

Volume 11, Number 1 - 1969

RADIOCARBON



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Editors

EDWARD S. DEEVEY - RICHARD FOSTER FLINT
J. GORDON OGDEN, III - IRVING ROUSE

Managing Editor

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YALE UNIVERSITY
NEW HAVEN, CONNECTICUT

**RADIOCARBON MEASUREMENTS: COMPREHENSIVE INDEX,
1950-1965**

The editors of *RADIOCARBON*, with the support of the National Science Foundation, have published a Comprehensive Index to previously published radiocarbon measurements. Entries through Volume 7 of *RADIOCARBON* have been scrutinized and revised where necessary, by all laboratories and authors of date lists. The Index lists all dates or other measurements in order of laboratory number, which have been kept current through the application of a series of corrections.

The Index is available to all subscribers to *RADIOCARBON* at ten dollars U.S. per copy.

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Editors: JOHN RODGERS AND JOHN H. OSTROM

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INSTRUCTIONS TO CONTRIBUTORS

Manuscripts of radiocarbon papers should follow the recommendations in *Suggestions to Authors*, 5th ed.* All copy must be typewritten in *double space* (including the bibliography): manuscripts for vol. 11, no. 2, must be submitted in *duplicate* by January 1, 1969, and for vol. 12, no. 1, by September 1, 1969.

Description of samples, in date lists, should follow as closely as possible the style shown in this volume. Each separate entry (date or series) in a date list should be considered an *abstract*, prepared in such a way that descriptive material is distinguished from geologic or archaeological interpretation, but description and interpretation must be both brief and informative. Date lists should therefore not be preceded by abstracts, but abstracts of the more usual form should accompany all papers (e.g. geochemical contributions) that are directed to specific problems.

Each description should include the following data, if possible in the order given:

1. Laboratory number, descriptive name (ordinarily that of the locality of collection), and the date expressed in years B.P. (before present, i.e. before A.D. 1950) and, for finite dates, in years A.D. or B.C. The standard error following the date should express, within limits of $\pm 1\sigma$, the laboratory's estimate of the accuracy of the radiocarbon measurement, as judged on *physicochemical* (not *geologic or archaeological*) grounds.
2. Substance of which the sample is composed; if a plant or animal fossil, the scientific name if possible; otherwise the popular name; but not both. Also, where pertinent, the name of the person identifying the specimen.
3. Precise geographic location, including *latitude-longitude coordinates*.
4. Occurrence and stratigraphic position in precise terms.
5. Reference to relevant publications. Citations within a description should be to author and year, with specific pages wherever appropriate. References to published date lists should cite the journal, year, vol., and specific page (e.g., Radiocarbon, 1968, v. 10, p. 97). Full bibliographic references are listed alphabetically at the end of the manuscript, in the form recommended in *Suggestions to Authors*.
6. Date of collection and name of collector.
7. Name of person submitting the sample to the laboratory, and name and address of institution or organization with which submitter is affiliated.
8. Comment, usually comparing the date with other relevant dates, for each of which sample numbers and references must be quoted, as prescribed above. Interpretive material, summarizing the significance and implicitly showing that the radiocarbon measurement was worth making, belongs here, as do technical matters, e.g. chemical pretreatment, special laboratory difficulties, etc.

Illustrations, in general, should be originals, but photographic reproductions of line drawings are sometimes acceptable, and should accompany the manuscript in any case, if the originals exceed 9 by 12 inches in size.

Reprints. Thirty copies of each article, without covers, will be furnished without cost. Additional copies and printed covers can be specially ordered.

Back issues. Full sets of back issues (vols. 1-9) are available at a reduced rate to subscribers at \$50.00 a set; vol. 10, nos. 1 and 2 is \$20.00; single issues are \$10.00 each.

* *Suggestions to authors of the reports of the United States Geological Survey*, 5th ed., Washington, D. C., 1958 (Government Printing Office, \$1.75).

NOTICE TO READERS

Half life of C¹⁴. In accordance with the decision of the Fifth Radiocarbon Dating Conference, Cambridge, 1962, **all dates published in this volume (as in previous volumes) are based on the Libby value, 5570 ± 30 yr,** for the half life. This decision was reaffirmed at the H³ and C¹⁴ Conference, Pullman, Washington, 1965. Because of various uncertainties, when C¹⁴ measurements are expressed as dates in years B.P. the dates are arbitrary, and refinements that take some but not all uncertainties into account may be misleading. As stated in Professor Harry Godwin's letter to *Nature* (v. 195, no. 4845, p. 984, September 8, 1962), the mean of three new determinations of the half life, 5730 ± 40 yr, is regarded as the best value now obtainable. Published dates can be converted to this basis by multiplying them by 1.03.

A.D./B.C. dates. As agreed at the Cambridge Conference in 1962, A.D. 1950 is accepted as the standard year of reference for all dates, whether B.P. or in the A.D./B.C. system.

Meaning of δC¹⁴. In Volume 3, 1961, we indorsed the notation Δ (Lamont VIII, 1961) for geochemically interesting measurements of C¹⁴ activity, corrected for isotopic fractionation in samples and in the NBS oxalic-acid standard. The value of δC¹⁴ that entered the calculation of Δ was defined by reference to Lamont VI, 1959, and **was corrected for age.** This fact has been lost sight of, by the editors as well as by authors, and recent papers have used δC¹⁴ as the **observed** deviation from the standard. This is of course the more logical and self-explanatory meaning, and cannot be abandoned now without confusion; moreover, except in tree-ring-dated material, it is rarely possible to make an age correction that is independent of the C¹⁴ age. In the rare instances where Δ or δC¹⁴ are used for samples whose age is both appreciable and known, we assume that authors will take special care to make their meaning clear; reference to "Δ as defined by Broecker and Olson (Lamont VIII)" is not sufficient to do this.

Radiocarbon Measurements: Comprehensive Index, 1950-1965. This index, covering all published C¹⁴ measurements through Volume 7 of RADIOCARBON, and incorporating revisions made by all laboratories, has been published. It is available to all subscribers to RADIOCARBON at ten dollars U.S. per copy.

Publication schedule. Volume 10 and subsequent volumes are published in two semi-annual issues, in Winter and in Summer, with deadlines for manuscripts on 1 September and 1 January.

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