## TARTU RADIOCARBON DATES XIII

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### INTRODUCTION

This date list reports dates of archaeological samples of Mesolithic and Neolithic sites of Estonia, Latvia and Lithuania. We use liquid scintillation counting at the Geochemical and Statistical Laboratory of the Institute of Zoology and Botany, Estonian Academy of Sciences. Our modern standard is benzene enriched in <sup>14</sup>C and its activity is checked with an NBS oxalic acid standard sample. Dates are given in conventional <sup>14</sup>C years, based on the Libby half-life of 5570 ± 30 yr. AD 1950 is the reference year. Errors are based on one standard deviation calculated from count rates.

## LATVIA

### Lubana lowland sites series

The Lubāna lowland is in eastern Latvia, 200 km east of Riga. Samples were collected by I. Loze and A. Liiva. Geomorphological and geological studies were made by G. Eberhards. Archaeological excavations of the Piestina site were conducted by I. Loze and F. Zagorskis.

Early Mesolithic

TA-1317. Sūlagals	9575 ± 80
Wood from depth 116–126 cm.	
Middle Mesolithic	
TA-1611. Zvidze	7240 ± 100
Wood from depth 190–198 cm.	
TA-857. Zvidze	7370 ± 90
Peat with charcoal, wood and nutshells from depth 166–170 cm.	
Late Mesolithic	
TA-1612. Zvidze	6610 ± 80
Wood from depth 170–190 cm.	

TA-1607. Zvidze	6630 ± 80
Wooden pole from depth 170-180 cm.	
TA-856. Zvidze	6770 ± 60
Charcoal from depth 90–120 cm.	
TA-861. Zvidze	6780 ± 60
Wood from depth 130 cm.	
TA-851. Zvidze	7020 ± 60
Charcoal from depth 160–180 cm.	
TA-864. Zvidze	7020 ± 60
Wood from depth 155 cm.	
TA-1632. Zvidze	7060 ± 80
Wood from depth 180–190 cm.	
TA-863. Zvidze	7110 ± 60
Peat from depth 150 cm.	
TA-1820. Osa	6710 ± 80
Wood from depth 130–160 cm.	
Early Neolithic	
TA-1594. Zvidze	5440 ± 80
Wood from depth 108–120 cm.	
TA-1818. Zvidze	5770 ± 60
Wood from depth 140–150 cm.	
TA-1819. Zvidze	5870 ± 60
Charcoal from depth 140–150 cm.	
TA-1608. Zvidze	6110 ± 80
Wood from depth 135-140 cm.	
TA-1592. Zvidze	6170 ± 70
Wood from depth 120–125 cm.	

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TA-1593. Zvidze	62	210 ± 80
Charcoal from depth 125–135 cm.		
TA-1609. Zvidze	62	210 ± 80
Wood from depth 140–150 cm.		
TA-883. Zvidze	62	260 ± 60
Wood from depth 112 cm.		
TA-852. Zvidze	63	315 ± 60
Charcoal from depth 75–85 cm.		
TA-862. Zvidze	65	535 ± 60
Wooden pole from depth 140 cm.		
TA-395. Zvejsalas	49	905 ± 70
Wood from depth 90–100 cm.		
Middle Neolithic		
TA-675. Zvidze	43	870 ± 80
Wood from depth 53 cm.		
TA-674. Zvidze	45	540 ± 60
Wood from depth 60 cm.		
TA-2253. Nainiekste	42	270 ± 60
Peat from depth 30–35 cm.		
TA-2254. Nainiekste	44	70 ± 60
Peat from depth 35–40 cm.		
TA-2255. Nainiekste	49	960 ± 90
Peat from depth 35–40 cm.		
TA-2251. Piestina	410	0 ± 100
Peat from depth 30–45 cm.		
TA-2252. Piestina	44	190 ± 60
Peat from depth 50-60 cm.		

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TA-382. Lagaža	3640 ± 70
Wooden pole from depth 75–95 cm.	
TA-396. Lagaža	3640 ± 70
Wooden pole from depth 75–95 cm.	
TA-749. Lagaža	3685 ± 80
Wooden pole from depth 80–100 cm.	
TA-394. Abora I	3770 ± 60
Wooden pole from depth 98 cm.	
TA-2145. Abora I	$4250 \pm 100$
Charcoal from depth 54–74 cm.	
TA-2144. Abora I	4490 ± 80
Charcoal from depth 90–115 cm.	
TA-2143. Iča	4120 ± 90
Wooden pole from depth 95 cm.	
TA-2249. Iča	4260 ± 70
Wood from depth 90 cm.	
TA-2247. Iča	4390 ± 80
Wood from depth 90–95 cm.	
TA-2248. Iča	4420 ± 80
Wood from depth 85–90 cm.	
TA-2250. Eini	4735 ± 60
Peat from depth 90–105 cm.	

#### **Zvidze site series**

The Zvidze habitation site is located in the western part of the Lake Lubāna hollow, northwest of the lake, on the edge of a wavy moraine leading into the Lubāna peaty hollow. The area is filled with lake deposits and covered with peat. Lake clay covers eroded areas of lake terraces and is gradually replaced by aleurites and sand. Overlying the clay are 1.3 to 1.5-m-thick yellow and gray sapropels. The site was investigated in 1973–1975 and 1981–1984. Samples were collected in 1982 by I. Loze and M. Ruša. G. Eberhards studied the geomorphology and I. Jakubovska and V. Stelle the palynology of the site.

TA-2033. Zvidze	4580 ± 80
Peat from depth 35–40 cm. Pollen Zone SB2.	
TA-1802. Zvidze.	4430 ± 50
Peat from depth 40-45 cm. Pollen Zone SB2.	
TA-1801. Zvidze	4750± 60
Peat from depth 50–55 cm. Pollen Zone SB1.	
TA-1800. Zvidze	5320 ± 50
Peat from depth 70–75 cm. Pollen Zone AT2.	
TA-1799. Zvidze	5510 ± 70
Peat from depth 75-80 cm. Pollen Zone AT2.	
TA-1798. Zvidze	6050 ± 100
Peat from depth 100–105 cm. Pollen Zone AT2.	
TA-1782. Zvidze	5990 ± 60
Peat from depth 115–120 cm. Pollen Zone AT2.	
TA-1746. Zvidze	635 <u>0</u> ± 60
Peat from depth 130–135 cm. Pollen Zone AT2.	
TA-1745. Zvidze	7480 ± 80
Peat with charcoal from depth 140–145 cm. Pollen Zone AT1.	
TA-1723. Zvidze	7180 ± 100
Sapropel from depth 145–147 cm. Pollen Zone AT1.	
TA-1722. Zvidze	7650 ± 100
Sapropel from depth 150–155 cm. Pollen Zone BO2.	

## **ESTONIA**

# Kääpa site series

The Kääpa habitation site is located on the left bank of the Vihandu River. The 50-cm-thick cultural level was at a depth of 160 cm in peat. The habitation site was investigated in 1959 and 1962.

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TA-747. Kääpa	3460 ± 80
Wood from depth 80 cm.	
TA-815. Kääpa	4640 ± 100
Peat from depth 40–48 cm.	
TA-724. Kääpa	4740 ± 60
Wood from depth 160–210 cm.	
TA-748. Kääpa	4760 ± 80
Wood from depth 60–65 cm.	

#### LITHUANIA

The Šventoji 1A and 1B habitation sites are located in northwestern Lithuania, at the lagoon of the Baltic Sea, 10 km north of Palanga. They were investigated by R. Rimantiene in 1966–1972.

TA-246. Šventoji 1A	4120 ± 80
TA-247. Šventoji 1B	4400 ± 90

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