

RE: Radiocarbon Dating Results For Samples MMF03 122, MMF03 326

Dear Mr. Coleman:

Enclosed are the radiocarbon dating results for two samples recently sent to us. They each provided plenty of carbon for accurate measurements and all the analyses went normally. The report sheet also contains the method used, material type, and applied pretreatments and, where applicable, the two-sigma calendar calibration range.

As always, this report has been both mailed and sent electronically. All results (excluding some inappropriate material types) which are less than about 20,000 years BP and more than about ~250 BP include this calendar calibration page (also digitally available in Windows metafile (wmf) format upon request). The calibrations are calculated using the newest (1998) calibration database with references quoted on the bottom of each page. Multiple probability ranges may appear in some cases, due to short-term variations in the atmospheric ^{14}C contents at certain time periods. Examining the calibration graphs will help you understand this phenomenon. Don't hesitate to contact us if you have questions about calibration.

We analyzed these samples on a sole priority basis. No students or intern researchers who would necessarily be distracted with other obligations and priorities were used in the analyses. We analyzed them with the combined attention of our entire professional staff.

Information pages are also enclosed with the mailed copy of this report. If you have any specific questions about the analyses, please do not hesitate to contact us.

The cost of the analysis was charged to the MASTERCARD card provided. A receipt is enclosed. Thank you. As always, if you have any questions or would like to discuss the results, don't hesitate to contact me.

Sincerely,

A handwritten signature in black ink that reads "Darden Hood". The signature is written in a cursive, flowing style.

Mr. Brian Coleman

Report Date: 1/7/2006

Material Received: 11/28/2005

Sample Data	Measured Radiocarbon Age	13C/12C Ratio	Conventional Radiocarbon Age(*)
Beta - 211105 SAMPLE : MMF03 122 ANALYSIS : AMS-Standard delivery MATERIAL/PRETREATMENT : (peat): acid/alkali/acid 2 SIGMA CALIBRATION : Cal AD 650 to 780 (Cal BP 1300 to 1170)	1360 +/- 40 BP	-27.9 o/oo	1310 +/- 40 BP
Beta - 211106 SAMPLE : MMF03 326 ANALYSIS : AMS-Standard delivery MATERIAL/PRETREATMENT : (peat): acid/alkali/acid 2 SIGMA CALIBRATION : Cal BC 3330 to 3220 (Cal BP 5280 to 5170) AND Cal BC 3180 to 3160 (Cal BP 5130 to 5100) Cal BC 3130 to 2920 (Cal BP 5080 to 4870)	4490 +/- 40 BP	-28.5 o/oo	4430 +/- 40 BP

CALIBRATION OF RADIOCARBON AGE TO CALENDAR YEARS

(Variable s: C 13/C 12=-27.9:lab. mult=1)

Laboratory number: **Beta-211105**

Conventional radiocarbon age: **1310±40 BP**

2 Sigma calibrated result: Cal AD 650 to 780 (Cal BP 1300 to 1170)
(95% probability)

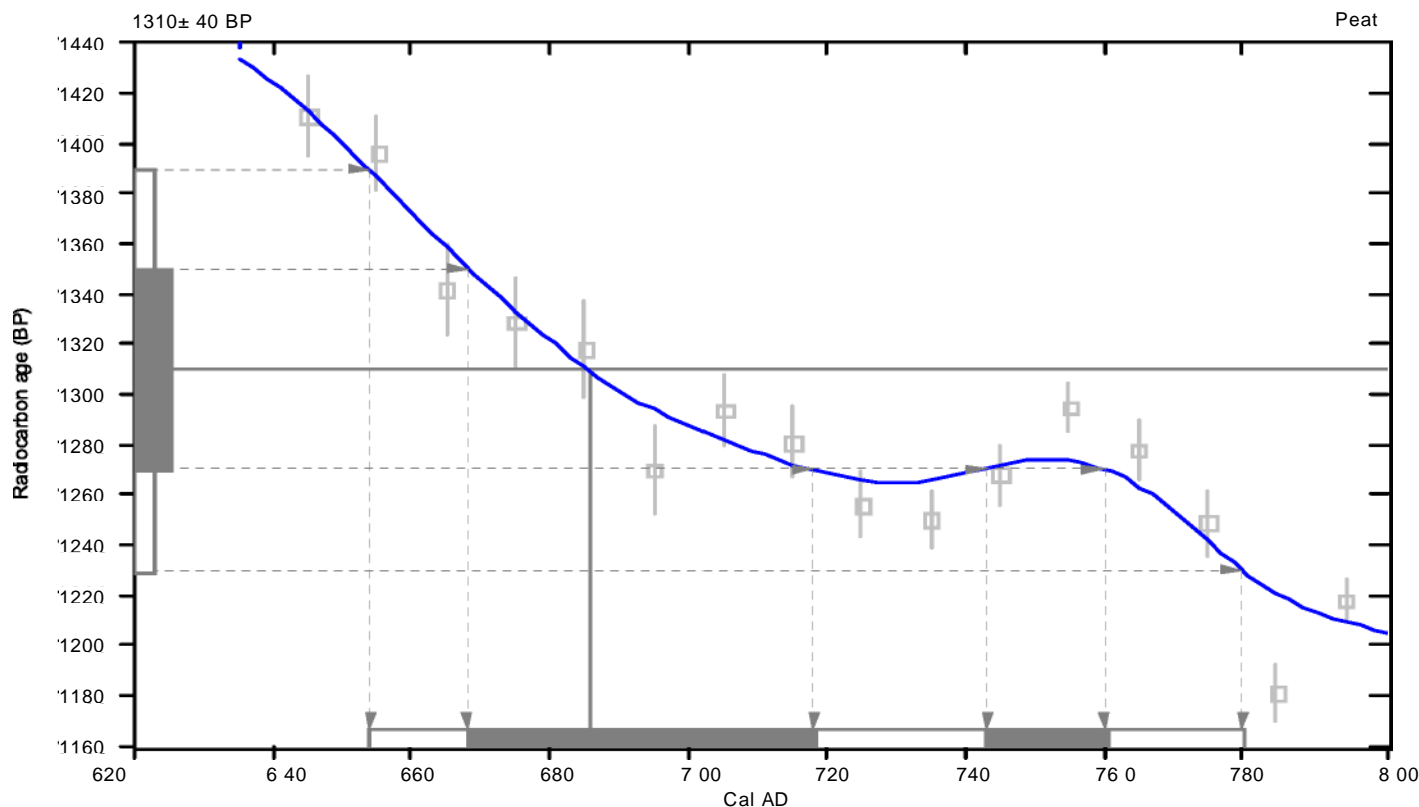
Intercept data

Intercept of radiocarbon age
with calibration curve:

Cal AD 690 (Cal BP 1260)

1 Sigma calibrated results:
(68% probability)

Cal AD 670 to 720 (Cal BP 1280 to 1230) and
Cal AD 740 to 760 (Cal BP 1210 to 1190)



References:

Database used

INTCAL98

Calibration Database

Editorial Comment

Stuiver, M., van der Plicht, H., 1998, Radiocarbon 40(3), pxi -xi ii

INTCAL98 Radiocarbon Age Calibration

Stuiver, M., et. al., 1998, Radiocarbon 40(3), p1041-1083

Mathematics

A Simplified Approach to Calibrating C14 Dates

Talma, A. S., Vogel, J. C., 1993, Radiocarbon 35(2), p317-322

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CALIBRATION OF RADIOCARBON AGE TO CALENDAR YEARS

(Variables: C13/C12=-28.5:lab. mult=1)

Laboratory number: B et a-211106

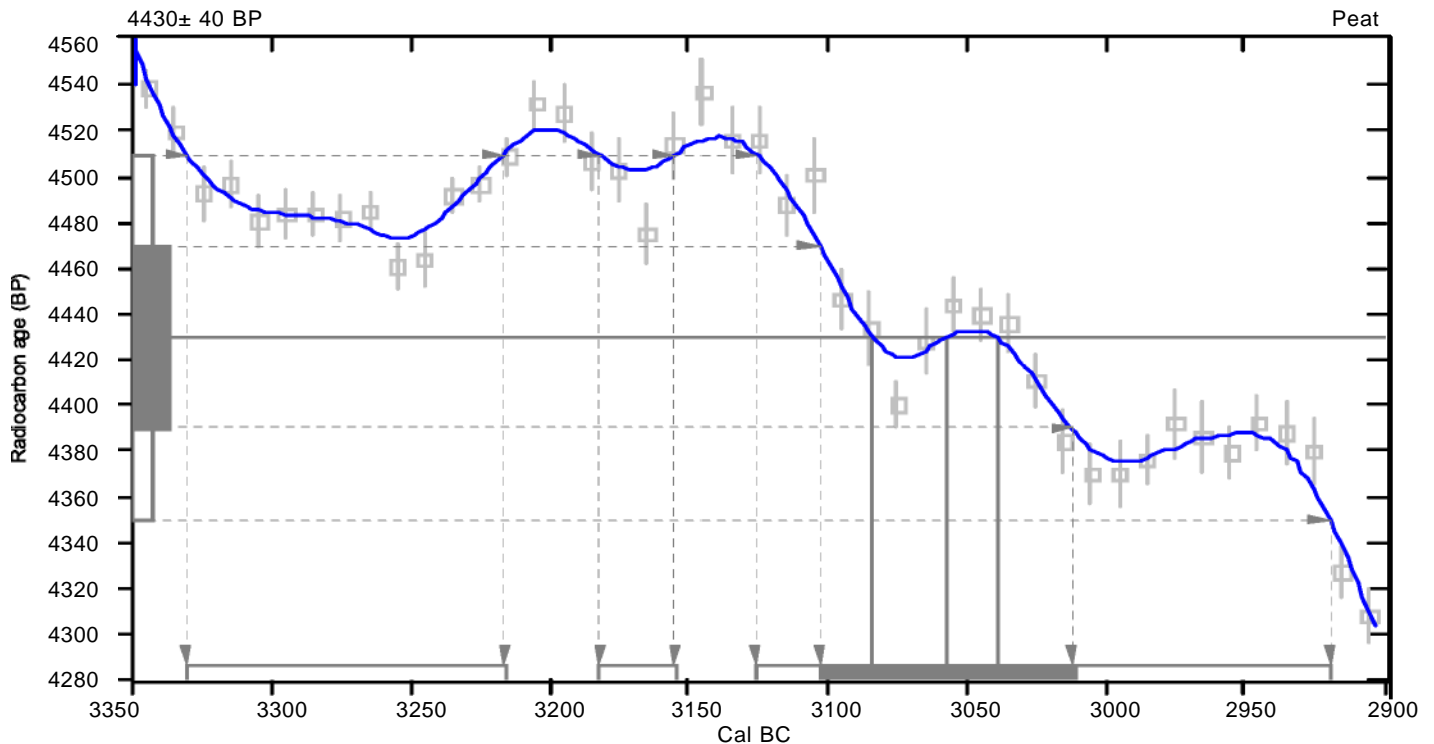
Conventional radiocarbon age: 4430±40 BP

2 Sigma calibrated results: Cal BC 3330 to 3220 (Cal BP 5280 to 5170) and
(95% probability) Cal BC 3180 to 3160 (Cal BP 5130 to 5100) and
Cal BC 3130 to 2920 (Cal BP 5080 to 4870)

Intercept data

Intercepts of radiocarbon age
with calibration curve: Cal BC 3080 (Cal BP 5030) and
Cal BC 3060 (Cal BP 5010) and
Cal BC 3040 (Cal BP 4990)

1 Sigma calibrated result: Cal BC 3100 to 3010 (Cal BP 5050 to 4960)
(68% probability)



References:

Database used

INTCAL98

Calibration Database

Editorial Comment

Stuiver, M., van der Plicht, H., 1998, *Radiocarbon* 40(3), pxi -xi ii

INTCAL98 Radiocarbon Age Calibration

Stuiver, M., *et. al.*, 1998, *Radiocarbon* 40(3), p1041-1083

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