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AN EARLY WOODLAND POTTERY VESSEL  
FROM MINNESOTA

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## AN EARLY WOODLAND POTTERY VESSEL FROM MINNESOTA

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The earliest ceramics appearing in the Ohio and upper Mississippi River drainages of eastern North America are thick-walled, cord marked vessels which serve to mark the beginning of the Early Woodland cultural period. A restored whole vessel from the LaMoille Cave site (21WN1) excavated by L. A. Wilford in 1939 (Wilford, 1954) represents one of the very few restored ceramic vessels of this early form labeled Marion Thick in Indiana (Helmen, 1951: 4-5; Griffin, 1952: 97-98) and is analyzed here, as its characteristics have never been completely described.

Wilford's summary report on the LaMoille site suggests that the remnants of that site, excavated after its partial destruction by highway construction, represented a deeply stratified fishing camp site with its lowest levels containing a preceramic late Archaic assemblage persisting with little modification of the lithic component into the middle levels of the deposit where sherds of the LaMoille vessel occurred. In the original excavation, Wilford recovered only 75% of the sherds represented in the subsequently restored vessel. The remaining sherds were recognized by Leland R. Cooper, later of Hamline University, in a private collection located near the site. Cooper obtained those added sherds and subsequently restored the vessel for Wilford.

The form of the LaMoille vessel and the setting of the LaMoille site in the riverine deciduous forest within the prairie peninsula conforms to the distribution of related early ceramic forms in the Ohio-Upper Mississippi drainage areas. These related forms, all very similar to Marion Thick, include Fayette Thick of Kentucky and southern Ohio (Griffin, 1943: 667-672; 1945: 221-222), Schultz Thick of Michigan (Fitting, 1972: 142-147), and Leimbach Thick of north central Ohio (Shane, 1967: 106-109). Similar pottery occurs at the Sheets and Larson (Munson, 1966) and Jean Rita (Linder, 1974) sites in Illinois and is perhaps related to Vinette I of New York (Ritchie and MacNeish, 1949: 100, 119). Very few sherds occur in any of these sites and this is true also of the few localities in

Minnesota where LaMoille Thick sherds are known. Other excavated Minnesota sites with this occurrence are the Schilling site (21WA1) on Grey Cloud Island, Commissary Point (21GD59) on Prairie Island, and the Anderson site (21AN1), immediately north of St. Paul (Streiff, 1972). Sites located in the mixed deciduous-coniferous forest of central and northern Minnesota lack LaMoille Thick sherds, as do all surface collections examined. Similarly, the type does not appear in either excavated sites or in local collections from sites located in the prairie grasslands of southwestern and western Minnesota. The earliest known ceramics in northern Minnesota occur in Laurel Culture sites (Stoltman, 1973; 1974), while the earliest pottery known in the prairie zones is an early Middle Woodland type, Fox Lake incised (Bonney, 1962; Hudak, 1974).

Chronological controls on early ceramic horizons in Minnesota are lacking except for Laurel (Stoltman, 1974: 74-89), but chronometric dates for Marion Thick and its variants elsewhere cluster around 500 B.C. The Leimbach site has been radiocarbon-dated at 520 B.C.  $\pm$  310 years (M-1524); and the Sheets and Larson sites date to 560 B.C.  $\pm$  100 years (I-1652). The Schultz II site at 530 B.C.  $\pm$  130 years (M-1425) and 540 B.C.  $\pm$  130 years (M-1524); and the Schultz I site at 530 B.C.  $\pm$  150 years (M-1525). The Jean Rita site has a single date (34 A.D.) obtained from bone (Linder, 1972: 149), a date that appears abnormally late and probably reflects contamination of the specimen dated.

The absence of dates on Minnesota sites where LaMoille Thick sherds occur prevents any precise statement on the temporal relationships with similar sites elsewhere, though the general assumption is that future Minnesota dates on this Early Woodland ceramic horizon should be slightly later than those in the Indiana-Ohio region. Whatever the chronological position, the physiographic and vegetational setting of sites with LaMoille Thick pottery is suggestive of a restricted cultural adaptation, and one which differs significantly from those associated with Laurel and Fox Lake ceramics.

## VESSEL DESCRIPTION

### LAMOILLE THICK

#### Sample:

14 identifiable rim sherds, 12 body sherds including 2 basal fragments constituting 1 partially restorable vessel (approximately 75%).

## Technology:

Method of manufacture: Coiled.

Paste: Sandy clay with large amount of tempering material.

Temper: Crushed crystalline stone, usually feldspar. Tempering ranges between .5 to 4.0mm and averages about 1.5mm.

Texture: Moderately compacted with coil breaks common.

Color: Exterior and core colors range from reddish yellow (HUE 7.5YR 6/6) to very dark grey (HUE 7.5YR 3/0); interior colors range from brown (HUE 7.5YR 5/5) to very dark grey (HUE 7.5YR 3/0).

Surface Finish: Exterior and interior surfaces are cord-marked. The exterior surface, while generally vertically cord-marked, does display bidirectional overstriking. The interior surface displays oblique and horizontal cord-marks. Both interior and exterior surfaces appear to have been smoothed before being cord-marked. Interiors are poorly smoothed with random smoothing marks and finger impressions. Undulating interior surfaces indicate that a cord-wrapped hand may account for the impressions. Exterior cord-marks appear to be a rolled cord-wrapped stick, as complex  $\begin{matrix} sZ \\ Z \\ Z \\ sZ \end{matrix}$ -twist cord impressions are present (Hurley, 1968: Fig. 1C; Linder, 1974: 116).

**Metrics:** Cord impression width 1.0mm to 2.9mm. Average 1.3mm.

## Decoration:

Technique and Motif:

Punctations: 8 groups of 5 punctations. Punctations ranged from 5.0mm to 13.0mm apart on lip. Groups ranged from 37.5mm to 80.0mm apart.

### Metrics:

Diameter: 2.0mm.

Depth: 3.0mm.

Fingernail Impressions: One group of 16 impressions (occurs on fragmented portion of vessel) placed perpendicular to and occurring 49.8mm from the lip surface.

### Metrics:

Length: 5.5mm to 8.5mm.

Width: 1.0mm to 1.9mm.

**Vessel Form:**

Lip: Flattened.

Rim: Attitude: Vertical.

Form: All straight.

Modification: Thinned (only on the exterior surface) toward upper rim.

Body: Form: Large jar. Elongate cylindrical body contracts toward small flat base. Large orifice with little rim construction and no shoulder.

Modifications: 3 sets of post firing holes possibly drilled for vessel suspension and/or crack lacing.

**Metrics:**

Two sets occur 60.0mm below lip. The third set is 30.0mm below lip. Exterior hole diameters range between 11.0mm to 3.0mm, interiors range between 4.5mm to 6.0mm. Set holes occur between 50.0mm to 65.0mm center to center.

Size:

**Metrics:**

Height: Approximately 32.0cm; orifice outside diameter: approximately 27.8cm.

Maximum Body Diameter: 28.0cm.

Thickness: Rim (taken 1.0cm below lip): 10.0mm to 15.0mm. Average body thickness is 13.0mm.

Volume: Approximate cubic content is 8 liters.

Base: Small, flat, smooth on interior and cord-marked exterior.

**Metrics:**

Outside diameter approximately 8.5cm. Thickness average is 15.0mm.

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Figure 1

LaMoille Thick pottery vessel, accession number 216-12, University of Minnesota Anthropology Department Collections.



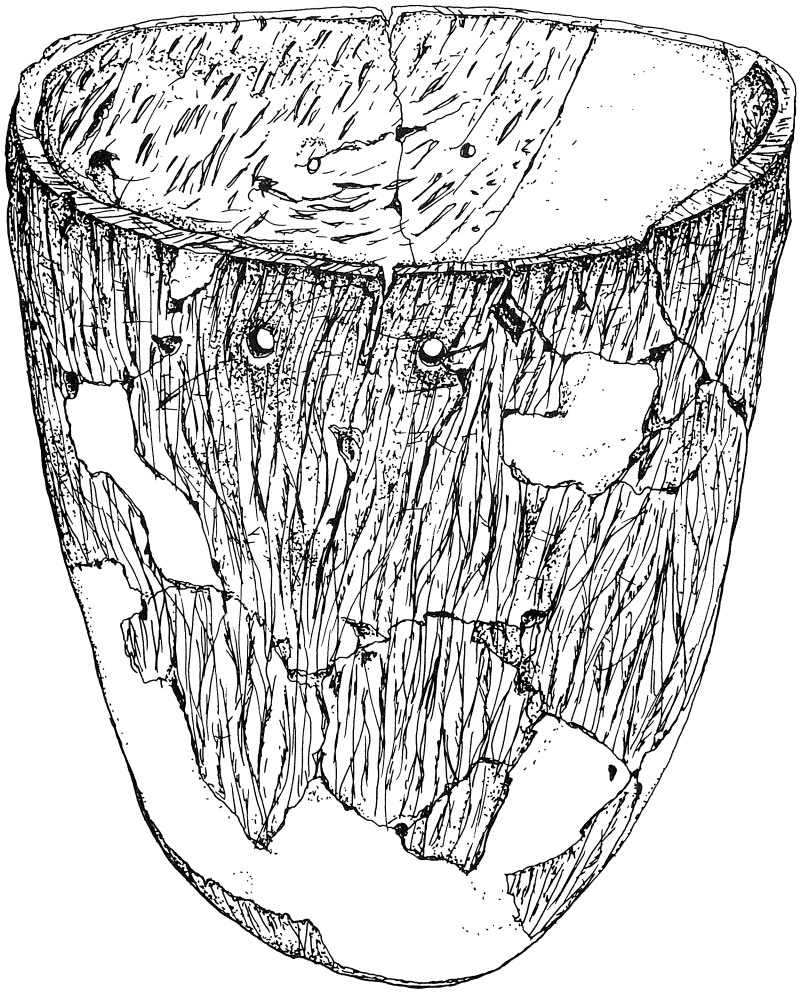


Figure 2  
LaMoille Thick pottery vessel.

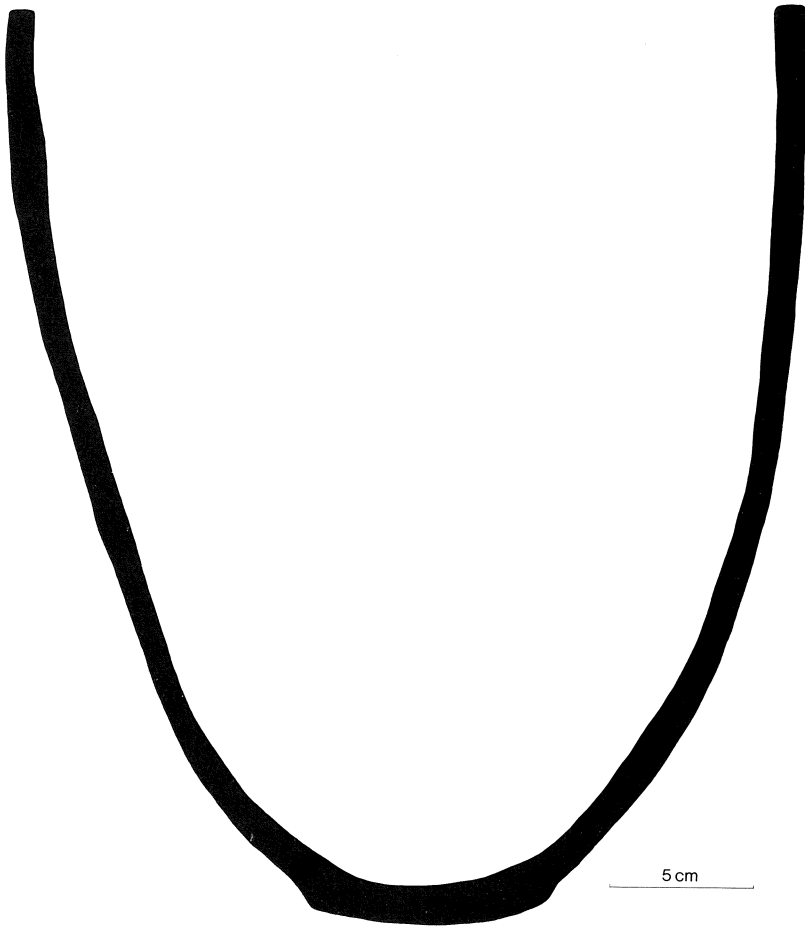


Figure 3  
Profile, LaMoille Thick pottery vessel.

## REFERENCES

- Bonney, R.A. 1962. *A Chronological list of southern Minnesota Woodland*. Unpublished Master of Arts thesis, University of Minnesota, Department of Anthropology.
- Fitting, J.E. 1972. The Schultz Site at Green Point. *University of Michigan, Museum of Anthropology, Memoirs* No. 4.
- Griffin, J.B. 1943. *The Fort Ancient Aspect*. The University of Michigan Press, Ann Arbor.
- \_\_\_\_\_. 1952. Some Early and Middle Woodland pottery types in Illinois. In *Hopewellian communities in Illinois* edited by Thorne Deuel, *Illinois State Museum, Scientific Papers*, Vol. 5, pp. 95-129.
- Helmen, V.R. 1950. *The cultural affiliations and relationships of Oliver Farm Site, Marion County, Indiana*. Unpublished Master of Arts thesis, University of Indiana.
- Hudak, G.J. 1974. *The Pedersen Site*. Unpublished Master of Arts thesis, University of Nebraska, Department of Anthropology.
- Hurley, W.M. 1968. *Cord twist: A patterned decorative ceramic attribute: North American and Japanese methodology*. Paper presented to VII International Congress of Anthropological and Ethnological Sciences, Tokyo.
- Linder, J. 1974. The Jean Rita Site: An Early Woodland occupation in Monroe County, Illinois. *The Wisconsin Archaeologist*, Vol. 55, No. 2, pp. 99-162.
- Munson, P.J. 1966. The Sheets Site: A late Archaic-Early Woodland occupation in west central Illinois. *The Michigan Archaeologist*, Vol. 12, No. 3, pp. 111-120.

- Ritchie, W.A. and MacNeish, R.S. 1949. The Pre-Iroquoian pottery of New York State. *American Antiquity*, Vol. 15, No. 2, pp. 97-124.
- Shane, O.C. III 1967. The Leimbach Site: An Early Woodland village in Lorain County, Ohio. In *Studies in Ohio Archaeology*, edited by Olaf H. Prufer and Douglas H. McKenzie, pp. 98-120. Western Reserve Press, Cleveland.
- Stoltman, J.B. 1973. The Laurel culture in Minnesota. *Minnesota Historical Society, Minnesota Prehistoric Archaeological Series*, No. 8.
- \_\_\_\_\_. 1974. Within-Laurel cultural variability in northern Minnesota. In *Aspects of Upper Great Lakes anthropology: Papers in honor of Lloyd A. Wilford*, edited by Elden Johnson, *Minnesota Historical Society, Minnesota Prehistoric Archaeological Series*, No. 11, pp. 74-89.
- Streiff, J.E. 1972. Roster of excavated prehistoric sites in Minnesota to 1972. *Minnesota Historical Society, Minnesota Prehistoric Archaeological Series*, No. 7.
- Wilford, L.A. 1954. The LaMoille Rock Shelter. *Minnesota Archaeologist*, Vol. 19, No. 2, pp. 17-21.