# **RADIOCARBON DATING IN THE VERNADSKY INSTITUTE IV\***

## A. P. VINOGRADOV, A. L. DEVIRTS, E. I. DOBKINA, and N. G. MARKOVA

# V. I. Vernadsky Institute of Geochemistry and Analytical Chemistry, Academy of Sciences, USSR, Moscow

# $1720 \pm 170$

# Mo-297. Timoshkovichi, Belorussian SSR [A.D. 230] \*\*

Peat, at depth 3.5 m, from upper of 2 layers, at village of Timoshkovichi [53° 35' N Lat, 26° 05' E Long], Korelichi Raion, Grodno Oblast, Belorussian SSR. Timoshkovichi is located on Novogrudok upland, beyond limits of region of Valday [Würm] Glaciation. Cross section synchronous with ancient ravine of Neman R. basin where 2 horizons of peat can be detected: the lower, according to pollen data, accumulated at time of Mikulino [Eem] Interglacial; the upper believed accumulated at time of 2nd climatic optimum of Mikulino Interglacial, or at time of early Interstadial of Valday [Würm] Glaciation (Tsapenko and Makhnach, 1959). Coll. 1962 by N. S. Chebotareva, Geog. Inst., Acad. of Sci., USSR.

#### Ligovka River series

## $3100 \pm 180$ [1150 b.c.]

#### Mo-315. Ligovka River, Leningrad Oblast

Wood from left bank of Ligovka R. [59° 50' N Lat, 30° 00' E Long] at Gorelovo sta. near Leningrad. From sediments postdating Baltic Ice Lake. Coll. 1962 by O. M. Znamenskaya, Leningrad State Univ., V. P. Grichuk, Geog. Inst., Acad. of Sci., USSR, and N. S. Chebotareva, (Cf. Mo-201, Vernadsky Inst. I-IV, 1966; Vinogradov *et al.*, 1962; Serebryannyy *et al.*, 1962).

## $9600\pm300$

#### Mo-316. Ligovka River, Leningrad Oblast [7650 B.C.]

Wood from same area as Mo-315, but from sediments of II Baltic Ice Lake.

### Mo-256. Mikulino village, Smolensk Oblast >34,000

Peat, with plant remains from Mikulino village  $[55^{\circ} 00' \text{ N Lat}, 31^{\circ} 05' \text{ E Long}]$ , Rudnya Raion, Smolensk Oblast. From shallow ravine, which cuts across moraine plateau on which Mikulino is located. Overlain by lacustrine silt and till; underlain by gyttja, sand, and till. Inferred age from pollen data: ca. 64,000 yr. Coll. 1958 by N. S. Chebotareva.

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**\*\*** Information in brackets interpolated by translator (E.M.S.) and commentator (D.B.S.).

# Mo-304. Cheremukha River, Yaroslavl' Oblast >29,000

Wood from lacustrine sediments in terrace on Cheremukha R.  $[58^{\circ} \ 00'$  N Lat,  $37^{\circ} \ 50'$  E Long], right tributary of Volga R., S of Rybinsk. Coll. 1962 by N. S. Chebotareva. [Sediments comprise SE rim of Mologo-Sheksnya Basin. Sample apparently from silty gray loam 0.3 to 2.3 m above water level (Arslanov *et al.*, 1966).] This stratum previously determined at 42,000 to 43,000 yr (Starik and Arslanov, 1961), is significantly younger than generally accepted age of Mikulino Interglacial. [42,000 to 43,000 yr age might be interpolation between LE-66A and LE-70A (Arslanov *et al.*, 1966) for position of sample rather than true date. Pollen data had indicated either Mikulino or Mologo-Sheksnya (Paudorf) age for these deposits; (Cf. LG-6A, All-Union Geol. Inst., 1968). [*D.B.S.*]

# Mo-307. Chermenino, Yaroslavl' Oblast >28,000

Wood from depth 2 m in 14 m terrace of Volga R. at Chermenino [58° 00' N Lat, 37° 50' E Long] S of Rybinsk. Coll. 1962 by N. S. Chebotareva. Cross section reveals sediments [gray silty loams, 8 m thick, with plant remains and freshwater molluscs] of [supposed] Mologo-Sheksnya [Paudorf Interstadial] lake overlain by [4 m thick] sands [late Würm (?)] with pebbles, animal remains, and wood. Sample from plant remains in these sands. Age of sands determined earlier as 25,900  $\pm$  900 yr (Le-21) and 28,800  $\pm$  2000 yr (Le-22) (Neustadt, 1965, p. 65; Starik and Arslanov, 1961). *Comment* (D.B.S.): earlier determinations of wood samples had to be repeated from new sample because of possible contamination; (Cf. also Le-64, Khlopin Inst. I, 1968 and LG-5, 4A and 4B, All-Union Geol. Inst I, 1968). Information in brackets from Arslanov *et al.*, 1966, p. 136.

#### **Desna River series**

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## $3880 \pm 180$ [1930 b.c.]

#### Mo-289. Desna River, Bryansk Oblast

Buried soil, deposited on loess ["post-loessal"], from right bank of Desna R. [53° 10' N Lat, 34° 20' E Long], from plateau in Bryansk Oblast. Coll. 1962 by T. D. Morozova and A. A. Velichko, Geog. Inst., Acad. of Sci., USSR. Depth 0.4 m. Inferred geologic age: Late Pleistocene; inferred archaeologic age: end of Upper Paleolithic (Velichko *et al.*, 1964).

All humic substances were fully extracted from sample.

# Mo-336. Desna River, Bryansk Oblast 3150 ± 180 [1200 B.C.] [1200 B.C.]

Soil from same location but with extraction of . . . organic substances prior to extraction of tightly bound forms of humic acids and humins [guminov], (Cf. Mo-337 and 342, Vernadsky Inst. I-IV, 1966.) [D.B.S.]

#### Mo-249. Imnati Peat Deposit, Georgian SSR (revised) <100

Peat from Poti bog ca. 8 km SE of Poti [42° 10' N Lat, 42° 25' E Long] Georgian SSR, from depth 1.75 to 2.0 m. Pollen data indicate age of 1000 to 1500 yr. Coll. 1961 by N. A. Khotinskiy, Geog. Inst., Acad. of Sci., USSR. [See Neustadt, 1965, p. 106 for detailed description of cross section. D.B.S.].

### Mo-290. Lake Baikal, Buryat-Mongol ASSR >28,000

Wood from sand, at depth 16.45 to 17.45 m below water surface, S Lake Baikal, near Solzan settlement [ca. 52° 00' N Lat, 106° 00' E Long]. Hard bottom at 20 m below surface. Coll [n.d.] by L. V. Tauson, Inst. of Geochem., Siberian Div., Acad. of Sci., USSR.

#### $1040 \pm 120$

# Mo-258. Victoria Islands, Soviet Arctic (revised) [A.D. 910]

Driftwood from Victoria Islands [ca.  $80^{\circ}$  15' N Lat,  $37^{\circ}$  30' E Long] in W sector of Soviet Arctic, from surface of marine terrace at Cape Knipovich, alt. 5.5 m. Driftwood had melted out from under ice dome in 1961. Inferred age: boundary between Upper and Middle Holocene (Grosval'd *et al.*, 1961, 1963, 1964). Subm. by M. G. Grosval'd, Geog. Inst., Acad. of Sci., USSR.

REFERENCES appear on p. 463.