

## 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

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### 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.

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| <b>St-1579. Ö. Bunneran 64:I</b>               | <b>8295 ± 100</b><br><b>6345 B.C.</b> |
| From 63° 12' N Lat, 12° 34' E Long, alt 810 m. |                                       |
| <b>St-1577. Tivoli 64:II</b>                   | <b>4685 ± 75</b><br><b>2735 B.C.</b>  |
| From 63° 11' N Lat, 12° 24' E Long, alt 800 m. |                                       |
| <b>St-1920. Glensvalen</b>                     | <b>3385 ± 70</b><br><b>1435 B.C.</b>  |
| From 63° 03' N Lat, 13° 39' E Long, alt 810 m. |                                       |
| <b>St-1929. Båktjenjaure</b>                   | <b>6310 ± 90</b><br><b>4360 B.C.</b>  |
| From 63° 58' N Lat, 13° 40' E Long, alt 700 m. |                                       |

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| <b>St-1642. Kärrnäset</b> | <b>295 ± 65</b><br><b>A.D. 1655</b> |
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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<sub>o</sub>.
- St-1673. Tönningfloarna 4** 7125 ± 160  
5175 B.C.  
360 cm below surface. Probably A<sub>o</sub>, possibly C<sub>o</sub> 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.

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

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

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

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

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

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

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

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

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



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

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

|   |                   |
|---|-------------------|
| <b>St-2103. Lidsjömyren 2</b>                         | <b>4630 ± 80</b>  |
| 225 cm below surface. <i>Betula</i> max.              | <b>2680 B.C.</b>  |
| <b>St-2104. Lidsjömyren 3</b>                         | <b>8525 ± 100</b> |
| 305 cm below surface. <i>A.</i> <sub>0</sub> .        | <b>6575 B.C.</b>  |
| <b>St-2085. Lidsjömyren 4</b>                         | <b>9620 ± 180</b> |
| 315 cm below surface. Beginning of peat growth.       | <b>7670 B.C.</b>  |
| <b>St-2082. Lidsjömyren 5 T</b>                       | <b>8500 ± 100</b> |
| 545 cm below surface. Beginning of mud sedimentation. | <b>6550 B.C.</b>  |
| <b>Åflon (63° 28' N Lat, 13° 50' E Long)</b>          |                   |
| <b>St-2127. Åflon 1</b>                               | <b>2120 ± 65</b>  |
| 110 cm below surface. <i>P.</i> <sub>0</sub> .        | <b>170 B.C.</b>   |
| <b>St-2125. Åflon 2</b>                               | <b>4530 ± 75</b>  |
| 270 cm below surface. <i>Betula</i> max.              | <b>2580 B.C.</b>  |
| <b>St-2129. Åflon 3</b>                               | <b>5795 ± 135</b> |
| 365 cm below surface. <i>T.</i> <sub>0</sub> .        | <b>3845 B.C.</b>  |
| <b>St-2130. Åflon 4</b>                               | <b>6725 ± 90</b>  |
| 405 cm below surface. <i>Betula</i> max.              | <b>4775 B.C.</b>  |
| <b>St-2131. Åflon 5</b>                               | <b>6760 ± 100</b> |
| 425 cm below surface. <i>QM.</i> <sub>0</sub> .       | <b>4810 B.C.</b>  |

#### 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.

|                         |                     |
|-------------------------|---------------------|
| <b>St-2168. B 579</b>   | <b>11,235 ± 235</b> |
| Clayey mud.             | <b>9285 B.C.</b>    |
| <b>St-2163. B 574:I</b> | <b>11,170 ± 240</b> |
| Mud/clay.               | <b>9220 B.C.</b>    |

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

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

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

### **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.

|   |                                      |
|---|--------------------------------------|
| <b>St-1891. Rya 1:40</b><br>Clay 40 cm below surface. | <b>5025 ± 80</b><br><b>3075 B.C.</b> |
|---|--------------------------------------|

|                            |                                       |
|----------------------------|---------------------------------------|
| <b>St-1890. Rya 1:80</b>   | <b>5680 ± 125</b><br><b>3730 B.C.</b> |
| Clay 80 cm below surface.  |                                       |
| <b>St-1892. Rya 1:260</b>  | <b>8365 ± 260</b><br><b>6415 B.C.</b> |
| Peat 260 cm below surface. |                                       |
| <b>St-1894. Rya 1:284</b>  | <b>8905 ± 170</b><br><b>6955 B.C.</b> |
| Clay 284 cm below surface. |                                       |

**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.

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

**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.

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

### **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.

|                                  |                  |
|----------------------------------|------------------|
| <b>St-1748. 48-51</b>            | <b>2450 ± 65</b> |
| Fen peat with alder, willow etc. | <b>500 B.C.</b>  |

|   |                   |
|---|-------------------|
| <b>St-1749. 86-91</b>   | <b>2990 ± 120</b> |
| Lowest of the peat, representing isolation of lagoon swamps from sea. | <b>1040 B.C.</b>  |

|                        |                  |
|------------------------|------------------|
| <b>St-1684. Handöl</b> | <b>3710 ± 80</b> |
|                        | <b>1760 B.C.</b> |

Peat from Handöl (63° N Lat, 24° E Long), Jämtland. Subm. by C. G. Wenner, Dept. of Quaternary Geology, Univ. of Stockholm.



**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**  
 165 to 170 cm below surface. **A.D. 520**

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

**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**  
 475 to 480 cm below surface. **7205 B.C.**

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

**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**  
 Muddy clay with mosses, 684 to 688 cm. Dates end of Younger Dryas period, but value is higher than expected. **8570 B.C.**

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

**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), Jämjö 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), Jämjö 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.

### Inlängan

Gyttja and peat from section in small bog on island of Inlängan, (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. C<sup>14</sup> 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.

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

### Sällmyr

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

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

### Båticke

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

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

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. Helgmyr 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** **7005 ± 140**  
**5055 B.C.**  
Peat and gyttja, very hard.

**Tomtmyr**

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

**St-1555. Tomtmyr 3** **< 250**  
Log.

**St-1557. Tomtmyr 4** **21,715 ± 1300**  
**19,765 B.C.**  
Peat. Age impossible to explain.

**St-1558. Tomtmyr 5** **< 250**  
Peat.

**St-1641. Tomtmyr 30** **8905 ± 100**  
**6955 B.C.**  
Peat.

**St-1638. Tomtmyr 31** **9205 ± 100**  
**7255 B.C.**  
Peat.

**St-1634. Tomtmyr A** **9460 ± 110**  
**7510 B.C.**  
Peat.

**St-1635. Tomtmyr B** **8690 ± 100**  
**6740 B.C.**  
Peat.

**Malms**

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

**St-1564. Malms 6** **8410 ± 115**  
**6460 B.C.**  
Peat of Amblystegium.

**St-1563. Malms 7** **8410 ± 145**  
**6460 B.C.**  
Peat.

**St-1611. Fröjel** **9155 ± 175**  
**7205 B.C.**  
Peat under Ancylus shoreline at Gåistes (57° N Lat, 18° 15' E Long).  
Made in order to compare with St-174 (Stockholm I), 9190 ± 130 B.P.



**Dynisse**

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

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

|                                     |                  |
|-------------------------------------|------------------|
| <b>St-2089. Suoksjokk, Lappland</b> | <b>8120 ± 90</b> |
|                                     | <b>6170 B.C.</b> |

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.

|                           |                   |
|---------------------------|-------------------|
| <b>St-1916. Tärnasjön</b> | <b>7545 ± 180</b> |
|                           | <b>5595 B.C.</b>  |

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.

*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)**

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

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

|                                     |                                      |
|-------------------------------------|--------------------------------------|
| <b>St-1604. Sundbornsmossen 23</b>  | <b>&lt; 250</b>                      |
| <b>St-1605. Sundbornsmossen 182</b> | <b>3710 ± 80</b><br><b>1760 B.C.</b> |

## NORWAY

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

|                                  |                                     |
|----------------------------------|-------------------------------------|
| <b>St-1996. Sjetnemyren 25 T</b> | <b>575 ± 70</b><br><b>A.D. 1375</b> |
| <b>St-2064. Sjetnemyren 25</b>   | <b>490 ± 65</b><br><b>A.D. 1460</b> |
| <b>St-1997. Sjetnemyren 59 T</b> | <b>1100 ± 65</b><br><b>A.D. 850</b> |
| <b>St-2063. Sjetnemyren 59</b>   | <b>1100 ± 70</b><br><b>A.D. 850</b> |

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

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

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

|   |                                    |
|---|------------------------------------|
| <b>St-2057. Kristiansundsmymren 34-36</b> | <b>965 ± 70</b><br><b>A.D. 985</b> |
|---|------------------------------------|

|                 |                                  |                  |
|-----------------|----------------------------------|------------------|
|                 |                                  | <b>2730 ± 70</b> |
| <b>St-2059.</b> | <b>Kristiansundsmymren 68-70</b> | <b>780 B.C.</b>  |
|                 |                                  | <b>3600 ± 80</b> |
| <b>St-2084.</b> | <b>Kristiansundsmymren 91</b>    | <b>1650 B.C.</b> |
|                 |                                  | <b>6875 ± 90</b> |
| <b>St-2087.</b> | <b>Kristiansundsmymren 158</b>   | <b>4925 B.C.</b> |

THE FAROES

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

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

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

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

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

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

*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.

- |  |                     |
|--|---------------------|
|  | <b>10,055 ± 300</b> |
| <b>St-1554. Sand Water</b>   | <b>8105 B.C.</b>    |
| Site (60° 17' N Lat, 01° 20' W Long), at alt of 37 m. From 125 to 128 cm below surface of sediment.      |                     |
|  | <b>9725 ± 265</b>   |
| <b>St-1595. Stanevatstoe Loch</b>  | <b>7775 B.C.</b>    |
| Site (60° 16' N Lat, 01° 20' W Long), at alt of ca. 80 m. From 382 to 389 cm below surface of sediment.  |                     |
| <b>Upper Loch of Brouster (60° 15' N Lat, 01° 36' W Long), at alt of ca. 3 m</b>                         |                     |
|  | <b>8760 ± 250</b>   |
| <b>St-1606. Br 400</b>   | <b>6810 B.C.</b>    |
| From 400 to 404 cm below the surface of the sediment.  |                     |
|  | <b>9670 ± 540</b>   |
| <b>St-1763. UB/14</b>  | <b>7720 B.C.</b>    |
| From 444 to 450 cm below surface of sediment.  |                     |
|  | <b>15,080 ± 850</b> |
| <b>St-1757. Lower Loch of Brouster</b>   | <b>31,130 B.C.</b>  |
| From 60° 15' N Lat, 01° 36' W Long. Tidal lake from 345 to 350 cm below surface of sediment.             |                     |
|  | <b>2615 ± 140</b>   |
| <b>St-1810. Strom Loch</b>   | <b>665 B.C.</b>     |
| From 60° 14' N Lat, 01° 17' W Long. Tidal lake. From 300 to 302 cm below surface of sediment.            |                     |
| <b>Loch of Clickimin (60° 09' N Lat, 01° 10' W Long)</b>   |                     |
|  | <b>9620 ± 750</b>   |
| <b>St-1639. Loch of Clickimin 140</b>  | <b>7670 B.C.</b>    |
| At sealevel, but normally not a tidal lake. From 137 to 140 cm below surface of sediment.                |                     |
|  | <b>12,090 ± 900</b> |
| <b>St-1640. Loch of Clickimin 180</b>  | <b>10,140 B.C.</b>  |
| From 177 to 180 cm below surface of sediment.  |                     |
|  | <b>9945 ± 250</b>   |
| <b>St-1559. Loch of Brow</b>   | <b>7995 B.C.</b>    |
| 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.

**Sigluvik series**

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

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

**St-2137. Sigluvik 2** **6065 ± 80**  
**4115 B.C.**  
 210 cm below surface.

**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** **5535 ± 120**  
**3585 B.C.**  
 270 to 300 cm below surface. Dating Sphagnum peat period.

**St-1797. Keflavik 2.6-3.9** **5650 ± 85**  
**3700 B.C.**  
 360 to 390 cm below surface. Dating of Betula rise.

**St-1798. Keflavik 5.1-5.3** **7280 ± 150**  
**5330 B.C.**  
 510 to 530 cm below surface. Bottom layer.

## II. ARCHAEOLOGIC SAMPLES

*A. Sweden***Krankmårtenhögen series**

Charcoal and resin caulking from graveyard 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** **6325 ± 90**  
**4375 B.C.**  
 Charcoal (with cremated bones).

**St-1835. VI:A52** **1555 ± 100**  
**A.D. 395**  
 Charcoal under burnt stones of hearth.

**St-1836. VII:A10** **2130 ± 90**  
**180 B.C.**  
**3930 ± 80**

**St-1837. VIII:A33** **1980 B.C.**  
 Charcoal (with cremated bones).

**St-1839. IX:A45** **2005 ± 85**  
**55 B.C.**  
 Charcoal from cooking pit under pieces of brittle burnt stones.

|                                 |                |                                      |
|---------------------------------|----------------|--------------------------------------|
| <b>St-1841.</b>                 | <b>X:A59</b>   | <b>&lt; 250</b>                      |
| Charcoal (with cremated bones). |                |                                      |
| <b>St-1842.</b>                 | <b>XI:A1</b>   | <b>1855 ± 160</b><br><b>A.D. 95</b>  |
| <b>St-1843.</b>                 | <b>XII:A3</b>  | <b>2245 ± 100</b><br><b>295 B.C.</b> |
| <b>St-1844.</b>                 | <b>XIII:A4</b> | <b>2330 ± 70</b><br><b>380 B.C.</b>  |
| <b>St-1845.</b>                 | <b>XIV:A37</b> | <b>2110 ± 70</b><br><b>160 B.C.</b>  |
| 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 arti-facts, nails, broken pieces, ceramics, glass, etc. Coll. by Kerstin Bergengren and subm. by Björn Ambrosiani.

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

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 Satsjaure (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.

|   |                                       |
|---|---------------------------------------|
| <b>St-1851. L 1</b><br>Hearth 10.   | <b>875 ± 65</b><br><b>A.D. 1075</b>   |
| <b>St-1852. L 2</b><br>Charcoal from circle of stones of unknown use.   | <b>810 ± 65</b><br><b>A.D. 1110</b>   |
| <b>St-1853. L 3</b><br>Hearth 6.  | <b>&lt; 250</b>                       |
| <b>St-1854. L 4</b><br>Hearth 1.  | <b>&lt; 250</b>                       |
| <b>St-1855. L 5</b><br>Hearth 9, coal of <i>Pinus silvestris</i> .  | <b>3920 ± 120</b><br><b>1970 B.C.</b> |
| <b>St-1856. L 6</b><br>Coal from <i>Pinus silvestris</i> in layer of brittle burnt stones.  | <b>&lt; 250</b>                       |
| <b>St-1857. L 7</b><br>Hearth 8, coal from <i>Betula</i> sp.  | <b>1760 ± 110</b><br><b>A.D. 190</b>  |
| <b>St-1858. L 8</b><br>Hearth 7, coal from <i>Betula</i> sp.  | <b>&lt; 250</b>                       |
| <b>St-1859. L 9 a</b><br>Charcoal from <i>Betula</i> immediately below the peat in pit No. 1.   | <b>&lt; 250</b>                       |
| <b>St-1860. L 9 b</b><br>Bottom layer in pit No. 1.   | <b>305 ± 70</b><br><b>A.D. 1645</b>   |
| <b>St-1867. Trälösa 1</b><br>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. | <b>3145 ± 100</b><br><b>1195 B.C.</b> |

**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 graveyard, 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.

|  |                                     |
|--|-------------------------------------|
| <b>St-1663. 1356:6</b>                               | <b>2005 ± 85</b><br><b>55 B.C.</b>  |
| Layer of charcoal in upper level of cultural layer.  |                                     |
| <b>St-1669. 1356:7</b>                               | <b>1035 ± 80</b><br><b>A.D. 915</b> |
| <b>St-1664. 1356:8</b>                               | <b>1185 ± 80</b><br><b>A.D. 765</b> |
| 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.

|  |                                       |
|--|---------------------------------------|
| <b>St-1602. S101:1</b>   | <b>2245 ± 70</b><br><b>295 B.C.</b>   |
| <b>St-1603. S101:2</b>   | <b>1615 ± 65</b><br><b>A.D. 335</b>   |
| Thin layer of charcoal on top of culture layer.                              |                                       |
| <b>St-1614. S101:3</b>   | <b>3400 ± 110</b><br><b>1450 B.C.</b> |
| <b>St-1598. S101:4</b>   | <b>4155 ± 145</b><br><b>2205 B.C.</b> |
| Thin layer of charcoal on bottom of culture layer.                           |                                       |
| <b>St-1647. S104:1</b>   | <b>2245 ± 85</b><br><b>295 B.C.</b>   |
| Hearth 1, among and under stones.  |                                       |
| <b>St-1615. A104:2</b>   | <b>2320 ± 65</b><br><b>370 B.C.</b>   |
| Hearth 2, under stones.  |                                       |
| <b>St-1648. S104:3</b>   | <b>5765 ± 110</b><br><b>3815 B.C.</b> |
| Under concentration of burnt stones.   |                                       |
| <b>St-1649. S104:4</b>   | <b>3735 ± 100</b><br><b>1785 B.C.</b> |
| <b>St-1650. S104:5</b>   | <b>5285 ± 130</b><br><b>3335 B.C.</b> |
| <b>St-1651. S104:6</b>   | <b>6345 ± 180</b><br><b>4395 B.C.</b> |
| Thin layer of charcoal partially covered by sand under thick cultural layer. |                                       |

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

**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.

|                                      |                                     |
|--------------------------------------|-------------------------------------|
| <b>St-1731. A8:IV</b>                | <b>830 ± 80</b><br><b>A.D. 1120</b> |
| <b>St-1732. A7:II</b>                | <b>&lt; 250</b>                     |
| <b>St-1733. A7:III</b>               | <b>370 ± 70</b><br><b>A.D. 1580</b> |
| <b>St-1734. A9:I</b>                 | <b>330 ± 65</b><br><b>A.D. 1620</b> |
| <b>St-1736. A11:V</b>                | <b>&lt; 250</b>                     |
| <b>St-1737. A11:VI</b>               | <b>&lt; 250</b>                     |
| <b>St-1735. Hammar I<sup>3</sup></b> | <b>2615 ± 75</b><br><b>665 B.C.</b> |

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.

|                               |                                     |
|-------------------------------|-------------------------------------|
| <b>St-1738. 707:335, 5-51</b> | <b>305 ± 75</b><br><b>A.D. 1645</b> |
|-------------------------------|-------------------------------------|

|                 |                   |                                     |
|-----------------|-------------------|-------------------------------------|
| <b>St-1739.</b> | <b>705:335-60</b> | <b>880 ± 80</b><br><b>A.D. 1070</b> |
| <b>St-1741.</b> | <b>704:336-70</b> | <b>490 ± 70</b><br><b>A.D. 1460</b> |

**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.

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

**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.

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

**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.

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

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.

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

**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.

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

**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.

|                 |             |                 |
|-----------------|-------------|-----------------|
|                 |             | <b>970 ± 65</b> |
| <b>St-1783.</b> | <b>2696</b> | <b>A.D. 980</b> |

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.



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

#### 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.

|                 |                      |                  |
|-----------------|----------------------|------------------|
|                 |                      | <b>650 ± 65</b>  |
| <b>St-1696.</b> | <b>Örkelljunga 1</b> | <b>A.D. 1300</b> |
|                 |                      | <b>740 ± 65</b>  |
| <b>St-1697.</b> | <b>Örkelljunga 2</b> | <b>A.D. 1210</b> |

#### 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.

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

#### 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.

|                 |                    |                  |
|-----------------|--------------------|------------------|
|                 |                    | <b>1370 ± 75</b> |
| <b>St-1756.</b> | <b>Eketorp I:1</b> | <b>A.D. 580</b>  |

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

|                 |                    |                  |
|-----------------|--------------------|------------------|
|                 |                    | <b>1645 ± 65</b> |
| <b>St-1970.</b> | <b>Eketorp A:1</b> | <b>A.D. 305</b>  |

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.

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

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

**Ormöga series I**

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

|                                 |                  |
|---------------------------------|------------------|
| <b>St-1540. F 21</b>            | <b>1565 ± 70</b> |
| Probably the roof from a house. | <b>A.D. 385</b>  |

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

### **Ormöga series II**

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

|                 |              |                                      |
|-----------------|--------------|--------------------------------------|
| <b>St-2046.</b> | <b>O 118</b> | <b>1230 ± 80</b><br><b>A.D. 720</b>  |
| <b>St-2048.</b> | <b>O 92</b>  | <b>2080 ± 105</b><br><b>130 B.C.</b> |

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 C<sup>14</sup> dates.

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

|  |                                     |                   |
|--|-------------------------------------|-------------------|
|  |                                     | <b>750 ± 65</b>   |
| <b>St-2148.</b>  | <b>F 177</b>                        | <b>A.D. 1200</b>  |
|  |                                     | <b>830 ± 60</b>   |
| <b>St-2149.</b>  | <b>F 32</b>                         | <b>A.D. 1120</b>  |
|  |                                     | <b>880 ± 65</b>   |
| <b>St-1909.</b>  | <b>555 A</b>                        | <b>A.D. 1070</b>  |
|  |                                     | <b>775 ± 70</b>   |
| <b>St-1923.</b>  | <b>555 B</b>                        | <b>A.D. 1175</b>  |
|  |                                     | <b>875 ± 65</b>   |
| <b>St-1919.</b>  | <b>91</b>                           | <b>A.D. 1075</b>  |
|  |                                     | <b>465 ± 65</b>   |
| <b>St-1660.</b>  | <b>Örlen</b>                        | <b>A.D. 1485</b>  |
| 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.          |                                     |                   |
|  |                                     | <b>2430 ± 140</b> |
| <b>St-1565.</b>  | <b>Västerljung F 134</b>            | <b>480 B.C.</b>   |
| 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.  |                                     |                   |
|  |                                     | <b>1545 ± 65</b>  |
| <b>St-1861.</b>  | <b>Selånger F15:12</b>              | <b>A.D. 405</b>   |
| 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. Biörnstad, Royal Office of Antiquities.   |                                     |                   |
|  |                                     | <b>3025 ± 80</b>  |
| <b>St-1808.</b>  | <b>Site 792 (the pot of Laisan)</b> | <b>1075 B.C.</b>  |
| Crushed sherds (60 g) from asbestos ceramics found at Lake Varris, (64° 42' N Lat, 16° 24' E Long), Vilhelmina parish, Lapplund. See Malgomaj-Varris Series (Stockholm VI). Subm. by Astrid Linder, Royal Office of Antiquities. |                                     |                   |
| <b>Havor series</b>  |                                     |                   |
| 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.   |                                     |                   |
|  |                                     | <b>1995 ± 65</b>  |
| <b>St-1578.</b>  | <b>LH 1</b>                         | <b>45 B.C.</b>    |
|  |                                     | <b>1945 ± 70</b>  |
| <b>St-1580.</b>  | <b>LH 2</b>                         | <b>A.D. 5</b>     |
|  |                                     | <b>2050 ± 100</b> |
| <b>St-1592.</b>  | <b>LH 3</b>                         | <b>100 B.C.</b>   |

- 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 4<sup>3</sup>** **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 Fornsal, 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.

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

### Halleby series II

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

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

### 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.

|                 |                 |                  |
|-----------------|-----------------|------------------|
| <b>St-1244.</b> | <b>Sk-Å 124</b> | <b>330 ± 95</b>  |
|                 |                 | <b>A.D. 1620</b> |
| <b>St-1274.</b> | <b>Sk-Å 1</b>   | <b>&lt; 250</b>  |
| <b>St-1275.</b> | <b>Sk-Å 2</b>   | <b>310 ± 130</b> |
|                 |                 | <b>A.D. 1640</b> |
| <b>St-1277.</b> | <b>Sk-Å 4</b>   | <b>355 ± 120</b> |
|                 |                 | <b>A.D. 1595</b> |



**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** **A.D. 1070** **880 ± 65**

**St-1884. Snesslingby II** **A.D. 1230** **720 ± 90**

**St-1885. Snesslingby III** **A.D. 1580** **370 ± 65**

**St-1886. Snesslingby IV** **A.D. 1105** **845 ± 70**

**St-1887. Snesslingby V** **A.D. 1400** **550 ± 70**

**St-1888. Sveden I** **A.D. 1075** **875 ± 65**

**St-1889. Fågla I** **3155 ± 65** **1205 B.C.**

**St-1882. Lännaby I** **A.D. 625** **1325 ± 105**

**St-1881. Österlisa I** **A.D. 915** **1035 ± 65**

**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.

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

**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.

|                 |                  |                                     |
|-----------------|------------------|-------------------------------------|
| <b>St-1931.</b> | <b>Dysberg 1</b> | <b>705 ± 65</b><br><b>A.D. 1245</b> |
| <b>St-1932.</b> | <b>Dysberg 2</b> | <b>490 ± 65</b><br><b>A.D. 1460</b> |

*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.

|                 |   |                                      |
|-----------------|---|--------------------------------------|
| <b>St-1969.</b> | <b>Lerna 1</b>                            | <b>3765 ± 70</b><br><b>1815 B.C.</b> |
|                 | Bones (sacrum) of domestic cattle.        |                                      |
| <b>St-1980.</b> | <b>Lerna 9</b>                            | <b>3970 ± 75</b><br><b>2020 B.C.</b> |
|                 | 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).

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

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

**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. Arbman, Historiska Museet, Univ. of Lund, Lund.

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

## III. MISCELLANEOUS (GEOCHEMICAL) SAMPLES

**Bredkålen series**

Atmospheric CO<sub>2</sub> 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.

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

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