

DATES FROM GILA PUEBLO

BY EMIL W. HAURY

Nearly all the ruins of southern Arizona and New Mexico have eluded the efforts of those who have attempted to date them on the basis of tree-rings. This is due, in the main, to the low altitude in which the ruins occurred and to the consequent distance from the forests where datable trees grew. The trees accessible to the builders of these southern villages were mesquite, ironwood, cottonwood, sycamore, etc., none of which have as yet shown themselves useful in tree-ring studies. One of the few ruins—and at the present time the southernmost—that has been dated by the Douglass system is Gila Pueblo, a Pueblo IV community of about 125 rooms, situated three miles south of Globe. Although it occurs at an altitude of 3600 feet above sea level and in the Lower Sonoran zone, it lies at the foot of the Pinal Mountains and only a few miles distant from pines. Most of the charred wood recovered from about 100 excavated rooms has been other than pine, but two rooms have yielded sizable logs of Western Yellow pine upon which certain dates can be placed. All of the material was charred.

The analysis is given below:

Room Number	Piece Number	Outside Dated Ring	Inside Dated Ring	Approx. Radius in MM	Estimated Rings Lost at Outside	No. Absent in Series	Bark Date
98	GP 395	1385	1200	130	0	0	1385
90	488	1345	1243	60	0	5	1345
90	489	1345	1312	55	0	0	1345
90	490	1345	1298	70	0	0	1345
90	493	1345	1311	40	0	0	1345
90	494	1345	1314	35	0	0	1345

These specimens were all dated without difficulty on the chronology derived from trees in the Flagstaff-northeastern Arizona area. Although the woodland on the Pinal Mountains falls into the type referred to as an "island forest," it is not far removed from the great forest belt to the north. Ring records from the Sierra Ancha, 40 miles north of Globe, agree with those from the Flagstaff area (1); hence the conformity in all major particulars of the Gila Pueblo wood to that of the Sierra Ancha and Flagstaff is to be expected. Dr. Douglass' study of living trees on the Pinal Mountains showed distinct resemblance to that Flagstaff pattern (2), thus demonstrating the ability to cross-date in modern wood.

The log labelled GP 395, giving a 185 year record, shows an almost perfect agreement with the master plot. Differences may be noted in the following areas: 1215-1225 is not so sharply marked as in the Flagstaff series; 1350 is larger; and the 1360-1364 configuration is less sharp. The 1276-1299 drought is not accentuated quite so markedly as in the trees from Flagstaff, but its duration and the pattern of the key rings within the drought area remain the same. In specimen GP 488, from Room 90, the drought record is defective to the extent of 5 omitted rings in 25, suggesting severe dry conditions. The difference in these two drought records is unquestionably due to environmental factors related to the indi-

vidual tree, and they become valuable chiefly to show that the drought extended into south-central Arizona, a fact which may prove useful to the archaeologist in studying the people of this area.

Culturally, Gila Pueblo is identified as a village of the Salado people (3), a division of the larger Pueblo Culture. The chief Salado settlements lie in the Tonto Basin, in the mountains and valleys to the south, and westerly in the Gila Basin where they mingled with the Hohokam. The evidence suggests that the movement into the Hohokam territory took place about 1300 immediately following the great drought. As one of the results of this co-occupation, Casa Grande and allied structures were built, chiefly through the influence of the Salado immigrants. Because of the agreement in the material culture of Gila Pueblo and that of the Salado occupation in the Gila Basin, such villages as Gila Pueblo and Casa Grande may be judged to be contemporaneous. Thus, with 14th century dates established for the former, the latter may be placed in the same century by inference. It must be said, however, that occupation at Casa Grande by the Hohokam long preceded this date, and that they continued to live in the vicinity of Casa Grande after its abandonment by the Saladoans which probably took place before 1450.

REFERENCES

- (1) Haury, E. W., 1934. The Canyon Creek Ruin and the Cliff Dwellings of the Sierra Ancha. Medallion Papers No. XIV, pp. 20-21. Globe, 1934.
- (2) Douglass, A. E., 1928. Climatic Cycles and Tree-growth. A Study of the Annual Rings of Trees in Relation to Climate and Solar Activity. Carnegie Institution of Washington, Publication No. 289, Vol. LL, p. 75. Washington, 1928.
- (3) Gladwin, W. & H. S., 1930. Some Southwestern Pottery Types, Series I. Medallion Papers No. VIII. Globe, 1930.

SECOND ANNUAL TREE RING CONFERENCE

BY H. T. GETTY

Tree ring workers met in their second annual conference at the Laboratory of Anthropology, Santa Fe, New Mexico, at 9:30 A. M. on Wednesday, May 1, 1935. Dr. A. E. Douglass was chairman for all sessions of this conference, and Dr. H. S. Colton voluntarily served as secretary. This conference was held in conjunction with the annual meeting of the Southwest Division of the American Association for the Advancement of Science, which also met in Santa Fe.

Those attending this second annual conference were: Dr. A. E. Douglass, Dr. H. S. Colton, Mr. Earl H. Morris, Dr. Emil W. Haury, Dr. Florence M. Hawley, Mr. W. S. Stallings, Mr. J. C. McGregor, Mr. H. T. Getty, Mr. Edmund Schulman, Mr. Roy Lassetter, and two tree ring students from the University of New Mexico.

Dr. Douglass made the introductory remarks at the opening of the conference, and outlined the grant of the Carnegie Institution which is to publish the results of his tree ring work. He outlined three topics to be discussed in the conference, namely: (1) the editing of the Tree Ring Bulletin, (2) the checking of dates, (3) presentation of dating tables in the Bulletin. Dr. Douglass stated that the editing of the Bulletin can be handled in Tucson. In regard to the checking of dates he designated W. S. Stallings to be responsible for the Rio Grande area, Florence Hawley for the Tennessee Valley, H. T. Getty for the Mesa Verde, Emil W. Haury