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Freedman, J and Evans, J 2015 Correction: Working with the Public: How an Unusual Museum Enquiry Turned into Travels Through Time and Space. *Open Quaternary*, 1: 9, pp. 1–2, DOI: http://dx.doi.org/10.5334/oq.aj

CORRECTION

# Correction: Working with the Public: How an Unusual Museum Enquiry Turned into Travels Through Time and Space

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This article details a correction to: Freedman, J and Evans, J 2015 Working with the Public: How an Unusual Museum Enquiry Turned into Travels Through Time and Space. *Open Quaternary*, 1: 8, pp. 1–14, DOI: http://dx.doi.org/10.5334/oq.ah

## Correction

The article 'Working with the Public: How an unusual museum enquiry turned into travels through time and space' (Freedman and Evans 2015) contains factual errors about radiocarbon dating, and a radiocarbon result that has not been correctly reported.

The second paragraph of the section 'The Dating Game' states that 'This method examines the ratio of $^{14}C$ to $^{13}C$, which equal when an organism is alive, but $^{14}C$ begins to decay to $^{13}C$ after death.' This should read:

'This method examines the ratio of $^{14}C$ to $^{13}C$, which is equal when an organism is alive, but $^{14}C$ begins to decay to *$^{14}N$ after death, whereas $^{12}C$ is a stable isotope and does not decay.'*

The radiocarbon result reported in the abstract and the section 'Radiocarbon results' does not represent a date range of AD 1739 – 1787. This confusion arose due to the measurements returned by the Radiocarbon date lab being given as 187 ± 24, as shown on the table below (**Table 1**).

C14 measurements within the last 300 years cannot be as accurate as that stated above. Radiocarbon dates are calculated by knowing the half life of $^{14}C$, and knowing the amount of $^{14}C$ and $^{12}C$ in a sample. However, due to anthropogenic increase of carbon within the last 300 years, the result can be precise but can have several dates. This is because the additional carbon in the atmosphere can give one date in one region and another date in another region, so the result obtained for this leopard tooth can end up with several dates. As such, any dates that have a result within the last 300 years should be reported as that. The calibrated date range for this leopard tooth is from AD 1656 to the present (which for radiocarbon dates is given as AD 1950).

These updated radiocarbon results do not affect the conclusion of the paper. The results of a radiocarbon date between AD 1656 and AD 1950 are still within the time of Linnaeus Tripe visiting India and Burma and returned back to Plymouth. With the detailed history of the locality, along with the Strontium and revised radiocarbon results we still conclude that Linnaeus Tripe brought the tooth back from India or Burma. The collaborative research carried out demonstrates how scientists working with the public can empower members of the public to be a key part of real scientific research.

## References

**Freedman, J,** and **Evans, J** 2015 Working with the Public: How an Unusual Museum Enquiry Turned into Travels Through Time and Space. *Open Quaternary*, 1: 8, DOI: http://doi.org/10.5334/oq.ah

| Lab Number | Sample Material | C14 measurement | Calibration curve | Calibration software | Calibrated ranges |
|---|---|---|---|---|---|
| OxA 30390 | Tooth (*Panthera paradus*) | 187 ± 24 | IntCal13 | OxCal v4.2 | 1656 cal AD - ... (95.4% confidence) |

**Table 1:** radiocarbon correction data.

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