Cliff Hse. ⁴	Wd. $\frac{1}{4}$ s.	DF	.88	2	1168	1264 vv
HIB - 9	Cuchillo Hse. ⁵	Ch. $\frac{1}{4}$ s.	PP	1.18	3	1163 p	1253 c
HIB -12	Nogales Cliff Hse.	Wd. sec.	DF	.38	1	1155 p	1267 v

¹See *Tree-Ring Bulletin* 15 (4) for symbol code.

²Surface structure in T 26 N, R 1 E Sec. 15. Three Bg series specimens not plotted here have outside dates ranging from 1213vv to 1264+vv and represent two other Bg sites.

³A personal communication from Dr. Hibben gives the source of these specimens as a cliff house east of the postoffice at Llaves.

⁴Nogales Canyon. Four additional specimens from Nogales Cliff House have outside dates ranging from 1239 to 1266.

⁵Surface structure in Nogales Canyon. Five additional specimens from Cuchillo House have outside dates ranging from 1248vv to 1254c.

Table 2. Tree-Ring Indices for the Gallina Area:
Ring-Widths in Per Cent of the Growth Trend

A. Ponderosa Pine										
A.D.	0	1	2	3	4	5	6	7	8	9
1140	.....	.....	.....	.....	119	130	87	77	117	124
1150	61	63	102	99	132	117	76	88	74	105
1160	103	55	75	92	99	89	97	94	78	92
1170	111	136	174	183	105	85	77	43	84	118
1180	145	144	105	75	137	108	37	71	83	69
1190	101	120	63	75	100	164	145	160	50	45
1200	77	126	126	120	111	83	47	108	69	134
1210	133	130	112	117	64	39	14	02	53	85
1220	98	72	89	97	109	85	108	59	99	99
1230	90	106	129	95	79	108	106	119	135	152
1240	106	169	133	106	134	74	45	87	109	110
1250	131	61	30	144	.....	.....	.....	.....	.....	.....
B. Douglas Fir										
A.D.	0	1	2	3	4	5	6	7	8	9
1150	.....	.....	.....	.....	.....	.....	.....	.....	.....	116
1160	104	75	88	140	172	127	85	134	62	87
1170	140	91	70	122	82	82	74	44	75	85
1180	89	105	71	92	108	116	78	113	103	98
1190	125	101	80	101	146	175	127	148	91	71
1200	143	111	116	113	113	80	66	87	114	151
1210	145	148	136	120	101	45	44	17	72	99
1220	85	59	51	98	84	66	93	47	89	99
1230	93	99	120	151	104	103	102	109	156	161
1240	97	152	137	113	140	62	56	70	103	102
1250	78	42	34	83	02	90	61	58	25	70
1260	58	57	87	.....	.....	.....	.....	.....	.....	.....

Measured growth series in Figure 1 show the ring chronologies in the three Gallina localities to be similar. Standardized means of the ponderosa pine and Douglas fir specimens were separately derived and are tabulated in Table 2. It is evident that the chronology is essentially the same in both species. The relation to the Mesa Verde Douglas fir index,² representing an area 120 miles to the northwest, is also illustrated in Figure 1.

²Schulman, *Tree-Ring Bulletin* 14: 6-7, 1947.