STOCKHOLM NATURAL RADIOCARBON MEASUREMENTS VII

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This paper is a direct continuation of Stockholm VI. The bone samples analyzed and published in this list are treated according to a method, modified (Sellstedt, Engstrand and Gejvall, 1966) and described by Berger, Horney and Libby (1964).

ACKNOWLEDGMENTS

I am indebted to all the staff at the laboratory and especially to Mrs. Ingrid Almstedt for her excellent handling of the routine work; Mr. Sandor Vaczy for good electronic and chemical service, and keeping the equipment in continuous operation. I also want to thank Mrs. Britt-Marie Lindkvist and Miss Kristina Dietmann for their secretarial work.

SAMPLE DESCRIPTIONS

I. GEOLOGIC SAMPLES

A. Sweden

Dry fir series

Continued from Stockholm II and VI. Coll. and subm. by Jan Lundqvist, Geol. Survey of Sweden, Stockholm.

St-1579. Ö. Bunneran 64:I **8295 ± 100**
6345 B.C.

From 63° 12' N Lat, 12° 34' E Long, alt 810 m.

St-1577. Tivoli 64:II **4685 ± 75**
2735 B.C.

From 63° 11' N Lat, 12° 24' E Long, alt 800 m.

St-1920. Glensvalen **3385 ± 70**
1435 B.C.

From 63° 03' N Lat, 13° 39' E Long, alt 810 m.

St-1929. Båktjenjaure **6310 ± 90**
4360 B.C.

From 63° 58' N Lat, 13° 40' E Long, alt 700 m.

St-1642. Kärrnäset **295 ± 65**
A.D. 1655

High-molecular, greasy organic material found deep in glaciofluvial esker at Kärrnäset (63° 57' N Lat, 15° 13' E Long), Jämtland. Subm. by Jan Lundqvist.

Jämtland peat series

Dating of peat and pollen-analytical levels in county of Jämtland. Samples indicated with "T" are only dried before preparation. The

others are pretreated with 2% NaOH solution and HCl solution. Coll. and subm. by Jan Lundqvist.

Fånnekölen (61° 47' N Lat, 13° 29' E Long)

St-1643. Fånnekölen 1 **< 250**

20 to 25 cm below surface. Picea max., Pinus min., von Post's level a.

St-1645. Fånnekölen 3 **1315 ± 65**
A.D. 635

40 to 45 cm below surface.

St-1644. Fånnekölen 2 **5945 ± 80**
3995 B.C.

70 to 75 cm below surface. Picea max., Pinus decrease, von Post's level b.

St-1662. Fånnekölen 5 **8500 ± 110**
6550 B.C.

90 to 95 cm below surface. Betula max.

St-1646. Fånnekölen 4 **7605 ± 90**
5655 B.C.

115 to 120 cm below surface. Beginning of peat growth.

Tönningfloarna (62° 13' N Lat, 15° 07' E Long), Jämtland

St-1670. Tönningfloarna 1 **1865 ± 70**
A.D. 85

50 cm below surface. Possibly von Post's level b.

St-1671. Tönningfloarna 2 **3905 ± 90**
1955 B.C.

110 cm below surface.

St-1672. Tönningfloarna 3 **4360 ± 80**
2410 B.C.

125 cm below surface. No. 2 or 3 represents P_o.

St-1673. Tönningfloarna 4 **7125 ± 160**
5175 B.C.

360 cm below surface. Probably A_o, possibly C_o level.

St-1674. Tönningfloarna 5 **8120 ± 110**
6170 B.C.

375 cm below surface. Beginning of ooze accumulation.

Malmfloten (62° 06' N Lat, 13° 22' E Long)

St-1758. Malmfloten 1 **< 250**

35 cm below surface. Von Post's level b.

	740 ± 65
St-1759. Malmfloten 2	A.D. 1210
75 cm below surface. Picea max.	
	2495 ± 130
St-1760. Malmfloten 3	545 B.C.
170 cm below surface. Possibly P _o .	
	2530 ± 95
St-1761. Malmfloten 4	580 B.C.
205 cm below surface. Possibly P _o .	
	4485 ± 65
St-1762. Malmfloten 5	2535 B.C.
280 cm below surface. Von Post's level d.	
	5650 ± 220
St-1764. Malmfloten 6	3700 B.C.
	6670 ± 400
St-1764 B. Malmfloten 6	4720 B.C.
340 cm below surface. Beginning of peat growth. St-1764 B pretreated with 2% NaOH solution. St-1764 and St-1764 B diluted with "dead" CO ₂ .	
Sjöarmyren (61° 46' N Lat, 14° 11' E Long)	
St-1765. Sjöarmyren 1	< 250
St-1765 B. Sjöarmyren 1	< 250
40 cm below surface. Von Post's level b. St-1765 B pretreated with 2% NaOH solution.	
	1535 ± 75
St-1767 B. Sjöarmyren 2	A.D. 415
65 cm below surface. Picea max. Pretreated with 2% NaOH solution.	
	2080 ± 65
St-1766. Sjöarmyren 3	130 B.C.
	2130 ± 100
St-1766 B. Sjöarmyren 3	180 B.C.
90 cm below surface. P _o . St-1766 B pretreated with 2% NaOH solution.	
	8095 ± 245
St-1768. Sjöarmyren 4	6145 B.C.
285 cm below surface. Beginning of peat growth.	
S. Mjölstötmyren (62° 13' N Lat, 12° 56' E Long)	
	765 ± 80
St-1769. S. Mjölstötmyren 1	A.D. 1185

St-1769 B. S. Mjölstötmyren 1	1420 ± 120 A.D. 530
35 cm below surface. Von Post's level b. St-1769 B pretreated with 2% NaOH solution.	
St-1770. S. Mjölstötmyren 2	2460 ± 60 510 B.C.
St-1770 B. S. Mjölstötmyren 2	2605 ± 90 655 B.C.
65 cm below surface. P _o . St-1770 B pretreated with 2% NaOH solution.	
St-1771. S. Mjölstötmyren 3	5845 ± 75 3895 B.C.
St-1771 B. S. Mjölstötmyren 3	6575 ± 410 4625 B.C.
230 cm below surface. Betula max. St-1771 B pretreated with 2% NaOH solution, then diluted with "dead" CO ₂ .	
St-1774. S. Mjölstötmyren 4 T	9180 ± 200 7230 B.C.
St-1775. S. Mjölstötmyren 4	9510 ± 210 7560 B.C.
355 cm below surface. A _o .	
St-1772. S. Mjölstötmyren 5	9725 ± 100 7775 B.C.
360 cm below surface. Beginning of peat growth.	
Funäsmýren (62° 35' N Lat, 12° 33' E Long)	
St-1905. Funäsmýren 1 T	2015 ± 65 65 B.C.
St-1982. Funäsmýren 1	1935 ± 75 A.D. 15
65 cm below surface. P _o .	
St-1906. Funäsmýren 2 T	2450 ± 100 500 B.C.
St-1983. Funäsmýren 2	2310 ± 70 360 B.C.
80 cm below surface. P _o .	
St-1907. Funäsmýren 3 T	2910 ± 80 960 B.C.
St-1984. Funäsmýren 3	2450 ± 65 500 B.C.
100 cm below surface. Betula max.	

St-1908. Funäsmýren 4 T	7670 ± 110 5720 B.C.
St-1985. Funäsmýren 4 195 cm below surface. Beginning of peat growth.	7320 ± 100 5370 B.C.
Flatrumýren (62° 44' N Lat, 12° 46' E Long)	
St-1910. Flatrumýren 1 T	2630 ± 75 680 B.C.
St-1986. Flatrumýren 1 65 cm below surface. P _o .	2440 ± 70 490 B.C.
St-1911. Flatrumýren 2 T	4360 ± 80 2410 B.C.
St-1987. Flatrumýren 2 160 cm below surface. Betula max.	4375 ± 110 2425 B.C.
St-1912. Flatrumýren 3 T	7105 ± 105 5155 B.C.
St-1989. Flatrumýren 3 235 cm below surface. Beginning of peat growth.	7260 ± 135 5310 B.C.
Henvålsmyren (62° 43' N Lat, 13° 27' E Long)	
St-1913. Henvålsmyren 1 T	< 250
St-1988. Henvålsmyren 1 25 cm below surface. Von Post's level b.	< 250
St-1914. Henvålsmyren 2 T	3400 ± 80 1450 B.C.
St-1990. Henvålsmyren 2 60 cm below surface. P _o .	2450 ± 75 500 B.C.
St-1915. Henvålsmyren 3 T	6380 ± 100 4430 B.C.
St-1991. Henvålsmyren 3 90 cm below surface. Betula max.	5830 ± 80 3880 B.C.
St-1917. Henvålsmyren 4 T	8160 ± 110 6210 B.C.
St-1992. Henvålsmyren 4 110 cm below surface. Beginning of peat growth.	8205 ± 170 6255 B.C.

Vattenfloen (62° 21' N Lat, 12° 41' E Long)

St-1933. Vattenfloen 1 T	1865 ± 70 A.D. 85
St-1993. Vattenfloen 1 40 cm below surface. P _o .	1985 ± 70 35 B.C.
St-1934. Vattenfloen 2 T 135 cm below surface. Betula max.	5285 ± 110 3335 B.C.
St-1935. Vattenfloen 3 T	7690 ± 100 5740 B.C.
St-1994. Vattenfloen 3 195 cm below surface. A _o .	8010 ± 100 6060 B.C.
St-1936. Vattenfloen 4 T	8075 ± 100 6125 B.C.
St-1995. Vattenfloen 4 200 cm below surface. Beginning of peat growth.	8275 ± 100 6325 B.C.

Stockbergsmymren (62° 44' N Lat, 14° 32' E Long)

St-1943. Stockbergsmymren 1 T	430 ± 70 A.D. 1520
St-2008. Stockbergsmymren 1 35 cm below surface. Von Post's level a.	445 ± 65 A.D. 1505
St-1937. Stockbergsmymren 2 T 85 cm below surface P _o .	2440 ± 75 490 B.C.
St-1938. Stockbergsmymren 3 T 170 cm below surface. Von Post's level d(?). Betula max.	4830 ± 80 2880 B.C.
St-1939. Stockbergsmymren 4 T	6310 ± 100 4360 B.C.
St-2001. Stockbergsmymren 4 220 cm below surface. Betula increase/Pinus decrease. Beginning of QM curve.	6255 ± 90 4305 B.C.
St-1940. Stockbergsmymren 5 T	8365 ± 100 6415 B.C.
St-2000. Stockbergsmymren 5 285 cm below surface. A _o .	8595 ± 180 6645 B.C.

St-1941. Stockbergsmymren 6 T	8340 ± 120
	6390 B.C.
	9055 ± 180
St-2002. Stockbergsmymren 6 315 cm below surface. Mountain heath vegetation ends.	7105 B.C.
	8835 ± 105
St-1942. Stockbergsmymren 7 T	6885 B.C.
	9280 ± 170
	7330 B.C.
St-2009. Stockbergsmymren 7 340 cm below surface. Beginning of peat growth.	
Docksmymren (62° 56' N Lat, 15° 44' E Long)	
St-1944. Docksmymren 1 T	1035 ± 70
	A.D. 915
	1000 ± 70
St-2035. Docksmymren 1 65 cm below surface. Von Post's level a.	A.D. 950
St-1945. Docksmymren 2 T	2730 ± 75
	1780 B.C.
	2410 ± 75
St-2026. Docksmymren 2 150 cm below surface. P _o .	460 B.C.
St-1946. Docksmymren 3 T	5930 ± 80
	3980 B.C.
	6170 ± 80
St-2036. Docksmymren 3 315 cm below surface. Von Post's level d.	4220 B.C.
St-1948. Docksmymren 4 T	6540 ± 90
	4590 B.C.
	5845 ± 80
St-2027. Docksmymren 4 330 cm below surface. Beginning of QM curve.	3895 B.C.
St-1949. Docksmymren 5 T	7200 ± 100
	5250 B.C.
	7775 ± 185
St-2037. Docksmymren 5 350 cm below surface. Beginning of peat growth.	5825 B.C.
Varggransmymren (62° 28' N Lat, 14° 00' E Long)	
St-1955. Varggransmymren 1 T	< 250
St-2041. Varggransmymren 1	< 250
30 cm below surface. Picea max., von Post's level a?	

St-1956. Varggransmyren 2 T	2120 ± 70 170 B.C.
St-2051. Varggransmyren 2 70 cm below surface. P _o .	2175 ± 75 225 B.C.
St-2126. Varggransmyren 4 125 cm below surface.	4515 ± 80 2565 B.C.
St-1957. Varggransmyren 3 T 130 cm below surface. Beginning of peat growth.	5010 ± 120 3060 B.C.
Myssjö Storflo (63° 55' N Lat, 14° 08' E Long)	
St-1963. Myssjö Storflo 1 T	< 250
St-2053. Myssjö Storflo 1 25 cm below surface. Von Post's level b.	< 250
St-1964. Myssjö Storflo 2 T	1635 ± 75 A.D. 315
St-2054. Myssjö Storflo 2 60 cm below surface. P _o .	1725 ± 70 A.D. 225
St-2058. Myssjö Storflo 7 65 cm below surface.	2355 ± 70 405 B.C.
St-2060. Myssjö Storflo 8 80 cm below surface.	2795 ± 70 845 B.C.
St-1965. Myssjö Storflo 3 T	3500 ± 70 1550 B.C.
St-2055. Myssjö Storflo 3 95 cm below surface. Zone boundary III/IV.	3425 ± 100 1475 B.C.
St-2061. Myssjö Storflo 9 110 cm below surface.	4310 ± 70 2360 B.C.
St-1966. Myssjö Storflo 4 T 120 cm below surface. Picea max.	2505 ± 80 555 B.C.
St-2062. Myssjö Storflo 10 130 cm below surface.	3920 ± 75 1970 B.C.

St-1967. Myssjö Storflo 5 T	5330 ± 80
	3380 B.C.
St-2049. Myssjö Storflo 5 155 cm below surface. Von Post's level d.	5865 ± 90
	3915 B.C.
St-1968. Myssjö Storflo 6 T	7710 ± 100
	5760 B.C.
St-2056. Myssjö Storflo 6 190 cm below surface. Beginning of peat growth.	8010 ± 100
	6060 B.C.
Bjurälvmossen (64° 55' N Lat, 14° 09' E Long)	
St-2097. Bjurälvmossen 1 T	2330 ± 75
	380 B.C.
St-2090. Bjurälvmossen 1 90 cm below surface. P _o .	2320 ± 75
	370 B.C.
St-2091. Bjurälvmossen 2 145 cm below surface. Change from Alnus to Betula domain. Beginning of peat growth.	4790 ± 75
	2840 B.C.
Laxsjömyren (63° 49' N Lat, 14° 51' E Long)	
St-2098. Laxsjömyren 1 75 cm below surface P _o .	2495 ± 75
	545 B.C.
St-2099. Laxsjömyren 2 110 cm below surface. Betula max.	4950 ± 80
	3000 B.C.
St-2101. Laxsjömyren 3 220 cm below surface. Beginning of peat growth.	7340 ± 100
	5390 B.C.
Hallvikenmyren (63° 44' N Lat, 15° 33' E Long)	
St-2076. Hallviken 1 T	1305 ± 70
	A.D. 645
St-2074. Hallviken 1 65 cm below surface. Picea max., von Post's level b.	1240 ± 65
	A.D. 710
St-2071. Hallviken 2 T	2485 ± 90
	535 B.C.
St-2075. Hallviken 2 130 cm below surface P _o .	2615 ± 100
	665 B.C.

St-2079. Hallviken 3	5410 ± 130 3460 B.C.
265 cm below surface. <i>Betula</i> max., von Post's level d?	
St-2070. Hallviken 4 T	6650 ± 80 4700 B.C.
St-2081. Hallviken 4	7320 ± 145 5370 B.C.
300 cm below surface. U _o and C _o .	
St-2073. Hallviken 5 T	7420 ± 150 5470 B.C.
St-2086. Hallviken 5	7920 ± 160 5970 B.C.
340 cm below surface. <i>Betula</i> max., von Post's level d?	
St-2072. Hallviken 6 T	8665 ± 230 6715 B.C.
St-2080. Hallviken 6	8275 ± 140 6325 B.C.
395 cm below surface. A _o .	
St-2083. Hallviken 7	9860 ± 115 7910 B.C.
405 cm below surface. Beginning of organic sedimentation.	
Predikmyren (64° 58' N Lat, 14° 08' E Long)	
St-2096. Predikmyren 1 T	1450 ± 70 A.D. 500
St-2094. Predikmyren 1	1210 ± 65 A.D. 740
25 cm below surface. <i>Picea</i> rise. (P _o ?)	
St-2095. Predikmyren 2 T	3240 ± 75 1290 B.C.
St-2092. Predikmyren 2	2945 ± 75 995 B.C.
60 cm below surface. P _o .	
St-2093. Predikmyren 3	6685 ± 75 4735 B.C.
140 cm below surface. Beginning of peat growth.	
Lidsjömyren (64° 19' N Lat, 15° 14' E Long)	
St-2102. Lidsjömyren 1	2395 ± 75 445 B.C.
150 cm below surface. P _o .	

St-2103. Lidsjömyren 2 **4630 ± 80**
2680 B.C.
225 cm below surface. *Betula* max.

St-2104. Lidsjömyren 3 **8525 ± 100**
6575 B.C.
305 cm below surface. *A.*_o.

St-2085. Lidsjömyren 4 **9620 ± 180**
7670 B.C.
315 cm below surface. Beginning of peat growth.

St-2082. Lidsjömyren 5 T **8500 ± 100**
6550 B.C.
545 cm below surface. Beginning of mud sedimentation.

Åflon (63° 28' N Lat, 13° 50' E Long)

St-2127. Åflon 1 **2120 ± 65**
170 B.C.
110 cm below surface. *P.*_o.

St-2125. Åflon 2 **4530 ± 75**
2580 B.C.
270 cm below surface. *Betula* max.

St-2129. Åflon 3 **5795 ± 135**
3845 B.C.
365 cm below surface. *T.*_o.

St-2130. Åflon 4 **6725 ± 90**
4775 B.C.
405 cm below surface. *Betula* max.

St-2131. Åflon 5 **6760 ± 100**
4810 B.C.
425 cm below surface. *QM.*_o.

The West Coast—Kattegatt series

Peat, "pitchy soil," mud (with various amount of clay and detritus) and shell from Swedish West Coast between Marstrand and Kullen (58° to 56° N Lat), and Kattegatt Sea between Sweden and Denmark (10.5° to 12.5° E Long). Dated in order to connect shorelines and date shore level displacement on Swedish West Coast and in Kattegatt Sea during Late Glacial and Postglacial time. Coll. and subm. by Nils-Axel Mörner, Dept. of Quaternary Geology, Univ. of Stockholm.

St-2168. B 579 **11,235 ± 235**
9285 B.C.
Clayey mud.

St-2163. B 574:I **11,170 ± 240**
9220 B.C.
Mud/clay.

St-2164. B 574:II Mud, clayey.	10,225 ± 120 8275 B.C.
St-2165. B 574:III Mud.	9970 ± 160 8020 B.C.
St-2003. B 432 Detritus mud.	10,400 ± 220 8450 B.C.
St-2006. B 437 Detritus mud.	8120 ± 210 6170 B.C.
St-2167. B 551 Mud.	7525 ± 180 5575 B.C.
St-2175. B 557 Mud.	9725 ± 115 7775 B.C.
St-2166. B 566 Muddy clay.	4210 ± 130 2260 B.C.
St-2203. B 583:I <i>Macoma calcarea.</i>	7200 ± 130 5250 B.C.
St-2204. B 583:II <i>Balanus hameri.</i>	11,565 ± 150 9615 B.C.
St-2176. B 583:III Mud/fine sand/"pitchy soil" (Swed: beckjordsartad mogyttja).	1985 ± 115 35 B.C.
St-2010. B 427:II Mud.	10,000 ± 330 8050 B.C.
St-2005. B 438:II Coarse-detritus mud.	10,285 ± 120 8335 B.C.
St-2170. B 441:II Clayey mud.	9780 ± 200 7830 B.C.
St-1707. B 1561 Mud.	9400 ± 450 7450 B.C.

St-1710. B 3 Fine (coarse) detritus mud.	9700 ± 120 7750 B.C.
St-2004. B 441:I Coarse detritus mud.	9280 ± 130 7330 B.C.
St-1698. B 171 Coarse detritus mud (Erioph., Phragm.).	9155 ± 120 7205 B.C.
St-1816. B 145:N+L Black peat—"pitchy soil."	9435 ± 180 7485 B.C.
St-1814. B 145:N(R) Dark peat.	9280 ± 300 7330 B.C.
St-1817. B 143:H "Pitchy soil" and mud.	9130 ± 120 7180 B.C.
St-1813. B 143:H(R) Mud—clayey mud.	9230 ± 500 7280 B.C.
St-2169. B 501 Dy.	9280 ± 125 7330 B.C.
St-2211. B 286 Dy and shells.	3255 ± 80 1305 B.C.
St-2206. B 287 <i>Littorina</i> sp. and shell fragments.	8735 ± 105 6785 B.C.
St-2171. B 502 Wood and dy-peat.	10,820 ± 200 8870 B.C.
St-2174. B 504 Wood and dy-peat.	9725 ± 200 7775 B.C.
St-1820. B 176:I Peat.	7565 ± 110 5615 B.C.
St-2172. B 176:II Brushwood peat.	8010 ± 100 6060 B.C.

St-2007. B 450 Coarse detritus mud, clayey.	7400 ± 100 5450 B.C.
St-2011. B 438:I Coarse detritus mud.	7565 ± 160 5615 B.C.
St-2012. B 427:I Black peat.	8595 ± 100 6645 B.C.
St-1818. B 268:I "Pitchy soil."	7220 ± 150 5270 B.C.
St-2177. B 268:II Peat.	6855 ± 90 4905 B.C.
St-1711. B 228:I Clayey, muddy peat (bushwood peat).	6520 ± 105 4570 B.C.
St-1815. B 228:II Peat (bushwood peat).	3005 ± 80 1055 B.C.
St-2214. B 228:III Peat (bushwood peat).	5780 ± 95 3830 B.C.
St-1819. B 220 "Pitchy soil."	6430 ± 140 4480 B.C.
St-2173. B 552 Humus layer in sand.	2100 ± 75 150 B.C.
St-2158. B 325 Peat.	1985 ± 70 35 B.C.

Rya series

Clay and peat from Rya (57° 33' N Lat, 12° 25' E Long), valley of Lygnern River, Västergötland. Investigation made to date different shorelines. Coll. and subm. by G. Ljunggren-Smedman, Dept. of Quaternary Geology, Univ. of Stockholm.

St-1891. Rya 1:40 Clay 40 cm below surface.	5025 ± 80 3075 B.C.
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St-1890. Rya 1:80	5680 ± 125
Clay 80 cm below surface.	3730 B.C.
St-1892. Rya 1:260	8365 ± 260
Peat 260 cm below surface.	6415 B.C.
St-1894. Rya 1:284	8905 ± 170
Clay 284 cm below surface.	6955 B.C.

Skede mosse series

Continued from Stockholm VI. Location: Skede mosse (56° 05' N Lat, 16° 45' E Long), Gärdslösa parish, Öland. Coll. and subm. by L. K. Königsson, Dept. of Quaternary Geology, Univ. of Uppsala, Uppsala.

St-1821. 2 G	1780 ± 75
	A.D. 170
St-1822. 6 G	4530 ± 100
	2580 B.C.
St-1823. 3 G	9080 ± 145
	7130 B.C.
St-1824. 8 G	9030 ± 120
	7080 B.C.
St-1825. 11 G	2935 ± 100
	985 B.C.
St-1826. 12 G	3520 ± 70
	1570 B.C.
St-1827. 16 G	3700 ± 100
	1750 B.C.
St-1828. 17 G	4025 ± 100
	2075 B.C.
St-1829. 18 G	3890 ± 80
	1940 B.C.
St-1830. 19 G	3855 ± 95
	1905 B.C.
St-1832. VIII:1 G	8970 ± 155
	7020 B.C.
St-1833. VIII:2 G	9055 ± 140
	7105 B.C.

Viskadalen series

Clay and wood from terraces of the river Viskan (57° 26' N Lat, 12° 32' E Long), Viskan, Västergötland. Dating of terraces and different

deltas. Coll. and subm. by Stig Widell, Dept. of Quaternary Geology, Univ. of Stockholm.

St-2038. B.P. 11:50-160	9915 ± 130
Clay, 150 to 160 cm below surface.	7965 B.C.
St-1899. B.P. 11:240-260	9330 ± 110
Wood, 240 to 260 cm below surface.	7380 B.C.
St-2021. B.P. 11:300-320	10,400 ± 120
Clay, 300 to 320 cm below surface.	8450 B.C.
St-1897. B.P. 4:150-160	3180 ± 75
Wood, 150 to 160 cm below surface.	1230 B.C.
St-2028. B.P. 4:250-260	5055 ± 80
Clay, 250 to 260 cm below surface.	3105 B.C.
St-1895. B.P. 8:480-490	3460 ± 105
Clay, 480 to 490 cm below surface.	1510 B.C.
St-1896. B.P. 6:440-450	3750 ± 70
Wood, 440 to 450 cm below surface.	1800 B.C.
St-1900. B.P. 1:450-460	4405 ± 80
Wood, 450 to 460 cm below surface.	2455 B.C.

Nyhem series

Peat covered by eolian sand from Nyhem (56° 40' N Lat, 14° 54' E Long), Halmstad, Halland. Subm. by E. Mohrén, Geol. Survey of Sweden. Coll. from soil surface +7 m above sealevel; on fine marine sand on flat plain below Littorina shoreline (+12 m), in remains of Phragmites peat ca. 0.75 m thick. Marine sand and peat have been pollen-analyzed.

St-1748. 48-51	2450 ± 65
Fen peat with alder, willow etc.	500 B.C.
St-1749. 86-91	2990 ± 120
Lowest of the peat, representing isolation of lagoon swamps from sea.	1040 B.C.
St-1684. Handöl	3710 ± 80
Peat from Handöl (63° N Lat, 24° E Long), Jämtland. Subm. by C. G. Wenner, Dept. of Quaternary Geology, Univ. of Stockholm.	1760 B.C.

Slåboda mosse series

Sphagnum peat from Slåboda (59° 09' N Lat, 18° 00' E Long), Västerhaninge, Södermanland. Coll. by Carl Larsson; subm. by Hans Möller, Geol. Survey of Sweden, Stockholm.

St-2067. Slåboda 2 **1430 ± 75**
A.D. 520
 165 to 170 cm below surface.

St-2069. Slåboda 3 **1145 ± 65**
A.D. 805
 155 to 160 cm below surface.

Tornbergasjön series

Clayey mud from moor at lake Tornbergasjön (59° 08' N Lat, 18° 05' E Long), Västerhaninge, Södermanland. Coll. by Carl Larsson; subm. by Hans Möller.

St-2040. Tornbergasjön 4 **9155 ± 180**
7205 B.C.
 475 to 480 cm below surface.

St-2039. Tornbergasjön 5 **9005 ± 225**
7055 B.C.
 480 to 490 cm below surface.

Blekinge vegetational history series

To get an absolute chronology for Late Quaternary time in eastern Blekinge several series of gyttja and peat samples were collected and dated. All samples are derived from pollen-analyzed sections in lakes or bogs. Results are discussed more comprehensively by Berglund (1966 a, b), the Hallarums mosse series also by Berglund (1964). Coll. and subm. by B. E. Berglund, Dept. of Quaternary Geology, Univ. of Lund, Lund.

Lösensjön

Gyttja samples from section in the lake of Lösensjön (56° 13' N Lat, 15° 45' E Long), Lösen parish, Blekinge. Samples date Late-Glacial pollen zones. They were cut from core (diam 36 mm) taken by Livingstone sampler. Depth given is that below water level (depth of water 270 cm).

St-1421. Lösensjön 4 **10,520 ± 170**
8570 B.C.
 Muddy clay with mosses, 684 to 688 cm. Dates end of Younger Dryas period, but value is higher than expected.

St-1422. Lösensjön 10 **10,400 ± 250**
8450 B.C.
 Muddy clay, 710 to 1716 cm. Dates beginning of Younger Dryas period.

St-1683. Lösensjön 12-13 **11,300 ± 360**
9350 B.C.

Clay gyttja, 724 to 740 cm. Dates medium of Alleröd period.

St-1423. Lösensjön 16 **11,740 ± 170**
9790 B.C.

Clay gyttja with mosses, 751 to 761 cm. Dates beginning of Alleröd period.

Igelsjön

Clayey algae gyttja from section in the lake of Igelsjön (56° 13' N Lat, 15° 42' E Long), Augerum parish, Blekinge. Dates end of Alleröd period. It is cut from core (diam 36 mm) taken by Livingstone piston sampler. Depth below water level 1015 to 1021 cm (depth of water 505 cm).

St-1420. Igelsjön 34 **10,850 ± 220**
8900 B.C.

Slättmossen

Clay gyttja from section in the bog Slättmossen (56° 09' N Lat, 15° 51' E Long), Jämsjö parish, Blekinge. Samples were cut out from core (diam 60 mm) taken by Livingstone piston sampler. Date the transition Younger Dryas/Pre-Boreal time.

St-1778. Slättmossen 1 **10,170 ± 160**
8220 B.C.

Clay gyttja, 346 to 350 cm below bog surface.

St-1847. Slättmossen 2 **9700 ± 150**
7750 B.C.

Clay gyttja, 362 to 366 cm below bog surface.

Hallarums mosse

Gyttja samples from pollen- and diatom-bearing section in the bog Hallarums mosse (56° 10' N Lat, 15° 51' E Long), Jämsjö parish, Blekinge. In early Postglacial time small lake was in this basin, but in Early Atlantic time Littorina Sea transgressed. At end of Sub-Boreal time basin was again isolated. All samples were cut out from core (diam 60 mm) taken by piston sampler (type Borro). Depth given is that below surface of bog. Age figures of marine samples must be reduced. Correction has been proposed to be ca. 400 yr (Berglund, 1964).

St-1324. Hallarums mosse 15 **4585 ± 70**
2635 B.C.

Marine, slightly clayey fine detritus gyttja, 221 to 224 cm. Early Sub-Boreal time immediately below isolation level.

- St-1325. Hallarums mosse 21** **5040 ± 85**
3090 B.C.
 Marine fine detritus gyttja, 244 to 248 cm. Early Sub-Boreal time.
- St-1326. Hallarums mosse 25** **5665 ± 85**
3715 B.C.
 Marine, clayey fine detritus gyttja, 260 to 264 cm. Dates beginning of Early Sub-Boreal period.
- St-1327. Hallarums mosse 30** **5945 ± 75**
3995 B.C.
 Marine fine detritus gyttja, 280 to 284 cm. Dates end of Late Atlantic period.
- St-1328. Hallarums mosse 34** **6220 ± 85**
4270 B.C.
 Marine fine detritus gyttja, 296 to 300 cm. Dates beginning of Late Atlantic period.
- St-1330. Hallarums mosse 37** **6395 ± 125**
4445 B.C.
 Marine fine detritus gyttja, 308 to 312 cm. Dates very end of Early Atlantic period.
- St-1331. Hallarums mosse 41** **6950 ± 90**
5000 B.C.
 Brackish fine detritus gyttja, 324 to 328 cm. Dates middle of Early Atlantic period and first Littorina transgression in this basin.
- St-1332. Hallarums mosse 44** **7105 ± 90**
5155 B.C.
 Lacustrine coarse detritus gyttja, 336 to 340 cm. From middle of Early Atlantic period immediately before transgression of Littorina Sea in this basin.
- St-1471. Hallarums mosse 50** **7710 ± 150**
5760 B.C.
 Lacustrine, slightly clayey fine detritus gyttja, 360 to 364 cm. Dates transition Boreal/Atlantic.
- St-1333. Hallarums mosse 56** **8140 ± 90**
6190 B.C.
 Lacustrine, slightly clayey fine detritus gyttja, 384 to 388 cm. Dates middle of Late Boreal period.
- St-1472. Hallarums mosse 66** **8665 ± 115**
6715 B.C.
 Lacustrine, clayey fine detritus gyttja, 424 to 428 cm. Dates very beginning of Late Boreal period.
- St-1334. Hallarums mosse 70** **8835 ± 170**
6885 B.C.
 Lacustrine, clayey fine detritus gyttja, 440 to 444 cm. Dates very end of Early Boreal period.

- St-1335. Hallarums mosse 83** **9380 ± 110**
7430 B.C.
 Lacustrine, slightly clayey fine detritus gyttja, 492 to 496 cm. Dates very beginning Early Boreal period.
- St-1679. Hallarums mosse 84** **9380 ± 120**
7430 B.C.
 Lacustrine, slightly clayey fine detritus gyttja, 496 to 500 cm. Dates the transition Pre-Boreal/Boreal.
- St-1680. Hallarums mosse 88-89** **9780 ± 115**
7830 B.C.
 Lacustrine, slightly clayey fine detritus gyttja, 512 to 520 cm. Dates middle of Pre-Boreal period.
- St-1336. Hallarums mosse 95** **10,000 ± 170**
8050 B.C.
 Lacustrine, clayey algae gyttja, 540 to 544 cm. Dates the transition Younger Dryas/Pre-Boreal.
- St-1337. Hallarums mosse 97-98** **10,170 ± 230**
8220 B.C.
 Lacustrine, clayey algae gyttja and muddy clay, 548 to 556 cm. Dates the transition Younger Dryas/Pre-Boreal.

Bäcks mosse

Peat samples from section in the raised bog Bäcks mosse on island of Aspö (56° 06' N Lat, 15° 32' Long), Blekinge. Samples are taken in a dug wall. Depth given is that below surfaces of bog.

- St-1289. Bäcks mosse 125** **2715 ± 80**
765 B.C.
 Highly humified Sphagnum peat, 30 to 34 cm. Dates end of Sub-Boreal time.
- St-1293. Bäcks mosse 131** **4405 ± 80**
2455 B.C.
 Highly humified Sphagnum peat, 52 to 56 cm. Dates middle of Early Sub-Boreal time.
- St-1682. Bäcks mosse 135** **4730 ± 75**
2780 B.C.
 Highly humified Sphagnum peat, 68 to 72 cm. Dates beginning of Early Sub-Boreal time.
- St-1294. Bäcks mosse 138** **5570 ± 85**
3620 B.C.
 Highly humified Sphagnum peat, 80 to 84 cm. Dates end of Late Atlantic time.

Inlängen

Gyttja and peat from section in small bog on island of Inlängen, (56° 04' N Lat, 15° 46' E Long), Torhamn parish, Blekinge. Samples

date land occupation phase during Neolithic time in outer-most archipelago of Blekinge. They also date isolation of basin from Littorina Sea. All samples were cut out from core taken by simple tube sampler. Depth given is that below surface of bog.

St-1404. Inlängen 54 **2705 ± 75**
755 B.C.

Swamp peat, containing gyttja and drift, 70 to 74 cm. Late Sub-Boreal time.

St-1405. Inlängen 56 **3145 ± 65**
1195 B.C.

Lacustrine coarse detritus gyttja, 80 to 85 cm. Dates beginning of Late Sub-Boreal time.

St-1406. Inlängen 59 **3545 ± 65**
1595 B.C.

Brackish, slightly clayey fine detritus gyttja, 95 to 100 cm. Dates a land occupation phase, slightly before isolation of basin at the transition Early/Late Sub-Boreal.

St-1407. Inlängen 62 **4170 ± 75**
2220 B.C.

Brackish, slightly clayey fine detritus gyttja, 110 to 114 cm. Early Sub-Boreal time.

Bredasund

Brackish, clayey gyttja from section in bay of the Baltic, (56° 09' N Lat, 15° 20' E Long), Listerby parish, Blekinge. Sample is cut from core (60 mm diam) taken by Livingstone sampler. Depth below water level is 127 to 130 cm (depth of water 90 cm). Sample dates distinct increase of human influence in vegetation in beginning of Late Sub-Atlantic time.

St-1777. Bredasund **980 ± 165**
A.D. 970

Utlängen

Brackish, clayey and silty gyttja from section in the fen Marbäcken on island of Utlängen, (56° 01' N Lat, 15° 48' E Long), Torhamn parish, Blekinge. Sample is taken 43 to 47 cm below surface in a dug wall. Dates foundation of the farmer village on Utlängen situated in outermost archipelago of Blekinge.

St-1288. Utlängen **385 ± 70**
A.D. 1565

Gotland series I

Samples from the island Gotland in the Baltic Sea. Coll. and subm. by G. Lundqvist, Geol. Survey of Sweden.

Ancylus shoreline and Littorina shoreline are two big transgression shorelines developed by the Baltic. They have been of greatest importance for dating of the geologic and archaeologic (see II, A, Archaeological samples, Sweden, Gotland series II) phases in late Quaternary time of Sweden. C¹⁴ datings of many samples of peat and wood collected under these transgression shorelines have been performed (Lundqvist, 1965).

Mällingsmyr

Peat and clay from Mällingsmyr (57° 15' N Lat, 18° 13' E Long). Made in order to determine beginning of Littorina Sea.

St-1589. Mällingsmyr 11	6470 ± 120
Lake marl with Anodonta.	4520 B.C.
St-1588. Mällingsmyr 12	7220 ± 95
Hard peat.	5270 B.C.
St-1590. Mällingsmyr 10	7770 ± 190
Sand with peat layers.	5820 B.C.
St-1586. Mällingsmyr 13	10,400 ± 120
Clay with stones and radicles.	8450 B.C.

Sällmyr

Samples under Ancylus shoreline at Sällmyr (57° 18' N Lat, 18° 13' E Long).

St-1556. Sällmyr 21	8760 ± 100
Peat.	6810 B.C.
St-1553. Sällmyr 22	8480 ± 100
Wood (log).	6530 B.C.

Båticke

Peat under Littorina shoreline at Båticke (57° 29' N Lat, 18° 14' E Long).

St-1624. Båticke 1	645 ± 120
	A.D. 1305
St-1722. Båticke B	3930 ± 105
	1980 B.C.
St-1591. Stigståde	4335 ± 80
	2385 B.C.
Wood (Quercus) from Stigståde Åker (57° 08' N Lat, 18° 18' E	

Long.). Locality was at first (in nineteenth century) supposed to be of interest for problems in connection with uplift of land.

St-1708. Kvarne A **5780 ± 85**
3830 B.C.

Clay under Littorina shoreline at Kvarne (57° 30' N Lat, 18° 38' E Long), Eskelhem. Coll. by C. G. Holdar, Gotland.

Gurpe

Sandy peat under Ancylus shoreline at Gurpe (57° 27' N Lat, 18° 38' E Long).

St-1560. Gurpe 8 **7835 ± 95**
5885 B.C.

St-1628. Gurpe 9 **7815 ± 110**
5865 B.C.

Snoder

Peat and clay under Littorina shoreline at Snoder (57° 14' N Lat, 18° 13' E Long).

St-1585. Snoder 14 **5240 ± 85**
3290 B.C.

Peat covered with eolian sand.

St-1584. Snoder 15 **5995 ± 85**
4045 B.C.

Lake marl under beach.

St-1583. Snoder 16 a **7750 ± 90**
5800 B.C.

Lower peat under beach.

St-1582. Snoder 16 b **6630 ± 80**
4680 B.C.

Upper peat under beach.

Helgmyr

Peat under Littorina shoreline at Helgmyr (57° 33' N Lat, 18° 13' E Long).

St-1619. Helgmyr 17 **6450 ± 100**
4500 B.C.

Peat.

St-1620. Helgymr 18 **6615 ± 100**
4665 B.C.

Peat, very compact.

St-1621. Helgmyr 19 **7380 ± 90**
5430 B.C.

Peat and gyttja.

St-1622. Helgmyr 20

Peat and gyttja, very hard.

7005 ± 140**5055 B.C.****Tomtmyr**

Peat and wood under Ancyclus shoreline at Tomtmyr (57° 33' N Lat, 18° 13' E Long).

St-1555. Tomtmyr 3

Log.

< 250**St-1557. Tomtmyr 4**

Peat. Age impossible to explain.

21,715 ± 1300**19,765 B.C.****St-1558. Tomtmyr 5**

Peat.

< 250**St-1641. Tomtmyr 30**

Peat.

8905 ± 100**6955 B.C.****St-1638. Tomtmyr 31**

Peat.

9205 ± 100**7255 B.C.****St-1634. Tomtmyr A**

Peat.

9460 ± 110**7510 B.C.****St-1635. Tomtmyr B**

Peat.

8690 ± 100**6740 B.C.****Malms**

Peat under Ancyclus shoreline at Malms (57° 33' N Lat, 18° 31' E Long).

St-1564. Malms 6

Peat of Amblystegium.

8410 ± 115**6460 B.C.****St-1563. Malms 7**

Peat.

8410 ± 145**6460 B.C.****St-1611. Fröjel**

Peat under Ancyclus shoreline at Gåistes (57° N Lat, 18° 15' E Long).
Made in order to compare with St-174 (Stockholm I), 9190 ± 130 B.P.

9155 ± 175**7205 B.C.**

Dynisse

Peat under Littorina shoreline at Dynisse (57° 16' N Lat, 18° 11' E Long), Spröge.

St-1609. Dynisse 20	7025 ± 180
4 microscopical samples.	5075 B.C.
St-1610. Dynisse BP 13	7400 ± 155
4 microscopical samples from another point.	5450 B.C.
St-1612. Dynisse A	6415 ± 80
Peat.	4465 B.C.
St-1613. Dynisse B	7260 ± 100
Peat.	5310 B.C.
St-1616. Dynisse C	7815 ± 90
Peat.	5865 B.C.
St-1617. Dynisse D	5895 ± 80
Peat.	3945 B.C.
St-1618. Dynisse E	7125 ± 95
Peat.	5175 B.C.

St-2089. Suoksjokk, Lappland	8120 ± 90
Stump found below 10 m of sediments at the river Luleälv (66° 31' N Lat, 20° 31' E Long), county of Norrbotten. Coll. by I. Hector, Swedish State Power Board; subm. by G. Lundqvist.	6170 B.C.

St-1916. Tärnasjön	7545 ± 180
Sediment from Tärnasjön (60° 56' N Lat, 15° 29' E Long), at alt of 603 m in county of Västerbotten, 74 to 81 cm below surface of sediment. Coll. and subm. by Gunnar Hoppe, Dept. of Physical Geography, Univ. of Stockholm, Stockholm.	5595 B.C.

B. Volcanic Ash

Investigation made in order to date horizons with volcanic ash in peat-bogs from Sweden, Norway and the Faroes. Samples coll. and subm. by Christer Persson, Geol. Survey of Sweden, Stockholm. Samples indicated with "T" are only dried before preparation.

SWEDEN

Klockamyren (62° 18' N Lat, 12° 28' E Long)

St-2106. Klockamyren 71	3700 ± 75 1750 B.C.
St-2107. Klockamyren 23	575 ± 65 A.D. 1375
St-2108. Mellstabromossen 47 (60° 30' N Lat, 15° 22' E Long).	1090 ± 65 A.D. 860
St-2119. Grövelsjömyren 25 (62° 05' N Lat, 12° 23' E Long).	1535 ± 70 A.D. 415

Sundbornsmossen (60° 33' N Lat, 15° 38' E Long)

St-1604. Sundbornsmossen 23	< 250
St-1605. Sundbornsmossen 182	3710 ± 80 1760 B.C.

NORWAY

Sjetnemyren (63° 21' N Lat, 11° 03' E Long)

St-1996. Sjetnemyren 25 T	575 ± 70 A.D. 1375
St-2064. Sjetnemyren 25	490 ± 65 A.D. 1460
St-1997. Sjetnemyren 59 T	1100 ± 65 A.D. 850
St-2063. Sjetnemyren 59	1100 ± 70 A.D. 850

Setranmyren (62° 27' N Lat, 08° 04' E Long)

St-1998. Setranmyren 45 T	505 ± 65 A.D. 1445
St-1999. Setranmyren 177 T	2775 ± 70 825 B.C.
St-2065. Setranmyren 45	330 ± 80 A.D. 1620
St-2066. Setranmyren 177	3050 ± 100 1100 B.C.

Kristiansundsmyren (63° 04' N Lat, 07° 50' E Long)

St-2057. Kristiansundsmyren 34-36	965 ± 70 A.D. 985
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		2730 ± 70
St-2059.	Kristiansundsmýren 68-70	780 B.C.
		3600 ± 80
St-2084.	Kristiansundsmýren 91	1650 B.C.
		6875 ± 90
St-2087.	Kristiansundsmýren 158	4925 B.C.

THE FAROES

Saksunmyren (62° 12' N Lat, 07° 04' W Long)

		1585 ± 70
St-2132.	Saksunmyren 11	A.D. 365
		3075 ± 100
St-2133.	Saksunmyren 55	1125 B.C.
		3350 ± 130
St-2134.	Saksunmyren 65	1400 B.C.

Myrarnar (62° 09' 07" N Lat, 07° 05' W Long)

		900 ± 120
St-2135.	Myrarnar 2:21	A.D. 1050
		3520 ± 105
St-2136.	Myrarnar 2:75	1570 B.C.
		3650 ± 560
St-2139.	Myrarnar 2:84	1700 B.C.

Klovinmyren (62° 04' 02" N Lat, 07° 15' W Long)

		2585 ± 75
St-2140.	Klovinmyren 37	635 B.C.
		2650 ± 75
St-2151.	Klovinmyren 50	700 B.C.
		3450 ± 70
St-2155.	Klovinmyren 94	1500 B.C.
		3800 ± 80
St-2156.	Klovinmyren 105	1850 B.C.
		8455 ± 100
St-2078.	Klovinmyren 280	6505 B.C.

C. Shetland

This series forms part of study of glacial and vegetational history of Shetland and of sealevel changes in area. Samples were collected mainly by Professor G. Hoppe, Dept. of Physical Geography, Univ. of Stockholm, Professor M. Fries, Royal College of Forestry, Stockholm, and Mr. A. Häggblom, Dept. of Physical Geography, Univ. of Stockholm, during an expedition in 1964. Subm. by Professor Hoppe.

Whalsay series

Submarine peat and wood from Symbister, Whalsay (60° 20' 05" N Lat, 01° 02' W Long) (Hoppe, 1965).

St-1552. Sy I **6030 ± 80**
4080 B.C.

Peat from 8.9 m below present high-water level.

St-1812. 13/N/Bottom **5945 ± 230**
3995 B.C.

Peat from the lowest few cm of 20-cm thick peat layer, depth below high-water level 9.0 m.

St-1811. 13/N/Top **5455 ± 170**
3505 B.C.

Peat from top few cm of 20-cm thick layer mentioned under St-1812, depth below high-water level 8.8 m.

St-1809. Sy/W/N14 **6970 ± 100**
5020 B.C.

Wood (probably from *Salix* sp.) embedded in peat layer, depth below high-water level 8.8 m.

St-1925. Sy/14/N **6670 ± 100**
4720 B.C.

Peat from same place as St-1890, depth below high-water level 8.8 m.

Tresta series

Peat and wood in peat from land, Tresta (60° 15' N Lat, 01° 20' W Long).

St-1608. 264/Vb **5145 ± 90**
3195 B.C.

Wood from depth of 264 cm below surface of 290-cm thick peat layer.

St-1607. Vd/1 **5865 ± 95**
3915 B.C.

Lowermost 2 cm of 300-cm thick peat layer (same as 290-cm thick layer in St-1608 and St-1714).

St-1714. Tr/311 **11,135 ± 135**
9185 B.C.

Peat from 1-cm thick layer, below 290-cm thick layer of peat (same as St-1608) and 43 cm of mineral soil.

St-1713. Loch of Wick **5470 ± 100**
3520 B.C.

From 60° 09' N Lat, 01° 13' W Long. Lowermost 2 cm of 230-cm thick layer of peat on a slope, just S of Loch of Wick.

Lake sediment series

Risk of contamination by old carbon cannot be excluded (for instance in St-1757) and this risk is now object of investigations.

St-1554. Sand Water **10,055 ± 300**
8105 B.C.
Site (60° 17' N Lat, 01° 20' W Long), at alt of 37 m. From 125 to 128 cm below surface of sediment.

St-1595. Stanevatstoe Loch **9725 ± 265**
7775 B.C.
Site (60° 16' N Lat, 01° 20' W Long), at alt of ca. 80 m. From 382 to 389 cm below surface of sediment.

Upper Loch of Brouster (60° 15' N Lat, 01° 36' W Long), at alt of ca. 3 m

St-1606. Br 400 **8760 ± 250**
6810 B.C.
From 400 to 404 cm below the surface of the sediment.

St-1763. UB/14 **9670 ± 540**
7720 B.C.
From 444 to 450 cm below surface of sediment.

St-1757. Lower Loch of Brouster **15,080 ± 850**
31,130 B.C.
From 60° 15' N Lat, 01° 36' W Long. Tidal lake from 345 to 350 cm below surface of sediment.

St-1810. Strom Loch **2615 ± 140**
665 B.C.
From 60° 14' N Lat, 01° 17' W Long. Tidal lake. From 300 to 302 cm below surface of sediment.

Loch of Clickimin (60° 09' N Lat, 01° 10' W Long)

St-1639. Loch of Clickimin 140 **9620 ± 750**
7670 B.C.
At sealevel, but normally not a tidal lake. From 137 to 140 cm below surface of sediment.

St-1640. Loch of Clickimin 180 **12,090 ± 900**
10,140 B.C.
From 177 to 180 cm below surface of sediment.

St-1559. Loch of Brow **9945 ± 250**
7995 B.C.
Located (59° 56' N Lat, 01° 19' W Long) at alt of ca. 1 m. From 198 to 201 cm below surface of sediment.

D. Other Countries

AZORES

Azores series

Material from the Azores, Portugal. Coll. and subm. by Magnus Fries, Royal College of Forestry, Stockholm.

St-2068. Azores 1 **3435 ± 75**
1485 B.C.

St-2077. Azores 2 **1815 ± 65**
A.D. 135

Two pieces of fossil wood, from *Juniperus brevifolia* from Sao Miguel (32° 52' N Lat, 25° 47' W Long).

St-2109. Azores 3 **845 ± 200**
A.D. 1105

Sediment core from Lagon Azul, Sao Miguel (37° 52' N Lat, 25° 47' W Long).

St-2114. Azores 4 **3930 ± 200**
1980 B.C.

Sediment core from Lagoa das Furnas, Sao Miguel (37° 45' N Lat, 25° 20' W Long).

St-2117. Azores 5 **< 250**

Sediment core from Lagona Raza, Sao Miguel (37° 50' N Lat, 25° 46' W Long).

St-2118. Azores 6 **2460 ± 105**
510 B.C.

Sediment core from Lagoa do Capita, Ilha do Pico (38° 28' 05" N Lat, 28° 19' W Long).

ICELAND

St-1800. Hvammkot 20 **4105 ± 75**
2155 B.C.

Peat from peat bog of Hvammkot (66° N Lat, 20° W Long), on Iceland. Dating of peat growth 200 cm below surface. Sample coll. and subm. by Gudfinna Ragnarsdottir, Dept. of Quaternary Geology, Univ. of Stockholm, Stockholm.

Siglufvik series

Dating of volcanic ash layer. Peat from peat bog of Siglufvik (65° 45' N Lat, 18° 00' W Long), Iceland. Coll. and subm. by Gudfinna Ragnarsdottir.

St-1799. Siglufvik 60 **525 ± 65**
A.D. 1425
60 cm below surface.

St-2137. Siglufvik 2

210 cm below surface.

6065 ± 80
4115 B.C.**Keflavik series**

Peat from peat bog of Keflavik (65° 45' N Lat, 19° 30' W Long),
Hegranes, Iceland. Coll. and subm. by Gudfinna Ragnarsdottir.

St-2138. Keflavik 2.7-3.0

270 to 300 cm below surface. Dating Sphagnum peat period.

5535 ± 120
3585 B.C.**St-1797. Keflavik 2.6-3.9**

360 to 390 cm below surface. Dating of Betula rise.

5650 ± 85
3700 B.C.**St-1798. Keflavik 5.1-5.3**

510 to 530 cm below surface. Bottom layer.

7280 ± 150
5330 B.C.

II. ARCHAEOLOGIC SAMPLES

*A. Sweden***Krankmårtenhögen series**

Charcoal and resin caulking from gravefield at lake Storsjön (62° 46' 40" N Lat, 13° 13' 23" E Long), Storsjö parish, Härjedalen. One grave contains metal artifacts which cannot be dated archaeologically. Resin was used as tightening material in wooden boxes filled with cremated bones. There were also a lot of stone artifacts in some graves. See Krankmårtenhögen series (Stockholm VI). Samples coll. by Göran Stolpe; subm. by B. Ambrosiani, Royal Office of Antiquities.

St-1834. V:A2

Charcoal (with cremated bones).

6325 ± 90
4375 B.C.**St-1835. VI:A52**

Charcoal under burnt stones of hearth.

1555 ± 100
A.D. 395**St-1836. VII:A10****St-1837. VIII:A33**

Charcoal (with cremated bones).

2130 ± 90
180 B.C.**3930 ± 80**
1980 B.C.**St-1839. IX:A45**

Charcoal from cooking pit under pieces of brittle burnt stones.

2005 ± 85
55 B.C.

St-1841.	X:A59	< 250
Charcoal (with cremated bones).		
St-1842.	XI:A1	1855 ± 160
		A.D. 95
St-1843.	XII:A3	2245 ± 100
		295 B.C.
St-1844.	XIII:A4	2330 ± 70
		380 B.C.
St-1845.	XIV:A37	2110 ± 70
		160 B.C.
Resin (with cremated bones).		

Kårtjejaure series

Charcoal from some of the hearths of the site Kårtjejaure 1371 (62° 29' N Lat, 18° 17' E Long), Stora Lule river, Gällivare parish, Lapp-land. Only one culture layer was found at site containing stone artifacts, nails, broken pieces, ceramics, glass, etc. Coll. by Kerstin Bergengren and subm. by Björn Ambrosiani.

St-1566.	1371:413	740 ± 65
		A.D. 1210
St-1567.	1371:419	< 250
St-1568.	1371:Z 6	3650 ± 70
		1700 B.C.
St-1569.	1371:V 16	430 ± 65
		A.D. 1520
St-1570.	1371:AF 16	280 ± 65
		A.D. 1670
St-1571.	1371:AB 12	6330 ± 80
		4380 B.C.
St-1572.	1371:AA 14	370 ± 65
		A.D. 1580
St-1573.	1371:AA 12	1925 ± 70
		A.D. 25
St-1575.	1371:X 8	1995 ± 70
		45 B.C.
St-1576.	1371:Z 10	920 ± 85
		A.D. 1030
St-1838.	Jörlanda IX	4500 ± 170
		2550 B.C.

Charcoal found in passage to a dolmen, in yellow sand under stone accumulation, Jörlanda parish (58° N Lat, 11° 45' E Long), Bohuslän. Coll. by Ingegerd Särilvik; subm. by B. Ambrosiani.

Luotosuollo series

Charcoal from site on Luotosuollo, islet in eastern part of lake Satisjaure (62° 27' N Lat, 18° 55' E Long), Gällivare parish, Norrbotten. Samples coll. by K. Bergengren; subm. by Björn Ambrosiani. Archaeological finds from site are partly of Stone Age type, partly remains of Lapp settlements of present time.

St-1851. L 1 **875 ± 65**
 Hearth 10. **A.D. 1075**

St-1852. L 2 **810 ± 65**
 Charcoal from circle of stones of unknown use. **A.D. 1110**

St-1853. L 3 **< 250**
 Hearth 6.

St-1854. L 4 **< 250**
 Hearth 1.

St-1855. L 5 **3920 ± 120**
 Hearth 9, coal of *Pinus silvestris*. **1970 B.C.**

St-1856. L 6 **< 250**
 Coal from *Pinus silvestris* in layer of brittle burnt stones.

St-1857. L 7 **1760 ± 110**
 Hearth 8, coal from *Betula* sp. **A.D. 190**

St-1858. L 8 **< 250**
 Hearth 7, coal from *Betula* sp.

St-1859. L 9 a **< 250**
 Charcoal from *Betula* immediately below the peat in pit No. 1.

St-1860. L 9 b **305 ± 70**
 Bottom layer in pit No. 1. **A.D. 1645**

St-1867. Trälösa 1 **3145 ± 100**
1195 B.C.

Charcoal from mound of brittle burnt stones at settlement at Trälösa (59° 55' N Lat, 17° 43' E Long), Vaksala parish, Uppland. Coll. by Sten Rentzhog; subm. by Björn Ambrosiani. No datable finds were made. Adjacent to mound are remains of what has probably been small house.

Ändesta series

Charcoal from Ändesta (59° 35' N Lat, 16° 45' E Long), Kungsåra parish, Västmanland. Samples coll. by Sten Rentzhog; subm. by U. E. Hagberg, Royal Office of Antiquities.

St-1868. 287515

1335 ± 70

A.D. 615

From cairn of large round stones in middle of gravefield, mostly of brittle burnt stones. In the cairn, ceramics (of general rough type) and burnt bones were found.

St-1869. 312527

2695 ± 100

745 B.C.

From mound of brittle burnt stones, gravel or larger round stones. A find of a small bronze saw was made.

Bågede series

Charcoal from grave at Bågede (64° 21' N Lat, 14° 49' E Long), Frostviken parish, Jämtland. Round barrow with layer of stones. Coll. by Elisabeth Allard; subm. by Björn Ambrosiani.

St-1599. Bågede 1

1130 ± 60

A.D. 820

Layer of charcoal on level of stone layer.

St-1601. Bågede 2

1045 ± 65

A.D. 905

St-1596. Bågede 3

1100 ± 70

A.D. 850

Layer of charcoal on original ground surface under stones.

Bölensvattnet series

Charcoal from site at Lake Bölensvattnet (63° 59' N Lat, 16° 26' E Long), Bodum parish, Ångermanland. Finds consist of stone artifacts and small pieces of ceramics from only one cultural layer. Samples coll. by Elisabeth Allard; subm. by Björn Ambrosiani.

St-1656. 1356:1

1035 ± 75

A.D. 915

St-1667. 1356:2

< 250

Hearth, charcoal layer above stone layer.

St-1668. 1356:3

1200 ± 70

A.D. 750

St-1657. 1356:4

1075 ± 75

A.D. 875

Hearth, thick layer of charcoal under stones.

St-1661. 1356:5

4920 ± 80

2970 B.C.

Small pit with charcoal, brittle burnt stones and burnt bones.

St-1663. 1356:6 **2005 ± 85**
55 B.C.

Layer of charcoal in upper level of cultural layer.

St-1669. 1356:7 **1035 ± 80**
A.D. 915

St-1664. 1356:8 **1185 ± 80**
A.D. 765

Hearth 1356 B, thick layer of charcoal under stones.

Lesjön series

Charcoal from sites S-101 Grananäset and S-104 Lemnäset at Lake Lesjön (63° 38' N Lat, 17° 03' E Long), Bodum parish, Ångermanland. Finds of stone artifacts, ceramics and pieces of some bone artifacts. Coll. by Elisabeth Allard; subm. by Björn Ambrosiani.

St-1602. S101:1 **2245 ± 70**
295 B.C.

St-1603. S101:2 **1615 ± 65**
A.D. 335

Thin layer of charcoal on top of culture layer.

St-1614. S101:3 **3400 ± 110**
1450 B.C.

St-1598. S101:4 **4155 ± 145**
2205 B.C.

Thin layer of charcoal on bottom of culture layer.

St-1647. S104:1 **2245 ± 85**
295 B.C.

Hearth 1, among and under stones.

St-1615. A104:2 **2320 ± 65**
370 B.C.

Hearth 2, under stones.

St-1648. S104:3 **5765 ± 110**
3815 B.C.

Under concentration of burnt stones.

St-1649. S104:4 **3735 ± 100**
1785 B.C.

St-1650. S104:5 **5285 ± 130**
3335 B.C.

St-1651. S104:6 **6345 ± 180**
4395 B.C.

Thin layer of charcoal partially covered by sand under thick cultural layer.

St-1652. S104:7	2830 ± 70 880 B.C.
St-1653. A104:8	2785 ± 75 835 B.C.
Thin layer of charcoal in cultural layer.	
St-1654. S104:9	2395 ± 80 445 B.C.
Charcoal among and under pieces of brittle burnt stones.	
St-1655. S104:10	5440 ± 115 3490 B.C.
Small pit with charcoal and burnt bones.	

Älvenäs series

Charcoal found in bottom of cairn in a graveyard at Nor River when it reaches the Åsfjorden, (59° 22' 10" N Lat, 13° 11' 16" E Long) in lake Vänern, Värmland. Coll. by P.-O. Ringquist; subm. by Björn Ambrosiani.

St-1731. A8:IV	830 ± 80 A.D. 1120
St-1732. A7:II	< 250
St-1733. A7:III	370 ± 70 A.D. 1580
St-1734. A9:I	330 ± 65 A.D. 1620
St-1736. A11:V	< 250
St-1737. A11:VI	< 250
St-1735. Hammar 1³	2615 ± 75 665 B.C.

Charcoal found together with cremated bones and pottery under one of the stones in a stone circle. Solberga parish (57° 53' N Lat, 11° 50' E Long), Bohuslän. Coll. by Hille Jaanusson; subm. by Björn Ambrosiani.

Igelsta series I

Charcoal from plain, cairn-like, brittle-burnt heap of stones at Igelsta (59° 10' N Lat, 17° 40' E Long), Östertälje parish, Södermanland. Grave, 10 m in diam, covered crevice of 1 m depth. Charcoal and burned bones were found under stones. Other finds were a razor, knife, tweezers and a button, all in bronze. Coll. by Åke Hyenstrand; subm. by Björn Ambrosiani.

St-1738. 707:335, 5-51	305 ± 75 A.D. 1645
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		880 ± 80
St-1739.	705:335-60	A.D. 1070
		490 ± 70
St-1741.	704:336-70	A.D. 1460

Igelsta series II

In connection with excavation of group of Bronze Age burial cairns on Igelsta mountain in Östertälje parish, a dwelling-place was found and excavated on a low terrace immediately S of mountain foot. A floor-like stratum of clay and stones was discovered. Stratum was surrounded by four small pits in sand, to some extent lined with stones and filled with soot and charcoal. They were possibly remains of firesides or cooking pits. Charcoal was taken for radiocarbon dating. On the dwelling place, pottery and burned bones were found. The most numerous finds, however, consisted of burned pieces of clay, probably once packed on plaited walls of sticks. The find of a hut in a probable Bronze Age milieu is almost unique in central Sweden and a dating is extraordinarily valuable.

St-1846.	690:227, 60-61	< 250
		2365 ± 70
St-1848.	640:366, -150	415 B.C.
		2775 ± 70
St-1849.	639:362, -165	825 B.C.
		2570 ± 70
St-1850.	642:365, -125	620 B.C.

Skagersvik series

Charcoal from gravefield in Skagersvik (58° 59' N Lat, 14° 06' E Long), Amnehärads parish, Västergötland. Coll. by Inga Lundström; subm. by Björn Ambrosiani. Found with burned bones in cremation pit A1:F1, in cremation layer A3:F5, A4:F9 and in urns A2:F2. Archaeological finds indicate Migration period and early Vendel Age. Under the finds was dark layer rich in flints that seem to belong to Mesolithic period.

		1165 ± 85
St-1715.	A4:F9	A.D. 785
St-1716.	A3:F6	< 250
		1685 ± 230
St-1717.	A3:F5	A.D. 265
		1230 ± 115
St-1718.	A2:F2	A.D. 720
		1695 ± 130
St-1719.	A1:F1	A.D. 255

Lossnen series

Continued from Stockholm IV. Charcoal, wood and resin from gravefield at Smalnäset, Lake Lossnen (62° 25' N Lat, 12° 51' E Long), Tännäs parish, Härjedalen. Coll. and subm. by H. Hvarfner, Royal Office of Antiquities, Stockholm.

St-1720. Lossnen 6	2100 ± 65 150 B.C.
St-1723. Lossnen 12	1965 ± 110 15 B.C.
St-1724. Lossnen 16	6650 ± 90 4700 B.C.
St-1725. Lossnen 23	1875 ± 90 A.D. 75
St-1726. Lossnen 25	2430 ± 70 480 B.C.
St-1727. Lossnen 31	4485 ± 150 2535 B.C.
St-1728. Tjärnbäcken	5440 ± 85 3490 B.C.

Charcoal found with burnt bones of *Alces alces* and *Ursus arctos* in a grave at Lake Lossnen (62° 25' N Lat, 12° 51' E Long), Tännäs parish, Härjedalen. Subm. by H. Hvarfner.

Tjikkiträsk series

Charcoal from site at St. Tjikkiträsk (64° 59' N Lat, 17° 42' E Long), Stensele parish, Västerbotten. Subm. by H. Hvarfner.

St-1750. T 1	7005 ± 100 5055 B.C.
St-1751. T 2	7380 ± 100 5430 B.C.
St-1752. T 3 a	7085 ± 90 5135 B.C.
St-1753. T 7 a	6395 ± 90 4445 B.C.
St-1754. T 8	4445 ± 110 2495 B.C.
St-1755. T 9	5300 ± 80 3350 B.C.

Rappasundet series

Charcoal from site at Hornavan (66° 04' N Lat, 17° 54' E Long), Arjeplog parish, Norrbotten. Subm. by Birgitta Hallgren and Harald Hvarfner.

	2180 ± 75
St-626. Rappasundet 5	230 B.C.
	540 ± 65
St-627. Rappasundet 6	A.D. 1410
	2165 ± 100
St-632. Rappasundet 7	215 B.C.
	1950 ± 80
St-637. Rappasundet 8	0 B.C.
	2235 ± 100
St-1729. Rappasundet 9	285 B.C.
	2235 ± 80
St-641. Rappasundet 11	285 B.C.
	2080 ± 90
St-1730. Rappasundet 12	130 B.C.
	2495 ± 70
St-1742. Rappasundet 14	545 B.C.
	2290 ± 75
St-1743. Rappasundet 15	340 B.C.
	1705 ± 75
St-1744. Rappasundet 16	A.D. 245
	1955 ± 75
St-1745. Rappasundet 18	5 B.C.
	1995 ± 75
St-1746. Rappasundet 19	45 B.C.
	2695 ± 70
St-1747. Rappasundet 20	745 B.C.

Vä series

Charcoal from site at Vä (56° N Lat, 14° E Long), Skåne. Site has been occupying almost same area as later medieval town. About 30 small huts, pit huts or hut hollows, have been examined. Samples are collected from hearths of lowermost levels of pits. Coll. and subm. by Egon Thun, Royal Office of Antiquities, Stockholm.

	970 ± 65
St-1783. 2696	A.D. 980

Trench XVIII, 2 to 6 m, Hut 22, level -180 cm (below present day surface), near bottom.

- St-1784. 2697** **1010 ± 65**
A.D. 940
 Trench XVIII, hut 22, level −200 cm.
- St-1785. 2700** **1450 ± 65**
A.D. 500
 Trench 111, 9 to 11 cm, Hut 27, just below hearthstones, level −150 cm.
- St-1786. 2702** **1200 ± 70**
A.D. 750
 Trench XVII, 1 to 4 m, Hut 19 from hearth at level of 154 cm.
- St-1787. 2707** **1165 ± 70**
A.D. 785
 Trench XIX, 29 m, Hearth N, Hut 21, in lowermost culture layer of trench.
- St-1788. 2708** **1390 ± 70**
A.D. 560
 Trench XIX, 19 to 22 m, Hut 21, from hearth at +26.20 m, ca. 10 cm over bottom of pit.
- St-1789. 2711** **1035 ± 65**
A.D. 915
 Trench XIX, 27.5 to 30.5 m, Hut 21, from hearth at bottom.
- St-1790. 2713** **1250 ± 110**
A.D. 700
 Trench XVIII, 2 m, Hut 22, in layer of ashes near edge of pit.
- St-1791. 2716** **1010 ± 70**
A.D. 940
 Trench V, 17 m, Hut 8, from hearth at −140 cm.
- St-1792. 2717** **1110 ± 65**
A.D. 840
 Trench V, Hut 8, from bottom layer of pit.
- St-1793. 2718** **1345 ± 65**
A.D. 605
 Trench XVIII, 1 to 4 m, Hut 19, from hearth at −170 cm.
- St-1794. 2719** **1615 ± 115**
A.D. 335
 Trench XX, 2 to 8 cm, lowermost cultural layer.

Hammarby series

Charcoal from hearths and postholes at Skälby (59° 41' N Lat, 17° 02' E Long), Hammarby parish, Uppland. Subm. by G. Arwidsson, Dept. of Nordic and Comparative Archeology, Univ. of Stockholm, and U. E. Hagberg, Royal Office of Antiquities, Stockholm.

St-2152. Hammarby 1	1675 ± 75
	A.D. 275
St-2153. Hammarby 2	1845 ± 70
	A.D. 105
St-2154. Hammarby 3	1855 ± 90
	A.D. 95

Örkelljunga series

Charcoal from primitive iron melting place at Östra Ringarp, (56° 15' N Lat, 13° 20' E Long), Skåne. Coll. by Sven Nöjd, Örkelljunga; subm. by H. Arbman, Historiska Museet, Univ. of Lund, Lund.

St-1696. Örkelljunga 1	650 ± 65
	A.D. 1300
St-1697. Örkelljunga 2	740 ± 65
	A.D. 1210

Kårarp series

Charcoal from hearth pits under cairn at Kårarp (56° 42' N Lat, 12° 52' E Long), Övraby parish, Halland. Subm. by Lennart Lundborg, Hallands Mus., Halmstad.

St-1523. p 130123	1995 ± 100
	45 B.C.
St-1546. p 133120	2015 ± 70
	65 B.C.
St-1547. p 129135	2050 ± 65
	100 B.C.
St-1548. p 130136	2395 ± 100
	445 B.C.

Eketorp series I

Charcoal from Eketorp ring-fort (56° 02' N Lat, 16° 03' E Long), Gräsgårds parish, Öland. Coll. within prehistoric fortress of Eketorp village. Fort and building foundations are built from limestone, which is local bedrock. Subm. by leader of excavation, Mårten Stenberger, Royal Office of Antiquities, Stockholm.

St-1756. Eketorp I:1	1370 ± 75
	A.D. 580
St-1970. Eketorp A:1	1645 ± 65
	A.D. 305

Hearth on clay floor of lowest of three habitation levels. Finds include pottery, iron-bars, loom-weights and beads.

Taken from ruined building A, fortress at Eketorp village. Finds include decorated pottery and bronze pin.

St-1973. Eketorp II:1 **1475 ± 70**
A.D. 475

Taken from a log in ruined building II. Finds include strap tag, bronze arrow head and glass fragments.

St-1974. Eketorp III:1 **1545 ± 65**
A.D. 405

Taken from ruined building III. Finds include clasp, bronze and glass fragments.

St-1981. Eketorp IV:1 **1460 ± 65**
A.D. 490

Taken from ruined building IV. Finds consisted of bronze rings.

Eketorp series II

Bone from same location as Eketorp series I. Coll. and subm. by Hans Sellstedt, Royal Office of Antiquities, Stockholm.

St-2112. N 17:II **900 ± 70**
A.D. 1050

Tibia of Homo.

St-2113. M 17:III **1270 ± 70**
A.D. 680

Ribs of Homo.

St-2115. S 13:II **1240 ± 70**
A.D. 710

Vertebrae and ribs of Homo.

St-1961. Västerås I **3775 ± 105**
1825 B.C.

Bone of *Phoca vitulina* in site from Stone Age near Västerås (59° 44' N Lat, 16° 30' E Long), Västmanland.

St-1976. Agnsjön **3660 ± 115**
1710 B.C.

Femur of *Alces alces* from site at Agnsjön (63° 33' N Lat, 17° 54' E Long). Anundsjö parish, Ångermanland. Investigation made in order to get opportunity to date Stone Age settlement. Subm. by Hans Sellstedt.

Skede mosse series

Bone from drained fen, Skede mosse (56° 05' N Lat, 16° 45' E Long), Gärdslösa parish, Öland. See Skede mosse series in Stockholm VI. Coll. and subm. by Hans Sellstedt.

St-1924. 1003 A **1760 ± 70**
A.D. 190

St-1930. 1003 B **1760 ± 70**
A.D. 190

Femur of calf. St-1924 is upper part of bone and St-1930 is lower part of same bone.

St-1975. 307	1935 ± 75
Humerus of horse.	A.D. 15
St-1977. 1018	1955 ± 70
Humerus of pig.	5 B.C.
St-1971. 805	1420 ± 65
Femur of Homo.	A.D. 530
St-1978. 118	< 250
Ribs of horse.	

Sörby Tall series

Charcoal from Iron Age settlement at Sörby Tall (56°50' N Lat, 16° 45' E Long), Gärdslösa parish, Öland. Subm. by U. E. Hagberg and Margareta Beskow, Royal Office of Antiquities, Stockholm.

St-1543. House II:A 33:F 144	1695 ± 75
From a hearth.	A.D. 255
St-1544. House II:A 34:F 136	1655 ± 70
From a post hole.	A.D. 295
St-1780. House II:F 133	1400 ± 70
From a clay level, which might have been a floor in the house.	A.D. 550
St-1781. House II:A 10:F 155	1370 ± 85
From a post hole in same settlement as St-1543 and St-1544.	A.D. 580
St-1782. House II:A 25:F 128	1325 ± 65
From a hearth in same settlement as St-1543 and St-1544.	A.D. 625
St-1779. House I:A 13	< 250
From a supposed garbage-pit.	
St-1866. F 201	1835 ± 75
	A.D. 115

Ormöga series I

Charcoal from Iron Age settlement in Bredsätra (56° 52' N Lat, 16° 48' E Long), Öland. subm. by U. E. Hagberg.

St-1540. F 21	1565 ± 70
Probably the roof from a house.	A.D. 385

St-1862.	A 5	1665 ± 70 A.D. 285
St-1863.	Hearth 6	1725 ± 70 A.D. 225
St-1864.	A 21	1595 ± 90 A.D. 355
St-1865.	A 67	1460 ± 65 A.D. 490

Ormöga series II

Bone from same site as Ormöga Series I. Samples coll. and subm. by Hans Sellstedt.

St-2046.	O 118	1230 ± 80 A.D. 720
St-2048.	O 92	2080 ± 105 130 B.C.

Petrosum of Greenland seal. *Comment* (H.S.): dating has shown that Greenland seal survived in the Baltic until at least 2000 B.P.

Västerhus series

Human bones, mainly femora and ribs, from 12 individuals in early Medieval cemetery at Westerhus chapel (63° 12' N Lat, 14° 28' E Long), Frösö parish, Jämtland. Coll. by N. Lagerholm; subm. by N.-G. Gejvall, Royal Office of Antiquities, Stockholm. Anthropology and building phases discussed by Gejvall (1960). Present dating in order to check results in this thesis and in odontological thesis by Svärdstedt (1966). *Comment* (N.-G. G.): from historical and architectural point of view vital phase of this cemetery has developed in E to W direction from A.D. 1070 to A.D. 1350, which is in very good agreement with C¹⁴ dates.

St-2141.	F 54	740 ± 65 A.D. 1240
St-2142.	F 225	650 ± 65 A.D. 1300
St-2143.	F 104	645 ± 85 A.D. 1305
St-2144.	F 171	1010 ± 65 A.D. 940
St-2145.	F 181	680 ± 60 A.D. 1270
St-2146.	F 117	740 ± 60 A.D. 1210
St-2147.	F 9	765 ± 65 A.D. 1185

		750 ± 65
St-2148.	F 177	A.D. 1200
		830 ± 60
St-2149.	F 32	A.D. 1120
		880 ± 65
St-1909.	555 A	A.D. 1070
		775 ± 70
St-1923.	555 B	A.D. 1175
		875 ± 65
St-1919.	91	A.D. 1075
		465 ± 65
St-1660.	Örlen	A.D. 1485
Wood from dug-out canoe found in lake Örlen, Fagersanna (58° 28' N Lat, 14° 18' E Long), Karlsborg, Västergötland. Subm. by Bo Gräslund, Royal Office of Antiquities, Stockholm and A. Pohl, Karlsborgs Mus. Karlsborg.		
		2430 ± 140
St-1565.	Västerljung F 134	480 B.C.
Scrapings from ceramics (pottery) found in Tuna (58° 54' N Lat, 17° 28' E Long), Västerljung parish, Södermanland. See Västerljung series (Stockholm VI). Subm. by Bo Gräslund.		
		1545 ± 65
St-1861.	Selånger F15:12	A.D. 405
Charcoal from Grave No. 12 in Gravefield No. 43 at Granlo (62° 15' N Lat, 17° 16' E Long), in Selånger parish, Medelpad. Subm. by M. Björnstad, Royal Office of Antiquities.		
		3025 ± 80
St-1808.	Site 792 (the pot of Laisan)	1075 B.C.
Crushed sherds (60 g) from asbestos ceramics found at Lake Varris, (64° 42' N Lat, 16° 24' E Long), Vilhelmina parish, Lapplund. See Malmogaj-Varris Series (Stockholm VI). Subm. by Astrid Linder, Royal Office of Antiquities.		
Havor series		
Charcoal from Lilla Havor (57° 13' N Lat, 18° 19' E Long), Hablingsbo parish, Gotland. Subm. by G. Arwidsson, Dept. of Nordic and Comparative Archeology, Univ. of Stockholm, Stockholm.		
		1995 ± 65
St-1578.	LH 1	45 B.C.
		1945 ± 70
St-1580.	LH 2	A.D. 5
		2050 ± 100
St-1592.	LH 3	100 B.C.

- St-1593. LH 4** **2035 ± 70**
85 B.C.
- St-1676. Mästermyr C 9903** **1020 ± 80**
A.D. 930
Bees wax found in the bog Mästermyr (57° 10' N Lat, 18° 13' E Long), Hemse parish, Gotland. Subm. by G. Arwidsson.
- St-1712. Stads-Gånsta 4³** **2875 ± 105**
925 B.C.
Charcoal from brittle-burnt cairn at Stads-Gånsta (59° 35' N Lat, 17° 15' E Long), Vårfrukyrka parish, Uppland. Coll. by Louise Cederschiöld; subm. by Mats Malmer, Royal Office of Antiquities, Stockholm.
- Gotland series II**
Samples from island of Gotland in the Baltic. Coll. and subm. by G. Lundqvist, Geol. Survey of Sweden, Stockholm (Lundqvist, 1965). See Gotland series I, Geologic Samples, Sweden. There are two bog castles (Långmyrborgen and Vasstädemyrborgen), the big lake dwelling-place Bulverket in lake Tingstäde träsk and two wooden causeways.
- St-1658. Roma Stormyr** **890 ± 70**
A.D. 1060
Log from wooden causeway in the bog Roma Stormyr (57° 28' N Lat, 18° 24' E Long).
- St-1677. Starrarmyr** **1110 ± 70**
A.D. 840
Log from wooden causeway at church of Lärbro (57° 47' N Lat, 18° 48' E Long). Subm. by E. Nyhlén, Gotlands Fornsalar, Visby, Gotland.
- St-1659. Bulverket** **955 ± 65**
A.D. 995
Wood from house in great lake-dwelling "Bulverket" in Tingstäde Träsk (57° 43' N Lat, 18° 38' E Long).
- Långmyrborgen series**
Peat and wood from fen castle Långmyrborgen (56° 55' N Lat, 18° 18' E Long).
- St-1623. Långmyrborgen** **2935 ± 70**
985 B.C.
Sand with peat.
- St-1626. Långmyrborgen 24** **2060 ± 115**
110 B.C.
Wood on trample stone.
- St-1627. Långmyrborgen 25** **3230 ± 120**
1280 B.C.
Peat on another stone.

St-1629. Långmyrborgen 26 **1925 ± 70**
A.D. 25
 Hard peat.

St-1630. Långmyrborgen 27 **1790 ± 65**
A.D. 160

Vasstäde series

Wood from palisades on NW side of fen castle in Vasstäde bog (57° 12' N Lat, 18° 18' E Long).

St-1562. Vasstäde A **2110 ± 75**
160 B.C.

St-1561. Vasstäde B **2365 ± 70**
415 B.C.

St-1581. Vasstäde C **2270 ± 70**
320 B.C.

Halleby series I

Charcoal from Halleby (58° 42' N Lat, 19° 57' E Long), Skärkind parish, Östergötland. Subm. by S. O. Lindqvist. This is continuation of earlier Halleby Series (Stockholm V); dated as part of large investigation of early settlements and their agriculture in this region.

St-1666. 201 **1740 ± 70**
A.D. 210
 Uppermost charcoal layer in hearth 30 cm below surface.

St-1685. 202 **1740 ± 70**
A.D. 210
 Charcoal from lowest layer among stones in same hearth as 201, 45 cm below surface.

St-1686. 203 **1355 ± 80**
A.D. 595
 Uppermost charcoal layer in hearth 40 cm below surface.

St-1687. 204 **1555 ± 70**
A.D. 395
 Lowest charcoal layer among stones in same hearth as 203, 60 cm below surface.

St-1688. 205 **1360 ± 65**
A.D. 590

St-1689. 206 **1390 ± 65**
A.D. 560

St-1690. 207 **1460 ± 80**
A.D. 490

Samples from three hearths, close together just outside fence around building lot C, 40 to 50 cm below surface.

		1525 ± 70
St-1691.	208	A.D. 425
Burned remains of house construction, 10 cm below surface.		
		1790 ± 80
St-1692.	209	A.D. 160
		1360 ± 75
St-1693.	210	A.D. 590
From hearth inside a building, 20 cm below surface.		
		1905 ± 75
St-1694.	211	A.D. 45
Post hole No. 1, 20 to 30 cm below surface.		
		1470 ± 90
St-1695.	212	A.D. 480

Halleby series II

Subm. by Evert Baudou, Dept. of Nordic and Comparative Archeology, Univ. of Stockholm, Stockholm.

		1655 ± 70
St-1872.	213	A.D. 295
From hearth in house from Early Iron Age.		
		1635 ± 75
St-1873.	214	A.D. 315
From wall in house from Early Iron Age.		
		1505 ± 70
St-1874.	215	A.D. 445
From hearth in house from Early Iron Age.		
		1430 ± 70
St-1875.	216	A.D. 520
From hearth under string of stones.		

Skånings-Åsaka series

Charcoal from culture layers at Skånings-Åsaka (58° 24' N Lat, 14° E Long), Västergötland. Subm. by Lars Thor, Dept. of History, Univ. of Stockholm. Investigation made in order to date agriculture in this area. Samples from a charcoal horizon probably resulting from intentional clearing of land by fire.

		330 ± 95
St-1244.	Sk-Å 124	A.D. 1620
St-1274.	Sk-Å 1	< 250
		310 ± 130
St-1275.	Sk-Å 2	A.D. 1640
		355 ± 120
St-1277.	Sk-Å 4	A.D. 1595

St-1876. Kilatorpet **< 250**

Charcoal from a cairn or agricultural mound of stones in pine-forest area at Kilatorpet (58° 08' N Lat, 15° 02' E Long), Hardemo parish, Närke. Subm. by Siv Augustsson, Dept. of Geography, Univ. of Stockholm, Stockholm.

385 ± 135**St-1877. Ekeberga****A.D. 1565**

Charcoal from burnt and trampled area at Ekeberga (58° 04' N Lat, 15° 11' E Long), Hallsbergs parish, Närke. Subm. by Siv Augustsson.

Hassla series

Charcoal from agricultural fields at Hassla (58° 26' N Lat, 15° 10' E Long), Vallerstad parish, Östergötland. Subm. by Maud Steiner and Ulla Svennrud-Parsons, Dept. of Geography, Univ. of Stockholm, Stockholm.

St-1878. Hassla 1965:A **< 250****585 ± 105****St-1879. Hassla 1965:B** **A.D. 1365****2945 ± 360****St-1880. Hassla 1965:C** **995 B.C.****Skederid series**

Charcoal from abandoned and unmapped agricultural areas in Skederid parish (59° 41' N Lat, 18° 39' E Long), Uppland. Subm. by Ulf Sporrang, Dept. of Geography, Univ. of Stockholm.

St-1883. Snesslingby I **880 ± 65**
A.D. 1070**St-1884. Snesslingby II** **720 ± 90**
A.D. 1230**St-1885. Snesslingby III** **370 ± 65**
A.D. 1580**St-1886. Snesslingby IV** **845 ± 70**
A.D. 1105**St-1887. Snesslingby V** **550 ± 70**
A.D. 1400**St-1888. Sveden 1** **875 ± 65**
A.D. 1075**St-1889. Fåglå 1** **3155 ± 65**
1205 B.C.**St-1882. Lännaby 1** **1325 ± 105**
A.D. 625**St-1881. Österlisa 1** **1035 ± 65**
A.D. 915

Alskog series

Charcoal from Alskog parish (57° 22' N Lat, 18° 39' E Long), Gotland. Subm. by D. Hannerberg, Dept. of Geography, Univ. of Stockholm, Stockholm.

		600 ± 70
St-1538.	64/65:2	A.D. 1350
		435 ± 70
St-1541.	64/65:4	A.D. 1515
St-1542.	64/65:5	< 250
		310 ± 100
St-1539.	6/65:7	A.D. 1640

Dysberg series

Wood from logs in supposed building around reduction furnace for manufacture of iron at Dysberg-Dysdalen (61° 09' N Lat, 18° E Long), Älvdalens parish, Dalarna. Coll. by J. P. Lamm; subm. by G. Arwidsson.

		705 ± 65
St-1931.	Dysberg 1	A.D. 1245
		490 ± 65
St-1932.	Dysberg 2	A.D. 1460

*B. Other Countries***Lerna series**

Bone from Cincinnati Univ. Excavation at Lerna (37° 36' N Lat, 22° 50' E Long), Argolide, Greece. Subm. by N.-G. Gejvall. Dated samples are selected from collection of 2380 samples of some 25,000 animal bone fragments. *Comment* (N.-G. G.): dates agree closely with archaeological chronology.

		3765 ± 70
St-1969.	Lerna 1	1815 B.C.
	Bones (sacrum) of domestic cattle.	
		3970 ± 75
St-1980.	Lerna 9	2020 B.C.
	Proximal part of humerus of domestic pig.	

Luni series

Bone samples from Luni (42° 13' Lat, 11° 56' E Long), in province of Viterbo, Comune di Blera. Subm. by C. E. Östenberg, Ist. Svedese, Rome, Italy. This is continuation of Luni series in Stockholm VI (Östenberg, 1966).

		4025 ± 100
St-2043.	K1 1	2075 B.C.
	Tibia of <i>Bos t. dom.</i>	

St-2042. K1 2	3955 ± 200
Femur of Homo.	2005 B.C.
St-2044. K1 3	3005 ± 75
Scapula of <i>Bos t. dom.</i>	1055 B.C.
St-2047. K1 4	2945 ± 80
Radius and ulna of <i>Bos t. dom.</i>	995 B.C.
St-2045. K1 5	3120 ± 75
	1170 B.C.

Buchy series

Charcoal from fortification at Buchy (49° 30' N Lat, 01° 17' E Long), Normandie, France, situated on hillslope originally surrounded by two streams. It consists of a circular earthen wall and foss. Samples are collected from a furnace, probably older than the earth work, also from the main culture level. Coll. and subm. by H. Arberman, Historiska Museet, Univ. of Lund, Lund.

St-1699. Buchy 1	920 ± 70
Trench Fd, 20 to 21 m, on bottom of furnace.	A.D. 1030
St-1700. Buchy 2	< 250
Trench Fd, 19 to 21 m, in the furnace.	
St-1701. Buchy 3	765 ± 95
Trench Fd, 20 to 21 m, in the furnace.	A.D. 1185
St-1702. Buchy 4	730 ± 110
Trench Fa, 19 to 20 m culture layer, with red, burnt clay, at bottom of trench.	A.D. 1220
St-1703. Buchy 5	970 ± 65
Trench Fa, 18 to 20 m, dark layer.	A.D. 980
St-1704. Buchy 6	980 ± 140
Trench F, 22 to 23 m, under the wall.	A.D. 970
St-1705. Buchy 7	845 ± 80
Trench F, 13.5 to 15.5 m, in deep pit, 3.10 below surface.	A.D. 1105
St-1706. Buchy 8	835 ± 65
Trench F, 15 m at bottom of pit, 3.50 below surface.	A.D. 1115

III. MISCELLANEOUS (GEOCHEMICAL) SAMPLES

Bredkålen series

Atmospheric CO₂ from Bredkålen (63° 54' N Lat, 15° 18' E Long), alt 400 m, Jämtland, Sweden. Earlier series in Stockholm V. Subm. by Svante Odén, Internat. Meteorological Inst., Stockholm. Only selected samples have been analyzed.

		$\delta C^{13}, \text{‰}$	$\Delta, \text{‰}$
St-2013.	6306	-17	+782 ± 6
St-1806.	6307	-12	+915 ± 6
St-1807.	6309	- 8	+993 ± 6
St-2017.	6311	-10	+896 ± 7
St-1805.	6402	- 9	+837 ± 6
St-1802.	6405	- 9	+909 ± 6
St-1804.	6507	- 8	+979 ± 6
St-1803.	6409	- 8	+940 ± 6
St-2014.	6412	-10	+814 ± 6
St-1801.	6502	- 8	+785 ± 6
St-2015.	6505	-10	+786 ± 6
St-2016.	6508	-10	+793 ± 6

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