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UNIVERSITY OF WISCONSIN RADIOCARBON DATES V

MARGARET M. BENDER, REID A. BRYSON,
and DAVID A. BAERREIS

Department of Meteorology, University of Wisconsin, Madison

The radiocarbon dates obtained since August, 1967 are included in this report. The procedures followed have been described previously (Wisconsin II).

The reported dates have been calculated using 5568 as the half-life of C^{14}, 1950 as the reference year. Samples are run at least once in each of two counters at 3 atm pressure for a minimum of 15,000 counts. The standard deviation quoted includes only the 1σ of the counting statistics of background, sample, and standard counts.

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I. ARCHAEOLOGIC SAMPLES

A. Oklahoma

State School Land site, Delaware County (D1-64 and D1-65)

D1-64 (D1ScI) and D1-65 (D1ScII) are 2 spatially segregated occupation areas of School Land site, Delaware County, Oklahoma (36° 39′ N Lat, 94° 42′ W Long). Charcoal samples were excavated in 1939 and 1940 and subm. by D. A. Baerreis. Both units are predominantly Spiro focus components and fall within latter part of range of previously dated specimens from other sites of this complex in Delaware County, range being from A.D. 850 to A.D. 1280 (Wisconsin I: WIS-42, WIS-46, WIS-49; Wisconsin IV: WIS-243, WIS-246 to 247, WIS-249 to 253; Michigan V: M-819).

790 ± 60

WIS-255. Delaware County (D1-65) **A.D. 1160**

Specimen 34 from Sq. NE 34:1, Level 3, 8 to 12 in. below surface.

790 ± 55

WIS-257. Delaware County (D1-64) **A.D. 1160**

Specimen 450 from Sq. NE 14:18, Level 6, 24 to 30 in. below surface.

710 ± 55

WIS-258. Delaware County (D1-64) **A.D. 1240**

Specimen 453 from Sq. NE 10:3, Level 3, 8 to 12 in. below surface.

900 ± 50

WIS-259. Delaware County (D1-64) **A.D. 1050**

Specimen 1356 from Sq. NE 9:27, Ievel 2, 4 to 8 in. below surface.

870 ± 60

WIS-260. Delaware County (D1-64) A.D. 1080

Specimen 1428 from Sq. NE 9:29, Level 4, 12 to 16 in. below surface.

560 ± 60

WIS-254. Cat Smith site, Oklahoma (Ms-52) A.D. 1390

Charcoal from Cat Smith site, Muskogee County, Oklahoma (35° 34′ N Lat, 95° 10′ W Long) coll. 1965 by T. P. Barr; subm. by D. A. Baerreis. Sample from House Pattern 1, charred post in Sq. O-N1, 18 in. depth. Artifacts included Woodward Plain, Maxey Noded Redware, and other clay-tempered pottery as well as such point types as Fresno, Washita, Reed, and Morris. Only 1 cultural component is present, apparently an early Fulton manifestation. Affiliations are with Fort Coffee focus (Wykoff and Barr, 1967).

500 ± 60

WIS-256. Sheffield site, Oklahoma (Sq-22) A.D. 1450

Charcoal from Sheffield site, Sequoyah County Oklahoma (35° 27′ N Lat, 95° 00′ W Long). Coll. 1966 by Don Wyckoff, Univ. of Oklahoma; subm. by D. A. Baerreis. Charcoal from Trench 1, Feature 4D, trash pit located in circular, semisubterranean house floor area. Site is single component and seems to be early Fort Coffee focus.

910 ± 55

WIS-261. Goff Shelter, Oklahoma (Ms-46) A.D. 1040

Charcoal from Goff Shelter, Muskogee County, Oklahoma (35° 36′ 45″ N Lat, 95° 16′ 11″ W Long). Coll. 1966 by F. Schneider; subm. by D. A. Baerreis. Sample from Feature 1, fire pit assoc. with late prehistoric (Fulton aspect) occupation. Bison was present along with shell-tempered pottery and small triangular arrow points.

B. Iowa

Broken Kettle site, Plymouth County, Iowa 13PM1

Soil samples, containing abundant charcoal which was subsequently removed by flotation, were obtained at Broken Kettle site, Plymouth County, Iowa (42° 38′ N Lat, 96° 36′ W Long). 13PM1, 1 of primary components for Big Sioux phase of Mill Creek culture, has been badly disturbed by early excavations. Samples coll. 1967 by R. Banks and D. A. Baerreis; subm. by D. A. Baerreis.

860 ± 55

WIS-272. Broken Kettle site (13PM1) A.D. 1090

Charcoal from soil sample in zone 0 to 6 in. above base of undisturbed cache pit in N margin of site.

930 ± 55

WIS-276. Broken Kettle site (13PM1) A.D. 1020

Material from soil sample coll. ca. 2 ft below top of midden in same area as WIS-272, 38 to 50 in. above base of deposit.

C. Missouri

300 ± 55

WIS-266. Utz Site, Missouri 23SA2 **A.D. 1650**

Charcoal from Utz site, Saline County, Missouri (39° 17′ N Lat, 93° 15′ W Long). Coll. 1950 by C. H. Chapman, Univ. of Missouri; subm. by D. R. Henning, Univ. of Missouri. Sample ca. 0.3 ft below plow zone in concentration near group of Oneota skeletons in excavation unit which yielded Oneota cultural materials.

D. Wisconsin

Walker-Hooper site series, Wisconsin 47GL65

Charcoal samples obtained from 1967 excavations conducted by Guy Gibbon at Walker-Hooper site in Green Lake County, Wisconsin (43° 42′ N Lat, 89° 09′ W Long). Walker-Hooper is type site for Grand R. focus, hitherto undated cultural unit within Oneota aspect (McKern, 1945).

710 ± 45

WIS-268. Walker-Hooper site (47GL65) **A.D. 1240**

Sample from cylindrical pit, Feature 8, Level 4.

720 ± 55

WIS-270. Walker-Hooper site (47GL65) **A.D. 1230**

Sample from bell-shaped pit, Feature 20, 1.5 to 2.0 ft below surface.

750 ± 55

WIS-277. Walker-Hooper site (47GL65) **A.D. 1200**

Charcoal from Feature 67, Test Pit 45, Level 4, 2 to 2.5 ft below plow zone.

Dietz site, Wisconsin 47DA12

Initial work in 1955 at Dietz site, Dane County, Wisconsin (43° 04′ N Lat, 89° 23′ W Long) suggested time of transition from Madison Cord-Impressed to Aztalan Collared pottery types (Baerreis and Nero, 1956). Sample coll. 1956 and subm. by D. A. Baerreis agrees with earlier date (Wisconsin III: WIS-193) of A.D. 1170.

830 ± 45

WIS-273. Dietz site (47DA12) **A.D. 1120**

Charcoal from storage pit, Feature 33.

II. GEOLOGIC SAMPLES

A. Wisconsin

Schimelpfenig Bog series, Dane County, Wisconsin

Samples coll. 1967 in conjunction with excavation of 2 mastodons (*Mastodon americanus*), under supervision of John E. Dallman, Univ.

of Wisconsin, in marl layer underlying peat deposit on Elmer Schimelpfenig farm, Dane County, Wisconsin (43° 04′ 45″ N Lat, 89° 04′ 45″ W Long).

9600 ± 105
WIS-264. Schimelpfenig Bog, Wisconsin 7650 B.C.

Tamarack (id. by R. F. Evert) embedded in peat, from Sample Column III, 30 to 32 in. below surface near interface with marl.

WIS-265. E mastodon, Schimelpfenig Bog, Wisconsin 9480 ± 100 7530 B.C.

Bone scraps from concentration of bone representing E mastodon.

WIS-267. W mastodon, Schimelpfenig Bog Wisconsin 9630 ± 110 7680 B.C.

Bone scraps from concentration of bone representing W mastodon.

B. Northwest Territories, Canada

Drainage Lake, N.W.T.

Two shallow beds of peat overlying sand in cold, dry, well-drained tundra area just N of Pelly Lake, Keewatin (66° 08′ N Lat, 101° 04′ W Long) where peat is not presently accumulating. Growth of material may reflect different climatic conditions. Pollen diagrams by H. Nichols (Nichols, 1967) show percentages of *Picea* and *Pinus* higher than modern surface counts. Coll. 1966 and subm. by H. Nichols.

1060 ± 55
WIS-263. Drainage Lake, N.W.T. A.D. 890

Rootlet peat, 26 to 28 cm below modern surface, from 30 cm of peat accumulation on top of sand.

940 ± 60
WIS-278. Drainage Lake, N.W.T. A.D. 1010

Rootlet peat 13 to 14 cm below modern surface. Dates cessation of peat growth which may reflect environmental or climatic change. Sample occurs just above change from lower coarse detritus mud to upper fibrous rootlet peat and at same level as increase of *Pinus* in pollen diagram.

6790 ± 75
WIS-275. Colville Lake, N.W.T. 4840 B.C.

Sedge peat, 205 to 210 cm below modern surface, which is basal organic material immediately overlying marl at 210 cm. Dates base of pollen diagram by H. Nichols and provides minimum date for deglaciation. Peat monolith cut from exposed peat face at Colville Lake, District of MacKenzie, N.W.T. (67° 06′ N Lat, 125° 47′ W Long). Coll. 1967 by J. A. Larsen, Univ. of Wisconsin; subm. by H. Nichols and R. A. Bryson.

6480 ± 80
WIS-262. Repulse Bay, N.W.T. 4530 B.C.

Shells, (*Hiatella arctica* L.), id. by Weston Blake, Jr., Canadian Geol. Survey, Ottawa, were obtained from slight depression in rocky

tundra on ridge in Repulse Bay, N.W.T., Canada (66° 31′ N Lat, 86° 15′ W Long) 120 ft above present day level of Hudson Bay. Since shells occur at depths from low tide levels to 600 ft, their value in determining date of shoreline emergence is limited, but the date establishes chronology in sense that area had been under water to some undetermined depth and emergence occurred subsequently. Another date (GSC-286: 6850 ± 140) for same general area is given in Craig (Craig, 1965). Outer 20% of shell was removed by acid washing.

C. Central Canada

Samples coll. and dated for 2 purposes: 1) to date initiation of bog growth in sections used for pollen analysis; 2) to provide minimum dates for deglaciation in region with minimal radiocarbon control of deglaciation timing. Peace R. and Porcupine Mt. dates seem too late to indicate deglaciation, and Waskesiu sample dates only onset of bog conditions. Interpolation from existing dates to N and S suggests that deglaciation at Porcupine Mt. should have occurred prior to 9000 B.P. and that some time elapsed before kettle formed. Pollen data by H. Nichols suggest that the region was open spruce forest at dated time.

Peace R. date is for drainage of pro-glacial lake of considerable extent with ice front quite distant. Minimal ice retreat dates ca. 100 mi to SE are 8560 ± 170 B.P. (GSC-525, GSC VI) and 8320 ± 260 B.P. (GSC-500, GSC VI). Date given here appears consistent with opening of channel at Lake Athabasca which drained pro-glacial lake. Pollen analysis by H. Nichols of basal mud and clay indicates patches of vegetation on bare mineral soil.

WIS-269. Waskesiu, Saskatchewan **2410 ± 60**
460 B.C.

Coarse detritus mud overlying clay, 150 to 160 cm below modern surface of bog. Organic material immediately overlies glacial lake clay which begins at 158 cm with rather sharp transition from organic to clay. Mud may not be conformable with clay but date should indicate initiation of bog conditions in valley. Coll. 1967 from Waskesiu, Saskatchewan, Canada (53° 55′ N Lat, 106° 03′ W Long) by R. A. Bryson and H. Nichols; subm. by H. Nichols.

WIS-271. Porcupine Mountain, Manitoba **6770 ± 70**
4820 B.C.

Necron mud, basal organic material overlying blue clay, 205 to 210 cm below present surface of bog; clay at 207 cm and below. Date provides minimum age for formation of basin (kettle ?) and date for base of pollen diagram analyzed by H. Nichols. Sample coll. in 1967 at elev. ca. 2100 ft at Porcupine Mt., Manitoba (52° 31′ N Lat, 101° 15′ W Long) by R. A. Bryson and H. Nichols; subm. by H. Nichols.

WIS-274. Peace River, Alberta **6880 ± 85 4930 B.C.**

Detritus mud with clay, basal organic material from bottom of peat bog which overlies (conformably) pro-glacial lake clay. Sample from 171 to 173 cm below modern surface; provides minimum age for drainage of lake. Coll. 1967 from Peace R., Alberta (56° 17′ N Lat, 117° 20′ W Long) by R. A. Bryson, H. Nichols, and R. L. Steventon; subm. by H. Nichols.

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