CHAPTER VII

RADIOCARBON DATING THE MISSISSIPPI PERIOD

A total of 7 radiocarbon dates have been obtained by the LMS from various sites in the Upper Tensas Basin. Three of these, pertaining to components of Balmoral, Routh, and Transylvania phases, are relevant to the present Information on these as well as on published dates for contemporary manifestations in the Lower Yazoo Basin and Natchez locality is presented in Table 55. The first 5 columns of this table contain the essential data on these dates and require no further comment at this point. Columns 6 and 7 present corrections of the radiocarbon age and mean calendar dates in columns 4 and 5 based on recent findings of Stuiver and Suess (1966). For over a decade, evidence has been accumulating that radiocarbon determinations do not always agree with the true age of By making radiocarbon determinations of wood independently and precisely dated with the tree-ring method, Stuiver and Suess have been able to establish a correction table for the conversion of conventional radiocarbon dates to true age. This table (ibid.: Table 1) covers the last 1000 years. Presumably the calendar dates

TABLE 55

RADIOCARBON DATES FROM THE UPPER TENSAS BASIN

AND SURROUNDING AREAS	
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Laboratory Number	y Provenience	Phase Affiliation	C14 Age	Calendar Age	Corrected C14 Age	Corrected Calendar Age
M-1377*	Fatherland, Md. B Fhase IV	Natchez	140+100	A.D. 1810	160/280	1790/1670
GX-486**	Transylvanía Cut 3	Transylvania	735+90	A.D. 1215	735	1215
M-1376*	Fatherland, Md. A Phase II	Fitzhugh	380 <u>+</u> 100	A.D. 1570	475	1475
M1378*	Fatherland, Md. B Phase III	Fitzhugh	425 <u>+</u> 100	A.D. 1525	495	1455
M379*	Fatherland, Md. B Phase II	Fitzhugh	700 <u>+</u> 110	A.D. 1250	680	1270
M-1380*	Fatherland, Md. B Phase I	Fitzhugh	770+110	A.D. 1180	760	1190
M-1381*	Fatherland, Md. C Phase III	Fitzhugh	725+110	A.D. 1225	725	1225
M-1382*	Fatherland, Md. C Phase III	Fitzhugh	680+110	A.D. 1285	670	1295
M-1383*	Fatherland, Md. C Sub-mound	${ t Fitzhugh}$	520+100	A.D. 1430	530	1420
						3

TABLE 55 (Continued)

Laboratory Number	Provenience	Phase Affiliation	C14 Age	Calendar Age	Corrected C-14 Age	Calendar Calendar Age
M-27***	Emerald, Stage E	Fitzhugh	470+250	A.D. 1480	510	1440
M-30***	Gordon, Feat. 4	Fitzhugh	350+250	A.D. 1600	460	1490
Y-2498***	Y-2498**** Winterville, 75/76B	Deer Creek	590+100	A.D. 1360	590	1360
M-47***	Anna, Md. 5	Fitzhugh	640+250	A.D. 1310	640	1310
Y-2497***	Y-2497*** Winterville, 70-72B	Winterville	490+100	A.D. 1460	530	1420
Y-2495****	Y-2495**** Winterville, 45E	Winterville	630+100	A.D. 1320	640	1310
Y-2494***	Y-2494*** Winterville, 45p	Winterville	740+100	A.D. 1210	740	1210
Y-2496***	Y-2496**** Winterville, 86D	Winterville	750+80	A.D. 1200	750	1200
**767-X5	Lake George, Md. F'	Mayersville?	635 <u>+</u> 65	A.D. 1315	635	1315
CX-489**	Routh, Cut 5	Routh	310+115	A.D. 1640	320/380/440	1630/1570/1510
Y-2493****	Y-2493**** Winterville, 86I	Crippen Point	920+70	A.D. 1030	750/850	1200/1100
GX-485**	Balmoral, Md. C	Balmoral	970+85	A.D. 980	910	1040
*Crane	*Crane and Griffin, 1966					

*Crane and Griffin, 1966.
**Krueger and Weeks, 1966.
***Crane, 1956.
****Brain, 1969.

in column 7 represent close approximations of actual sample age, and in the following discussion they will be used in place of the uncorrected dates in column 5.

The single date from Balmoral site of A.D. 1040+85 is acceptable for terminal Coles Creek culture (Phillips 1970: Fig. 2: Williams 1962: Table 1). Charcoal from a layer of fired earth and burned wood in Cut 5 at Routh site has yielded a radiocarbon age of 310+115 years. This corresponds to 3 different corrected calendar dates, but all must be rejected as being too late for either the Balmoral or Routh components at the site (see Chapter II, pp. 236-238). The radiocarbon determination of 735+90 years from Transylvania site was obtained from charcoal associated with a probable burned structure in Cut 3. The sherd counts for the stratum associated with this structure (Stratum 4) indicate Transylvania phase affiliation for the feature. The calendar date of A.D. 1215 is, however, entirely too early for this component. It is possible that the structure is actually a Fitzhugh phase feature, but the 1 sigma standard deviation range of this assay, A.D. 1125-1305, barely overlaps the estimated beginning date of Fitzhugh phase. Furthermore, the Fitzhugh component at Transylvania is not felt to be especially early within the phase. Irregardless of the cultural affiliation of the burned structure in Cut 3, GX 486 is suspect.

Radiocarbon dates from the Upper Tensas Basin are not of much use in establishing a chronology for the area. There are, however, abundant dates from the Lower Yazoo Basin and Natchez locality which pertain to the period of time covered in this thesis, and with these it is possible to estimate the age of the various phases.

Brain (1969: Table 19) obtained a radiocarbon age of 920±70 years for the Crippen Point occupation at Winter-ville. Two corrected calendar dates, A.D. 1100 and A.D. 1200, correspond to this determination. Given that Crippen Point phase immediately follows Balmoral phase in time, these dates align fairly well with GX 485.

Routh phase is estimated to begin around A.D.

1200. Since the distinction between Routh and Fitzhugh phases represents an arbitrary slicing of a cultural continuum, any age assigned to this juncture is equally arbitrary. Nevertheless, it is felt that Fitzhugh phase components will normally date after A.D. 1350. Brain obtained a series of radiocarbon dates for the Winterville component at the type site which range between A.D. 1200 and 1420. Since Winterville and Routh phases can be roughly equated on ceramic grounds, these dates support the above estimates. The single date for Mound F' at Lake George is also in line with these estimates if the dated

sample is associated with the Mayersville phase activities there. $^{\rm l}$

Area and Natchez locality, were such available, would decrease in age from north to south. In the Natchez locality, Fitzhugh phase extends right up to the historic date line (1682) for all practical purposes. Further north in the vicinity of Lake St. Joseph, the Taensa phase probably begins prior to the historic period, but just how much earlier is not known. As both Fitzhugh and Taensa sites have significant associations with the 16 stage channel that formed Lake St. Joseph, the shift may not have occurred more than a century before European contact. At the northern end of the Survey Area, the change to Transylvania phase is also undated, but a safe guess would place it sometime in the sixteenth century.

The single component at Emerald site and the latest occupations at Anna and Gordon can be identified as Fitzhugh phase. The single Anna date is from "high in the fill of Mound 5" (Crane 1956:665) and is apparently associated with the Fitzhugh stages of the mound. Anna is considered on ceramic evidence (see Chapter IV, pg. 438) to be relatively early in Fitzhugh phase, while Emerald

late Coles Creek structure, Mound E, is unacceptable.

seems to have been occupied much later. The corrected calendar dates for these two sites agree with this ordering. Pottery from the Feature 4 house structure at Gordon is predominantly Fitzhugh phase. There is therefore some certainty that the radiocarbon date (M-30) obtained from that feature does refer to the Fitzhugh component. The pottery complex at Gordon is certainly not later than that at Emerald. The corrected calendar date of A.D. 1490 therefore seems more reasonable than the conventional date of A.D. 1600.

Eight radiocarbon dates ranging between A.D.

1200 and 1700 are available from the Fatherland site.

Neitzel (1965:86), unable to give a satisfactory interpretation for all of them, questions most of them

(M-1379-M-1383) on the grounds that they are either too early or do not conform to mound stratigraphy. Phillips (1970:948-9) is unable to reject any of the dates and opts for the 500 year occupation span indicated by the total series.

Neitzel does not think there is sufficient ceramic change evident in the Fatherland collections to justify recognition of a 500 year occupation span. Having studied much of the Fatherland material himself, the present author

lCotter, 1952:Fig. 55, and author's own observation of collections from the site.

would agree with Neitzel on this point. A thirteenth century occupation should yield markers of the Routh phase, but there are none. If any dates are to be rejected, it would seem logical to dismiss those falling in the thirteenth century. This leaves a series of three, fifteenth century dates for initial and intermediate stages of mound construction and one excellent date of A.D. 1670 for the historic construction stage of Mound B.