GIN-104. Pavlov campsite, Czechoslovakia

Charcoal. Pavlov campsite [48° 50' N Lat, 16° 25' E Long], Czechoslovakia. Archaeologic [sic] age is beginning of Würm III. Other determinations of charcoal from same campsite are: 24,800 ± 150 yr (GRO-1325, de Vries, 1958) and 26,400 ± 230 yr (GRO-1242, ibid.), which agree with our date. Subm. by A. N. Rogachev; [no date given (E.M.S.)].

Molodova V site series

This Paleolithic campsite in Dnestr region, Ukrainian SSR [approx. 48° 25' N Lat, 26° 30' E Long] was excavated 1951-1963 by A. P. Chernysh (1959). Samples GIN-52, 54, 56, 105, and 106 coll. 1962 by N. V. Kind. References: Ivanova (1959); Chernysh (1959); Alekseyev et al. (1964). Cf. also Ivanova (1966); fig. 20 presents consolidated stratigraphic table, to depth 12 m, of excavations, including soil horizons, culture (Mousterian, Upper Paleolithic, and Mesolithic), mammalian and molluscan fauna, assoc. woody species, inferred climates, radiocarbon dates, and tentative geologic correlations; also, GIN-6-10, Geol. Inst. I (D.B.S.).

GIN-54. Molodova V site

Loam with campfire charcoal. Early Mesolithic Stratum 1, depth 0.5 to 0.8 m. Estimated stratigraphic position: Allerød to [Upper] Earlier Dryas.

GIN-56. Molodova V site

Loam with campfire charcoal from Stratum [2], (late Magdalenian), depth 1.2 to 1.4 m. C\(^{14}\) age of fossil bones from same stratum, according to ethyl-benzol variant, is 11,900 ± 230 yr (GIN-8).

GIN-147. Molodova V site

Charcoal from campfire, Stratum 4, (late Magdalenian) depth 1.9 to 2.05 m.


** Information in brackets interpolated by translator (E.M.S.) and commentator (D.B.S.).
GIN-52. Molodova V site
Loam with campfire charcoal, Stratum 5 (middle Magdalenian), depth 2.2 to 2.4 m.
17,100 ± 180 [15,150 B.C.]

GIN-105. Molodova V site
Loam with campfire charcoal, Stratum 6 (early Magdalenian), depth 2.6 to 2.8 m.
16,750 ± 250 [14,800 B.C.]

GIN-106. Molodova V site
Soil, Stratum 10 (mature Solutrean), depth 4.4 to 4.9 m.
23,100 ± 400 [21,150 B.C.]

GIN-72. Molodova I site, Ukrainian SSR
Shells of land molluscs. Molodova [48° 35’ N Lat, 26° 45’ E Long], Baylova Ripa ravine, on left bank of Dnestr, above Molodova I campsite. Layer of loessal alluvia underlies zone of soil formation and corresponds to 2 soils in cross section of Molodova V (Ivanova, 1960); upper one is synchronous with cultural Strata 9 and 10 (Ivanova, 1959; Chernysh, 1959). Depth of stratum is 6.5 to 7 m. Sample coll. 1962 by N. V. Kind.
22,850 ± 120 [20,900 B.C.]

Vyg River sites series, Karelian ASSR

GIN-130. Zalavruga I site
Charcoal from bonfire from Zalavruga I campsite, Vyg River, Malinin Island [1.5 km SE of Besovy Sledki, 64° 30’ N Lat, 34° 40’ E Long] (Gurina, 1961, p. 516), Karelian ASSR. Depth 0.70 m (Cross Section 15, Quadrants 2 and 2a). Intrusive particles of sand mixed with ocher. Inferred archaeologic date: 2nd millennium B.C.
4010 ± 70 [2060 B.C.]

GIN-129. Besovy Sledki site
Wood from Besovy Sledki campsite [64° 30’ N Lat, 34° 40’ E Long], Vyg R. [actually located on old channel of Vyg R. (D.B.S.)], Karelian ASSR, in layer of silty sand at depth 1.1 m under cliff on which campsite was located. Layer contains many pottery fragments. Thought to date from 2nd half of 3rd millennium B.C.
5430 ± 50 [3480 B.C.]

GIN-57. Moscow, Moscow Oblast
Wood from house in Moscow, built ca. A.D. 1900. Discrepancy probably due to Suess effect. Date of approx. contemporaneous sample, GIN-3: 290 ± 80 yr (Geol. Inst. I).
230 ± 100 [A.D. 1720]

GIN-112. Berendeyevovo swamp, Yaroslavl’ Oblast
Wood from Berendeyevovo swamp [56° 35’ N Lat, 39° 00’ E Long] in Pereslavl’ Raion, Yaroslavl’ Oblast. Pile-dwelling settlement in peat
5730 ± 120 [3780 B.C.]

**GIN-111. Lake Pleshcheyevo, Yaroslavl’ Oblast [6600 b.c.]**

Wood from shore of Lake Pleshcheyevo, Perslav’-Zaleskiy [56° 42’ N Lat, 38° 50’ E Long]. Sample from peat at depth 1.9 m, overlying fluvial-glacial sediments. Geologic age: basal Holocene. Coll. 1964 by V. V. Cherdyntsev.

**Pleshcheyevo campsites series, Yaroslavl’ Oblast**

**GIN-114. Pleshcheyevo I site [A.D. 420]**

Charcoal from hearth pit in dune sand, 25 to 30 cm thick, 1 km from present shoreline of Lake Pleshcheyevo, Pleshcheyevo I campsite, Pereslav’ Raion, Yaroslavl’ Oblast [56° 57’ N Lat, 38° 43’ E Long]. Cultural stratum overlay by contemporary soil and underlain by lake sands. Inferred date: medieval. Subm. [n.d.] by A. L. Nikitin.

**GIN-116. Pleshcheyevo II site [1920 b.c.]**

Charcoal from Pleshcheyevo II campsite, same locality as GIN-114, in sand dune at former shoreline of L. Pleshcheyevo, 0.5 km from present shoreline on SW side. Cultural stratum, ca. 40 cm thick, overlies soil, and is overlain by horizon of contemporary podsolic soil, up to 25 cm thick. Archaeologic date: 2nd phase of comb-and-pit-marked Neolithic. Settlement date same as pile dwelling, GIN-112. Age of sample appears markedly less than estimated. Subm. by A. L. Nikitin.

**GIN-113. Pleshcheyevo III site [530 b.c.]**

Charcoal from remains of dwelling destroyed by fire at Pleshcheyevo III campsite, near Samples GIN-114 and 116. Campsite on low dune, 400 m from present shoreline. Cultural stratum, at depth 35 to 40 cm, in contemporary forest soil, underlain by lake sand. Stratum has strictly local character, and penetrates to depth 50 to 70 cm. Archaeologic date: Early Iron age before introduction of gorodishche [fortified settlement], tentatively, middle 1st millennium b.c. Subm. by A. L. Nikitin.

**GIN-115. Pleshcheyevo IV site [2770 b.c.]**

Charcoal from Pleshcheyevo IV campsite, near GIN-114. Geographic and stratigraphic position analogous to Pleshcheyevo I. Samples taken along whole cultural stratum. Archaeologic date: Volosovo culture, late Eneolithic, ca. middle of 2nd millennium b.c. [Cf. Tret’yakov and Mongayt, 1956, p. 101. (D.B.S.)] Subm. by A. L. Nikitin.
GIN-128. **Dikarikha site**

Charcoal from hearth depth 0.45 to 0.50 m, at Dikarikha campsite from low dune on N shore of L. Pleshcheyev [56° 57' N Lat, 38° 46' E. Long]. Cultural stratum (settlement and cemetery) lies in sandy loamy deposits. Archaeologic date: late Bronze. Subm. by A. L. Nikitin.

**GIN-67. Sungir' Stream, Vladimir Oblast**

Peat from Sungir' Stream, above Suromna village [approx. 56° 10' N Lat, 40° 35' E Long], Vladimir Oblast. Peat, ca. 10 cm thick, from depth 1.5 m in lacustrine and paludal loam in I terrace. Estimated geologic age: late Glacial to early Holocene. Sample coll. 1963 by S. M. Tseytlin and L. D. Sulerzhitskiy.

**Ulovo series, Vladimir Oblast**

GIN-82. **Ulovo**

Buried soil of II terrace, depth 3.7 m, from left bank of Ulovka R. valley, 3 km above confluence with Nerl' R., Ulovo village, Vladimir Oblast [approx. 56° 20' N Lat, 40° 50' E Long]. Upper stratum of buried soil of Terrace 2 above flood plain. Strongly humified loam lies 3.7 m beneath topsoil loams; former overlie moraine, disturbed by solifluction, overlying periglacial sand. Inferred age: late Glacial. Coll. 1963 by S. M. Tseytlin and L. O. Sulerzhitskiy. (Cf. GIN-16, Geol. Inst. I [D.B.S.]).

GIN-81. **Ulovo**

Buried soil from same exposure as GIN-82, lower soil stratum, 0.15 m thick at depth 6.2 m. Soil is inclusion within deposits of periglacial alluvia disturbed by deposition of ice-wedge casts. Overlies till of Dnepr (?) [Mindel] Glaciation. Inferred age: a Würm interstadial. Coll. 1963 by S. M. Tseytlin and L. D. Sulerzhitskiy. Previous date of >35,000 yr for this sample (GIN-16, Geol. Inst. I).

GIN-83. **Vladimir, Vladimir Oblast**

Yakimanka series, Vladimir Oblast

GIN-84. Yakimanka

Buried soil from Kamennyy Ovrag [“Stony Ravine”] in Yakimanka village, Suzdal’ Raion, Vladimir Oblast [56° 22’ N Lat, 40° 22’ E Long]. Sample from upper part of left slope, 1 km from confluence with Nerl’ R., depth 2.5 m; underlies topsoil loams, and overlies till. Soil disturbed by solifluction. Age approx. that of GIN-82. Coll. 1963 by S. M. Tseytlin and L. D. Sulerzhitskiy.

GIN-102a. Yakimanka

Humus extracted from peat with alkaline treatment, from Kamennyy Ovrag, Yakimanka village. Peat at depth 5 m, base of left bank of ravine, 1 km from confluence with Nerl’ R. Overlain with loams and underlain by sand. Thickness of peat ca. 1.5 m. Paleobotanical data correlate with Mikulino [Eem] Interglacial (Metel’tseva and Sukachev, 1961). Dates of earlier samples: 9750 ± 200 yr (GIN-11, Geol. Inst. I), and >22,000 (GIN-12, Geol. Inst. I). Reasons for discrepancy are unclear. Present measurement corroborates ancient age of peat deposit, which lies beyond limits of our variant of C¹⁴ method. Coll. 1964 by N. V. Kind.

GIN-80. Yeliseyevichi site, Bryansk Oblast

Wood from Yeliseyevichi campsite, Bryansk Oblast [53° 35’ N Lat, 33° 35’ E Long]. [Erroneously given in text as Belorussian SSR. (D.B.S.)]. Found in base of hearth at depth 2.3 m, in floor of dwelling made of mammoth bones, in stratum of loessal loams. Archaeologic estimate, according to V. D. Bud’ko, who subm. sample, is Late Gravettian, analogous to Pavlov campsite (GIN-104, this list). (Cf. also Butzer, 1964, p. 389-393. [D.B.S.])

GIN-94. Kursk I site, Kursk Oblast

Fossil bone from Kursk I campsite [51° 40’ N Lat, 36° 10’ E Long], Kursk. I terrace above flood plain, right bank of Seym R. Cultural stratum of campsite lies in reddish-brown clay at depth 1.2 m from surface. Estimated archaeologic age: early or middle Magdalenian. Sample coll. 1963 by P. I. Boriskovskiy, Inst. of Archael., Acad of Sci., USSR.

Kostenki Group sites series, Voronezh Oblast

GIN-86. Kostenki I site

Charred bone from upper stratum of Kostenki I campsite [51° 25’ N Lat, 39° 01’ E Long]. “Second dwelling.” Depth, 1.5 m. Coll. 1963 by A. A. Velichko, Inst. of Geog., Acad. of Sci., USSR and A. N. Roga-
GIN-93. Kostenki II site


11,000 ± 200
[9050 B.C.]

GIN-89. Kostenki XII site

Loam of upper humified layer at Kostenki XII campsite [51° 25' N Lat, 39° 01' E Long], with aggregate thickness of 0.55 m, at depth 1.7 m. Enriched with humus in lower part of layer. On underlying brownish-gray loam are separate lenses of volcanic ash. Cultural Stratum II of campsite assoc. with [humified] layer. Coll. 1963 by A. A. Velichko and A. N. Rogachev.

23,600 ± 300
[21,650 B.C.]

GIN-79. Markina Gora site


14,300 ± 460
[12,350 B.C.]

GIN-78. Kostenki XVII site

Loam from lower humified layer at campsite Kostenki XVII [51° 24' N Lat, 39° 01' E Long]. Stratum 6 at depth 6.35 to 6.45 m. Ca. 1.5 m higher occur lenses of volcanic ash. Basic cultural stratum of campsite assoc. with lower [humified] layer. Inventory of both cultural strata [GIN-77] is same type and close in time (Boriskovskiy, 1953). Coll. 1963 by A. A. Velichko and A. N. Rogachev.

20,100 ± 200
[18,150 B.C.]

GIN-85. Kostenki XVIII site


9610 ± 190
[7660 B.C.]

GIN-77. Kostenki XVIII site

Humified loam from Kostenki XVIII campsite, same location as GIN-85. Stratum 4a at depth 3.6 to 3.7 m; upper surface shows maximum enrichment with humus and charcoal. At depth 1.1 m from zone of contact [with topsoil chernozem] lenses of volcanic ash occur. Finds of Upper Paleolithic inventory assoc. with Stratum 4a. Coll. 1963 by A. A. Velichko and A. N. Rogachev.

20,000 ± 350
[18,050 B.C.]
**GIN-107. Kostenki XIX site**

11,800 ± 500 [9850 B.C.]

Charred bone from Kostenki XIX campsite [51° 25' N Lat, 39° 00' E Long], Kostenki village. Located on I terrace above flood plain of Don R. Cultural stratum lies in loam at depth 1 to 2.5 m, becoming deeper downslope. Coll. [n.d.] by P. I. Boriskovskiy. Estimated archaeologic age: Late Paleolithic or transitional to Mesolithic (Boriskovskiy, 1963).

**GIN-88. Borshevo II site (Kostenki Group)**

12,300 ± 100 [10,350 B.C.]

Humified alluvium from I Terrace above flood level of Don R., Borshevo village. Underlies lower cultural stratum of Borshevo II campsite [51° 20' N Lat, 39° 06' E Long]. Sampled layer, 0.15 m thick, at depth 3.35 m, contains plant remains and mollusc shells. Archaeologic age: transitional from Magdalenian to Azilian, i.e., transitional between Upper Paleolithic and Epipaleolithic (D.B.S.). Coll. 1963 by A. A. Velichko and A. N. Rogachev.

**GIN-66. Chyornyy Yar, Astrakhan Oblast**

12,500 ± 140 [10,550 B.C.]


**GIN-926. Akhshtyr cave, N. Caucasus**

19,500 ± 500 [17,550 B.C.]


**Nabati series, Poti, Georgian SSR**

**GIN-108. Poti, Georgian SSR**

4140 ± 50 [2190 B.C.]

Peat from Nabati deposit near city of Poti [42° 10' N Lat, 41° 40' E Long], Kolkhidian [Colchis] depression, Georgian SSR. [Carex]—reedy peat at depth 3.5 m. Samples GIN-108 and 127 subm. [n.d.] by P. P. Timofeyev, Geol. Inst., Acad. of Sci., USSR.

**GIN-127. Poti, Georgian SSR**

6660 ± 60 [4710 B.C.]

Sedge [Carex] peat from same deposit as GIN-108. Depth, 6 m.
GIN-32. Karmir-blur, Armenian SSR  
2500 ± 40  
GIN-126. Irtysh River, Omsk Oblast  
30,700 ± 300  
GIN-101. Yar’yakhamal River, Krasnoyarsk Krai  
>45,000  
GIN-55. Malaya Kheta R., Krasnoyarsk Krai  
21,700 ± 1700  
GIN-140. Igarka Permafrost Station,  
35,400 ± 300  
Krasnoyarsk Krai  
23,450 B.C.]

**GIN-76. Igarskiy Yar, Krasnoyarsk Krai** [33,850 B.C.]


**GIN-98. Denezhkino, Krasnoyarsk Krai** [34,950 B.C.]

Buried wood from II, 30 m terrace of Yenisey R. at Benezhkino settlement [66° 40' N Lat, 86° 50' E Long], in obliquely stratified fluvial-glacial sediment, at elev. 13 m above water level. Stratigraphic position approx. same as sample GIN-76. Coll. 1962 by N. V. Kind and S. L. Troitskiy.


Plant remains with wood fragments from Yenisey R. at Koneshchel'ye settlement [unlocated: on Yenisey R. between 65° and 69° N Lat (D.B.S.)]. II terrace, 30 m above river. Sandy layer, with plant remains, at depth 4.5 m, assoc. with top of 8 to 10-m alluvial facies of Karginskoye (?) period; this facies was deposited on Zyryanka glacial and fluvial-glacial deposits. Layer disturbed by frost, believed related to beginning of Sartanskoye cooling. Coll. 1962 by N. V. Kind and S. L. Troitskiy.

**Bol'shoy Shar sub-series, Yenisey River, Krasnoyarsk Krai**

**GIN-100. Bol'shoy Shar** [28,250 B.C.]

Plant remains from II, 30-m terrace of Yenisey R. opposite mouth of Bol'shoy Shar channel [unlocated: between 65° and 69° N Lat (D.B.S.)]. From alluvium with plant remains, at depth 17 m, overlain and underlain by varved clays from peri-glacial lake at edge of Zyryanka glacier, at time of maximum S advance. Samples GIN-100, 100a, and 110 coll. 1962 by N. V. Kind and S. L. Troitskiy.

**GIN-100a. Bol'shoy Shar** [32,850 B.C.]

Humus extracted from sample GIN-100. Closeness of dates of samples GIN-100a and 110, and discrepancy with GIN-100, point to contamination of GIN-100 with younger carbon.
GIN-100. Bol’shoy Shar

Plant remains from same locality as GIN-100; depth, 18 m.

GIN-61. Nizhnaya Tunguska R., Krasnoyarsk Krai


Upper Yenisey Paleo-Mesolithic series

GIN-117. Afontova Gora II site, Krasnoyarsk Krai


Upper Yenisey Paleo-Mesolithic series (cont’d.)

GIN-91. Kokorevo I site


GIN-90. Kokorevo II site


Angara River Paleo-Mesolithic series

GIN-96. Ust’-Belaya site, Irkutsk Oblast

Fossil bone from multi-stratum campsite, Ust’-Belaya [52° 55’ N Lat, 103° 35’ E Long], III-IV cultural horizons; I terrace above flood plain of Belaya R., 800 m above confluence with Angara R. Alluvial

**GIN-97. Mal'ta site, Irkutsk Oblast**

Fossil bones from campsite at Mal'ta village [52° 52' N Lat, 103° 25' E Long], Irkutsk Oblast. III terrace above flood plain of Belaya R. Sample taken at depth 1.05 m from lower cultural stratum which lies in loess-like loam, overlapping surface of alluvium. Inferred geologic age: last Interstadial of Zyryanka Glaciation. Archaeologic age: early Siberian Paleolithic. Coll. 1963 by E. L. Ravskiy, Geol. Inst., Acad. of Sci., USSR.

**GIN-103. Malaya Anyuy River, Yakut ASSR**

Wood from Malaya Anyuy R., 22 km above Anyuysk village [68° 20' N Lat, 161° 30' E Long], E part of Kolyma lowland. Fragment of log of *Larix dahurica* from lacustrine-alluvial layer containing also *Pinus pumila*. Inferred geologic age: Karginskoye [Paudorf Interstadial (?)]. Coll. 1963 by A. V. Sher.

**Avacha Volcano series**

**GIN-122. Avacha Volcano, Kamchatka**

Charred wood from dike of agglomerate, Avacha Volcano, Kamchatka [53° 20' N Lat, 158° 40' E Long].

**GIN-118. Zhirovaya, Kamchatka**

CO₂. Zhirovaya, Lower Zhirovaya springs, Kamchatka [unlocated; near Avacha Volcano]. Presence of contemporary “living” carbon was shown: value of C¹⁴ shown is in relation to 0.95 × NBS oxalic acid.

Comment: nuclear fallout appears to be contaminant. (Ed.)

**Kunashiri Island series, Kurile Islands, Sakhalin Oblast**

**GIN-124a. Kunashiri Island**

Wood from base of pyroclastic layer from Kunashiri Is. [ca. 44° 00’ N Lat, 145° 40’ E Long], Kurile Islands. Sample not pretreated with alkali and acid.

**GIN-124b. Kunashiri Island**

Control sample of wood at same locality as GIN-124a. Subjected to usual chemical treatment. Difference between 2 dates is within statistical tolerances.

REFERENCES appear on p. 443.