

# Radiocarbon

1975

## INSTITUTE OF GEOLOGICAL SCIENCES RADIOCARBON DATES VI

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This date list was compiled by the Institute of Geological Sciences (UK) incorporating data supplied under contract by E Welin, Radioactive Dating Laboratory, Stockholm. Unless otherwise stated, age figures are in  $^{14}\text{C}$  years before AD 1950. The half-life of  $^{14}\text{C}$  is taken as 5568 years and the error, based on counting statistics of sample, background, and modern, is given as one standard deviation. Correction for  $^{13}\text{C}/^{12}\text{C}$  fractionation has been made.

**IGS-C14/96. (St 3903) Brantingham, Yorkshire** **21,835  $\pm$  1660**  
**19,885 BC**  
 $\delta^{13}\text{C} = -32.8\text{‰}$

Bone fragment from temporary excavation in sand and gravel SW of Brantingham (53° 45' N, 0° 35' W, Grid Ref SE 9385 2918). Depth 3.05m below surface. Coll 1970 and subm by G D Gaunt, Inst Geol Sci. *Comment*: bone occurred within or at base of littoral sediments attributed to maximum alt phase of Lake Humber. Date is Upper Devensian for this phase and stratigraphically supports approx contemporaneity with maximum Devensian ice advance into Vale of York.

**IGS-C14/141. (St 4397) Abingdon By-pass,** **32,300  $\pm$  1920**  
**Berkshire** **30,350 BC**  
 $\delta^{13}\text{C} = -27.3\text{‰}$

Wood from peat, peaty clay, and sand, 6m thick, infilling channels in Kimmeridge Clay and overlain by thin, poorly developed (? Plateau) gravels at Sugworth Lane Bridge cutting (51° 42' N, 1° 15' N, Grid Ref SP 5125 0076).

**IGS-C14/142. (St 4385) Abingdon By-pass,** **41,760  $\pm$  3470**  
**Berkshire** **39,810 BC**  
 $\delta^{13}\text{C} = -23.4\text{‰}$

Wood from same horizon as IGS-C14/141. *Comment* (BCC): samples are from same stratigraphic layer; either derivation or localized humic contamination has occurred.

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- IGS-C14/143. (St 4371) Redditch, Worcestershire** **5430 ± 155**  
**3480 BC**  
 $\delta^{13}C = -26.2\%$

Peat from auger borehole in peat bog at Ipsley Alders (51° 81' N, 1° 53' W, Grid Ref SP 0784 7655), depth 0.5 to 0.7m below surface. Coll 1972 and subm by B C Worssam, Inst Geol Sci.

- IGS-C14/144. (St 4365) Redditch, Worcestershire** **6350 ± 115**  
**4400 BC**  
 $\delta^{13}C = -26.5\%$

Peat from same borehole as IGS-C14/143, depth 1.2 to 1.5m below surface, rests on alluvial fan sediments. Coll 1972 and subm by B C Worssam.

- IGS-C14/145. (St 4370) Jersey, Channel Islands** **3605 ± 120**  
**1655 BC**  
 $\delta^{13}C = -27.1\%$

Peat from 7.4 to 8.0m below surface in borehole (49° 13' N, 2° 13' W, Grid Ref 7NW 2272 1172) some 300m NNW of St Ouen's Pond and 1100m SSE of IGS-C14/113. Coll 1971 and subm by R G Thurrell, Inst Geol. Sci. *Comment* (RGT): 1m peat with sand based at 1.8m is interbedded with sandy beach sediments of Ouen's coastal plain. Date corresponds with that for IGS-C14/113, confirming a stratigraphic correlation of sediments in W part of coastal plain at ca 2m.

- IGS-C14/146. (St 4373) Pitsea, Essex** **5065 ± 100**  
**3115 BC**  
 $\delta^{13}C = -26.2\%$

Peat at -3.6m in borehole at Bowers Marshes (51° 31' N, 0° 31' E, Grid Ref TQ 7473 8641) from Flandrian alluvial sediments. Coll 1973 by M Sarginson and subm by K J Northmore, Inst Geol Sci.

- IGS-C14/147. (St 4386) Sutton Courtney,** **33,190 ± 3450**  
**Oxfordshire** **31,240 BC**  
 $\delta^{13}C = -21.6\%$

Plant fragments from peaty silts at base of limestone gravel of Thames Floodplain Terrace, ca +48m (51° 38' N, 1° 15' W, Grid Ref: Su 520936). Coll 1971 and subm by D J Briggs, Leeds Polytechnic. *Comment* (DGB): suggests terrace aggraded during Upton Warren Interstadial period and that 1b facet of Thames Floodplain Terrace was formed earlier than 1a facet. Confirms separation of 2 facets on morphologic grounds.

**IGS-C14/148. (St 4398, Fraction 1)** **2385 ± 115**  
**435 BC**  
 $\delta^{13}C = -4.5\text{‰}$

Wallasea, Essex.

**(St 4400, Fraction 2)** **2300 ± 115**  
**350 BC**

Wallasea, Essex.

Shell band, largely comprising a life assemblage of *Ostrea edulis* (Linné) in Flandrian alluvial sediments from 7m depth in borehole on Wallasea I (51° 37' N, 0° 48' E, Grid Ref TQ 9375. Coll 1972 by R A Ellison and subm by P Grainger, Inst Geol Sci. *Comment* (B W Conway): *Ostrea edulis* is known to live offshore, on stable bottom, from about low-tide level to between -25 and -80m. Dates help determine sedimentation and/or subsidence rates.

#### Troon series, Ayrshire

Peat 0.3m thick from tunnel at Dundonald Rd (55° 33' N, 4° 39' W, Grid Ref NS 3361 3111). Overlain by sands and gravels of postglacial emerged beach and rests on humic pebbly sand of indeterminate origin. Coll 1973 and subm by S K Monro, Inst Geol Sci.

**IGS-C14/149. (St 4372)** **8015 ± 120**  
**6065 BC**  
 $\delta^{13}C = -27.4\text{‰}$

From top 2cm peat band at +6.74 to +6.76m. *Comment* (SKM): date infers Flandrian transgression which may be closer to actual transgression than previous dates in Ayrshire.

**IGS-C14/150. (St 4374)** **9090 ± 320**  
**7140 BC**  
 $\delta^{13}C = -26.8\text{‰}$

From basal 3cm of peat bed at +6.46 to +6.49m.

#### West Thurrock series, Essex

Peats and peaty clays from borehole at West Thurrock Power Sta (51° 28' N, 0° 17' E, Grid Ref TQ 58837700). Coll 1973 and subm by B W Conway, Inst Geol Sci.

**IGS-C14/151. (St 4377)** **3795 ± 115**  
**1845 BC**  
 $\delta^{13}C = -25.5\text{‰}$

Peaty clay with wood from -1.35m.

**IGS-C14/152. (St 4401)** **4975 ± 120**  
**4490 BC**  
 $\delta^{13}C = -25.9\text{‰}$

Peaty clay with wood from -3.40m.

*General Comment* (BWC): pollen analysis incomplete, but visual inspection suggests upper salt-marsh origin; samples therefore probably deposited 2 to 3m above mean sea level.