[RADIOCARBON, VOL. 13, NO. 1, 1971, P. 26-28]

INSTITUTE OF GEOLOGICAL SCIENCES RADIOCARBON DATES I

E. WELIN, L. ENGSTRAND, and S. VACZY
Radioactive Dating Laboratory, Stockholm, Sweden*

This date list was compiled by the Institute of Geological Sciences (U.K.) incorporating data supplied under contract by Dr. E. Welin, Radioactive Dating Laboratory, Stockholm. Unless otherwise stated age figures are in C^{14} years before A.D. 1950. The half-life of C^{14} is taken as 5568 years and the standard error is given as a standard deviation of 1σ. Correction for C^{13}/C^{12} has not been made. This is the first of a series of annotated lists of C^{14} dates of British and overseas material in course of preparation by the Institute.

5830 ± 110

IGS-C14/1. (St 3062) Leuchars, Fife **3880 B.C.**

Peat from borehole at St. Michael's Wood, (56° 24′ N Lat, 2° 53′ W Long, Grid Ref. NO 4541 2348) in peat bog at landward limit of post-Glacial raised beach. Depth below surface 1.00 to 1.15 m; overlies wedge of clastic deposits marking limit of Flandrian transgression. Coll. 1969 and subm. by J. I. Chisholm, Inst. of Geol. Sciences.

7605 ± 130

IGS-C14/2. (St 3063) Leuchars, Fife **5655 B.C.**

Peat from same borehole as IGS C14/1, at depth 2.35 to 2.50 m below surface. Underlies wedge of clastic deposits marking limit of Flandrian transgression. Coll. 1969 and subm. by J. I. Chisholm.

9945 ± 160

IGS-C14/3. (St 3064) Leuchars, Fife **7995 B.C.**

Peat from same borehole as IGS C14/1 at depth 3.75 to 3.90 m below surface, at base of peat sequence, resting on late-Glacial sand. Coll. 1969 and subm. by J. I. Chisholm.

4280 ± 100

IGS-C14/4. (St 3057) Leeds, Yorkshire **2330 B.C.**

Wood fragment from 'upper sand and gravel' at Oxbow Opencast Coal site (53° 46′ N Lat, 1° 28′ W Long, Grid Ref. SE 361 300), in Aire Valley. Coll. 1964 and subm. by G. D. Gaunt, Inst. of Geol. Sciences. *Comment*: sample was derived from an horizon containing abundant horizontally disposed tree trunks. Pollen analyses by J. W. Franks, Univ. of Manchester, of silts and clays below and above this horizon suggest correlations with Flandrian Zones VI and VIIb, respectively (Gaunt, Coope, and Franks, in press). Age determination is compatible with these correlations. Pollen of Cerealia and Plantaginaceae was present in the silts and clays above the tree trunks. Abundance of trees at this horizon may possibly reflect forest clearance.

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IGS-C14/5. (St 3071 A, outer fraction) Aberlady, East Lothian **5535 ± 160 / 3585 B.C.**

(St 3071 B, inner fraction) Aberlady, East Lothian **5070 ± 180 / 3120 B.C.**

Shells from temporary sec. (56° 1′ N Lat, 2° 51′ W Long, Grid Ref. NT 4713 8053) from a fossil life assemblage of *Ostrea edulis* Linn. and *Mya truncata* Linn., respectively, lying on, or burrowed into a platform of till 1.8 m above O.D. Covered by 1 m of estuarine clay. Fauna a little below low water mark. Correlated with a post-Glacial raised beach 8.55 m above O.D. Coll. 1968 and subm. by A. D. McAdam, Inst. of Geol. Sciences. (Descr. by A. D. McAdam and Shelagh M. Smith).

IGS-C14/6. (St 3065) Aberlady, East Lothian **2505 ± 100 / 555 B.C.**

Peat from temporary sec. at Luffness Links (56° 1′ N Lat, 2° 51′ W Long, Grid. Ref. NT 4710 8130) in peat wedge underlying 1 m sand, overlying estuarine clay. Probably lies near former high water mark at 6 m above O.D. Coll. 1968 and subm. by A. D. McAdam.

IGS-C14/7. (St 3070) Loch Linnhe area, Argyll **3315 ± 100 / 1365 B.C.**

Shells from semi-consolidated plastic clay excavated around screw of sunken ship (56° 29′ N Lat, 5° 25′ W Long). Sample 6 ft below sea floor, probably never above sea level since its formation. Level ca. 100 ft below O.D. Coll. and subm. by R. A. Eden. (Note by D. C. Greig).

IGS-C14/8. (St 3066) Belfast **9130 ± 120 / 7180 B.C.**

Peat from borehole in Castle Arcade (54° 36′ N Lat, 5° 56′ W Long, Grid Ref. J 3390 7425). Depth 14.94 m below surface; from layer of peat at base of estuarine clay. Coll. 1968 and subm. by H. E. Wilson, Inst. of Geol. Sciences. *Comment*: in Belfast Lough, Stephens (1968) assigned peat beneath the estuarine clay to Zone VI C, dating to ca. 8200 B.P. New datings place the basal peat at V/VI transition and indicate a much earlier date than has hitherto been suspected. Alternatively, peat deposition in the Belfast area may have been a polyphase event.

IGS-C14/9. (St 3058) Belfast **8715 ± 100 / 6765 B.C.**

Wood from same borehole at depth 11.59 m below surface in estuarine clay. Coll. 1968 and subm. by H. E. Wilson. *Comment*: same as for IGS-C14/8.

IGS-C14/10. (St 3067) Birmingham **>40,000**

Plant remains washed from peat bed in core sample between 6.81 m and 6.88 m depth from Quinton No. 1 Borehole (52° 28′ N Lat, 2° 00′ W Long, Grid Ref. SO 9921 8471). Peat from part of sequence of organic sediments sandwiched between glacial deposits. Coll. 1969 and

subm. by A. Horton, Inst. of Geol. Sciences. Contained insect fauna and plant remains indicate interglacial age.

IGS-C14/11. (St 3059) West Bromwich **12,165 ± 160 / 10,215 B.C.**

Wood fragments from basal 150 mm of 1.77 m thick peat in floor of small tributary of R. Tame. Peat rests upon glacial gravels (52° 32′ N Lat, 1° 58′ W Long, Grid Ref. SP 0213 9331). Coll. 1969 and subm. by A. Horton.

IGS-C14/12. (St 3060) West Bromwich **9970 ± 110 / 8020 B.C.**

Wood fragments from peat bed 0.51 to 0.61 m above base of peat described above. Coll. and subm. by A. Horton.

IGS-C14/13. (St 3068) Wittersham, Kent **3560 ± 100 / 1610 B.C.**

Peat from depth 4.27 m below surface in a borehole (50° 0′ N Lat, 0° 41′ E Long, Grid Ref. TQ 885 258) at Blackwall Bridge in the Rother Valley. Drift deposits, 31.4 m thick, included a bed of peat from 3.66 to 6.7 m below surface. Pollen analysis made by Charles Turner of peat at 3.81 m yielded a pollen spectrum referable to Zone VII b, and at 6.25 m a spectrum suggesting Zone VII a (pre-elm decline). Coll. 1968 and subm. by E. R. Shephard-Thorn, Inst. of Geol. Sciences. *Comment*: dates agree with palynologic evidence and also with previous dates from the older near-surface peats of Romney Marsh. IGS-C14/14 (see below) is one of the oldest dates so far obtained and suggests that peat may have started to accumulate in this part of the Rother Valley prior to its general accumulation in Romney Marsh.

IGS-C14/14. (St 3069) Wittersham, Kent **4845 ± 100 / 2895 B.C.**

Peat from same borehole at depth 5.89 to 5.97 m below surface. Coll. 1968 and subm. by E. R. Shephard-Thorn. *Comment*: see IGS-C14/13.

IGS-C14/15. (St 3061) Arlington, Sussex **9435 ± 120 / 7485 B.C.**

Wood fragments from peaty layer forming floor to the buried channel of R. Cuckmere at ca. O.D. (25 ft below surface). Coll. 1969 and subm. by R. D. Lake, Inst. of Geol. Sciences, from excavations for E sec. of Arlington Reservoir dam (50° 50′ N Lat, 0° 11′ E Long, Grid Ref. TQ 538 074).

References

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