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A RADIOCARBON DATE FROM THE HARTWELL MORaine, WARREN COUNTY, OHIO. A buried log exposed by excavation along Interstate route 71 was collected by Dale Garner and James Ernst on July 15, 1963. The sample was subsequently identified by Dr. George Burns and dated by Dr. J. Gordon Ogden, III, both of the Botany Department, Ohio Wesleyan University, Delaware, Ohio.

The cut from which the wood was taken is located three miles southeast of Lebanon at the junction of Interstate route 71 and state route 123 (in the NE $\frac{1}{4}$  of section 22, R3 T5) in Turtle Creek Township, Warren County, Ohio. The site lies in the Hartwell Moraine, about 100 yards northwest of the Wisconsin boundary in this area. The log was embedded in calcareous till at a depth of 10 ft below the surface. The total thickness of till was more than 15 ft and oxidation extended to a depth of 8 ft. The soil at the surface is mapped as Russell.

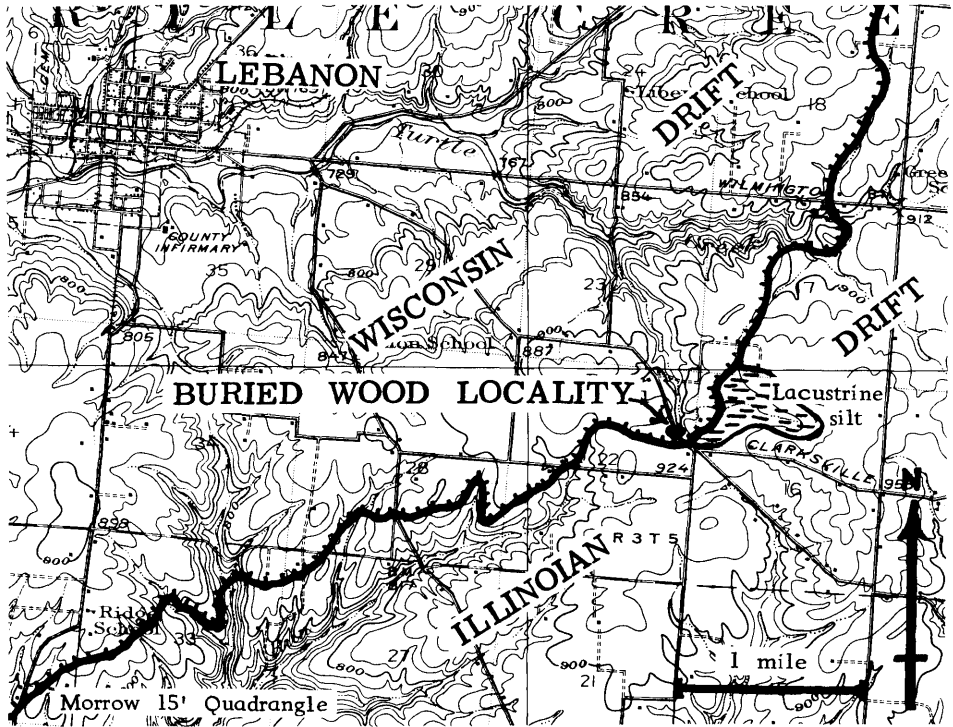


FIGURE 1. Location of site from which buried wood was taken.

The log from which this wood sample was collected projected out from the excavated bank, one end having been cut off by the excavating equipment, the other portion extending into the bank for an undetermined distance. The log was inclined upward about 30 degrees from the horizontal and pointed to the south-southwest. This orientation, which presumably indicates the direction of local ice movement, is unusual because it is not parallel with the direction of ice movement suggested by the east-west Wisconsin boundary 100 yards away. It is possible that the presence of a small bedrock valley adjacent to the site to the northeast may have locally diverted the direction of ice flow.

The wood was identified by Dr. Burns as spruce (*Picea*), the genus reported from many other similar situations (Burns, 1958). Its age was determined to be  $19,621 \pm 372$  (OWU-102). From this date, it is obvious that "late" Wisconsin till is present right up to the Wisconsin boundary in this area, as is true farther south at Westchester (north of Sharonville) in Butler County, where a date of  $20,500 \pm 800$  (W-304) was obtained from wood in till (Goldthwait, 1958: 216). Apparently no "early" Wisconsin drift, such as has been reported by Forsyth (1957) from Highland County in the Scioto lobe of central Ohio, is present at the surface in this part of the Miami lobe of western Ohio.—DALE GARNER, *Division of Lands and Soil, Lebanon, Ohio*, and JANE L. FORSYTH, *Division of Geological Survey, Columbus, Ohio 43212*.

#### REFERENCES

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- Burns, G. W. 1958. Wisconsin age forests in western Ohio. II. Vegetation and burial conditions. *Ohio J. Sci.* 58: 220-230.
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