

English Heritage Scientific Dating Customer Satisfaction Survey 2004

Summary

During the spring of AD 2004, all users of the English Heritage Scientific Dating service since 1999 were sent a postal questionnaire to complete regarding the quality of service they had experienced. Seventy-one questionnaires were returned. The results show that the general quality of service was rated very highly by the respondents. Their main complaint was about speed of the return of results, which was considered to be too slow.

Keywords: Radiocarbon, Dendrochronology

Author: Andrew Parnell, 1 Mauncer Lane, Woodhouse, Sheffield, S13 7JF

Executive Summary

- The percentage of people rating English Heritage Dating Services as excellent or very good was very high – 78%. This was broadly the same for both the radiocarbon service and the dendrochronology service.
- Contact with the service is infrequent – the vast majority (87%) only use the services every few months or less. Only 11% use it weekly or every few weeks.
- Statements regarding the speed of delivery or results were the most poorly received by the respondents. Only 71% of the respondents agreed with the statement “The dating arrived in good time”. However, timing was seen as the least important factor by 68% of those using the radiocarbon service.
- The radiocarbon service was used by more respondents than either the dendrochronology service or the general advisory service. Almost 70% of the respondents claimed to use the radiocarbon service, compared with just under half using dendrochronology and 45% getting advice.
- The advisory service was rated very highly by respondents. Statements regarding understanding, timing, and helpfulness were agreed with by approximately 9 in 10 respondents.
- In the dendrochronology section, only 52% of respondents agreed with the statement “The ‘what you want’ memo was helpful”. This was significantly lower than any of the other statements given in that section.

Introduction

This document contains analysis and discussion of the results obtained from the English Heritage Scientific Dating Customer Satisfaction Survey 2004. This section deals with the background to the survey and details the way in which it was run. Sections 2, 3, and 4 concern the analysis of the data. Appendices A, B, C, and D contain statistical information, the questionnaire, tables of data, and answers to open-ended questions respectively.

Method

The survey was split into three parts; an overall section, a section on radiocarbon dating, and a section on dendrochronology. As the sample was also in this form, respondents could be sent only those parts relevant to them.

It was felt that the questionnaire would be conducted best by post. Each respondent was sent a questionnaire in April 2004 to fill in and return. All responses had been received by early June and were transferred on to computer.

Included in the questionnaire were a variety of questions including agreement scales, priority choices, and open-ended questions to allow for more qualitative and individual answers. The list of answers for this latter type of questions is included in Appendix D.

The survey was conducted in the strictest confidence. Every respondent was assured anonymity in their answers. It should be impossible to identify any individual from the answers they gave.

Sample and response rates

The supplied sample contained 155 names and addresses. Of these:

- 91 (59%) use the radiocarbon service
- 53 (34%) use the dendrochronology service
- 11 (7%) use neither

Seventy-one surveys were returned, a response rate of 46% which is slightly better than most postal surveys. Of these:

- 46 (65%) were radiocarbon users
- 21 (30%) were dendrochronology users
- 4 (6%) were neither

The data were weighted to take account of these profiles. For details of the weighting system see Appendix A.

Overall section

The overall section was filled in by all respondents. All values here are based on weighted data from an original base size of 71. In certain places, graphs are shown to indicate more clearly the nature of the answers. Open ended answers are given in italics to support the text.

Services used. The first question they were asked was in regard to which services they used. The radiocarbon service was used most often, by 70% of respondents. Both the advisory service and the dendrochronology service were used by just under half of all respondents.

Frequency of contact. Contact with the English Heritage Dating Service (EHDS) was infrequent. Only 11% of respondents spoke to them on a weekly basis. The vast majority (43%) contacted them on a monthly basis whilst approximately one-fifth spoke to them once a year or less than once a year.

Usual and preferred communication methods. This question allowed the respondents to tick more than one box to indicate the different methods they used to communicate with EHDS. Email and telephone were the most popular methods with 87% and 79% respectively. Contact by post was used by just over half and in person by just over one in three. This contrasted slightly with a later question on the most desirable communication method. In this question email came out as most preferable with 73%, the postal service came a clear second with 35%, followed by telephone in third with 20%. It is suggested that this difference may concern the need for formal documents which must be sent by either post or email.

Rating questions. Here, respondents were asked to rate the following statements:

1. "The advice arrived in good time"
2. "The advice was easy to understand"
3. "The advice was realistic"
4. "The report was easy to understand"
5. "The progress of the job was well communicated"
6. "The dating arrived in good time"

The percentage agreeing was high for all of these statements with almost nine out of ten respondents agreeing with the first four. This value fell to just over seven out of ten for the last two statements. As is a common theme throughout this report, the speed with which results are returned was the lowest scoring factor (Fig 1).

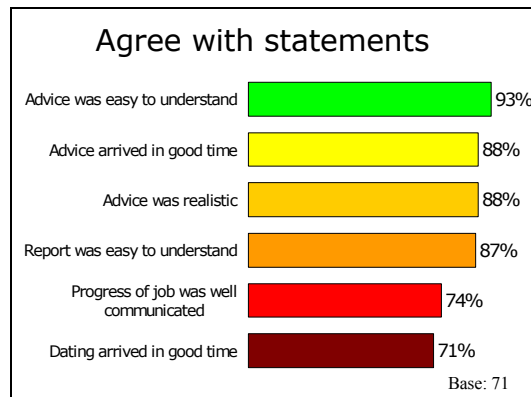


Figure 1

Help from EHDS. An extremely large proportion (95%) understood either fully or partially how to get help from EHDS. Just 1 respondent felt that they did not understand at all.

EHDS guidelines. Just over seven out of every ten respondents found the EHDS guidelines either very or fairly useful. However, 10% did not know that EHDS had guidelines and 17% of respondents did not answer this question, which is a possible further indication of a lack of knowledge about EHDS guidelines.

"Should publicise your guidelines booklets which are very useful to the non-specialist."

Training. Almost three quarters of respondents had never been to a scientific training day. Those that had were asked to give comments which are included in Appendix D. Respondents were then asked whether they thought that EHDS training should be made available to conservation professionals. 61% thought that it should, only 1% thought that it should not. The remainder either did not know or gave no answer.

"I didn't even know they existed"

Overall rating. The final part of the overall section of the questionnaire required respondents to rate their overall satisfaction with EHDS. Here over one-third described EHDS as excellent and over 40% as very good. No respondents described the overall service provided by EHDS as poor (Fig 2).

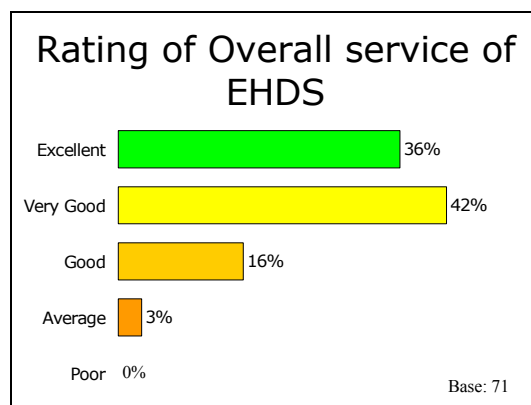


Figure 2

Radiocarbon section

This section was answered only by those previously identified as using the English Heritage Radiocarbon Dating Service (EHRDS). The data here are taken from weighted tables with an unweighted base size of 46.

Frequency of contact. Again, contact with EHRDS was infrequent, here slightly more so than overall. Just under one-third only contacted EHRDS every few months, and over 40% contacted them less than once a year.

Usefulness of service. 94% of respondents found the EHRDS service very useful or fairly useful. Only 2 respondents found the service to be not very useful (Fig 3).

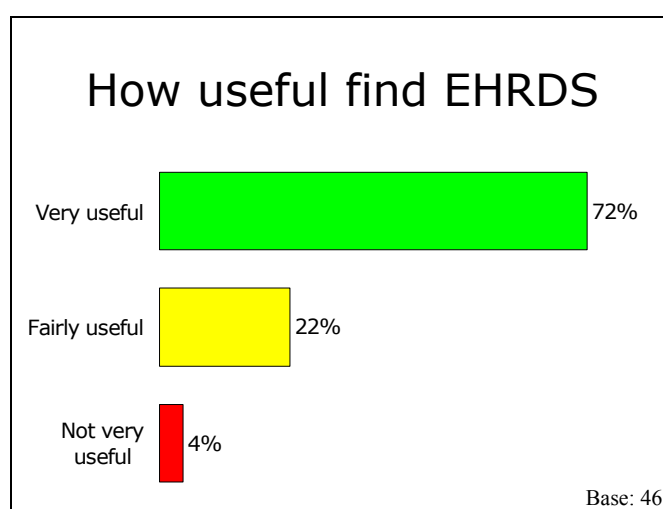


Figure 3

Rating questions. Respondents were asked to rate the following factors:

1. The quality of the output
2. The usefulness of the results
3. Help with sample selection
4. Help with calibration
5. Help with mathematical modelling
6. The timeliness of the delivery

Factors one and two were rated as very good or fairly good by almost 95% of respondents. 'Help with sample selection' and 'help with calibration' came third and fourth with 89%. 'Help with mathematical modelling' was only rated as good by 79% and 'timeliness of delivery' by 76%. Again timeliness of delivery was the lowest rated factor.

"Speed up! The service can be/is at times too slow."

Importance ratings. In this section, respondents were asked to rank speed, accuracy, precision, and reliability in terms of their importance from one to

four. Speed overwhelmingly came out as the factor of least importance. 68% of those using EHRDS rated speed as fourth in the list. Accuracy and reliability were considered almost equally important in first place with 44% and 40% respectively. Precision was considered second most important by almost half of respondents. The most popular ranking was:

1. Accuracy
2. Precision
3. Reliability
4. Speed

This was chosen by 24% of respondents.

Accessing information. Respondents were asked here about how they access information about existing radiocarbon dates. Almost 9 in 10 respondents used archaeological publications. Next came radiocarbon date lists (54%), archaeological grey literature (50%), sites and monuments records (30%), the CBA index of radiocarbon dates (28%) and the radiocarbon laboratory websites (22%). It is noted that those which are considered most useful (radiocarbon date lists, SMRs, and the radiocarbon laboratory websites) were not used widely (Fig 4).

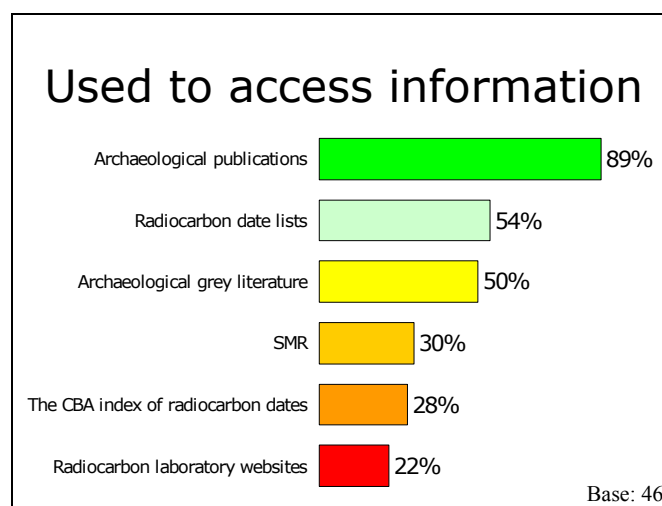


Figure 4

Overall service. The overall rating of EHRDS was comparable with that in the overall section. 76% of respondents in this section said that the service was either excellent or very good. Again, no respondents said that the service provide by EHRDS was poor.

Dendrochronology section

This part of the questionnaire was sent only to those who had been previously identified as using the English Heritage Dendrochronology Dating Service (EHDDS). The figures presented here are based on weighted data with a base size of 21. It should be noted that this base size is extremely small. Consequently errors around these figures may be large. See Appendix A for more details.

Frequency of use. Again, use was concentrated in the range of monthly to yearly contact. 29% of respondents used the service once every few months, 33% only once a year.

Usefulness of service and CfA reports. 76% of respondents found the service very useful. No respondents found the service not at all useful. Well over half of respondents found the CfA reports very useful.

Understanding or funding criteria. Almost two-thirds of respondents in this section understood either fully or partially the criteria for funding dendrochronology projects. However, 10% did not understand at all and 14% here did not answer the question.

Rating questions. Respondents were asked whether they agreed or disagreed with the following statements:

1. "The forms provided were helpful"
2. "The results were useful"
3. "The information arrived in good time"
4. "The what you want memo was helpful"

Statements one and two came out on top with over 8 in 10 responding either strongly agree or slightly agree. Statement three regarding timing was agreed with by just over three quarters of respondents. Only 52% of respondents agreed with the statement "the what you want memo was helpful" (Fig 5).

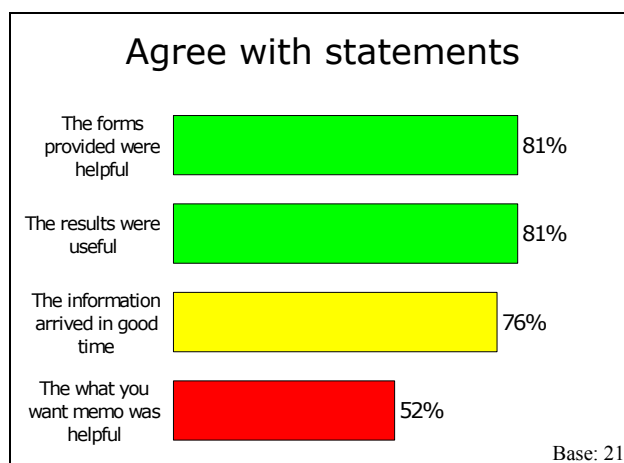


Figure 5

Whether dendrochronology should come standard with recording analysis. 57% of respondents thought that it should, but 10% thought it should not and 34% either left that part blank or did not know.

Accessing information on dendro dates. Almost half here had used CfA report summaries whilst 43% had used publications. Only 29% had used either *Vernacular Architecture* date lists or the VAG dendrochronology database. These figures are considered to be quite low (Fig 6).

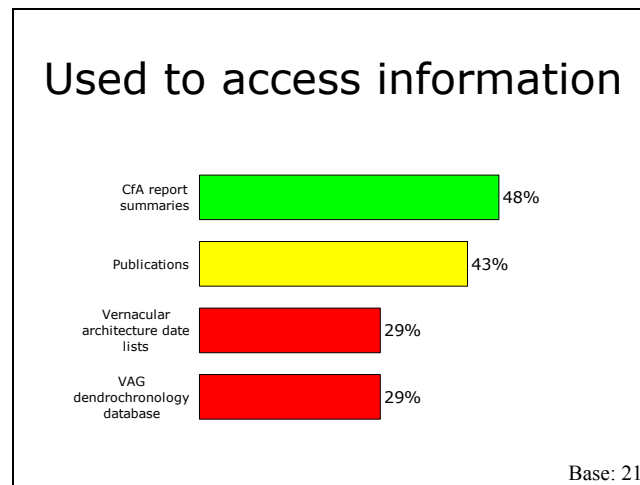


Figure 6

CfA reports. Respondents were asked whether they knew how to find out which buildings had CfA reports. 62% said they did not, only 19% said they did.

Rating of service. Again, 76% of respondents found the service provided by EHDDS to be excellent or very good. No respondents found the service to be poor.

“Staff are very knowledgeable, friendly, and accessible.”

Conclusions and recommendations

Overall, EHDS scored highly in terms of satisfaction and service even though communication with them was infrequent for the majority of its customers. In all areas, timeliness of delivery was rated as poor compared with the quality of the service and the results. However, this appears to be the factor of least importance to customers. The following recommendations are given (in no particular order):

- Provide more guidelines and publicise them better.
- Provide more training days, and assess preferences for the content of the course. Quite a few respondents asked for specific topics to be covered (see Appendix D). Give the training to conservation professionals too.
- Improve the timing aspect of the service. This may require physically speeding up the turnaround on projects or better education of customers as to why their results will take so long to be provided.
- For the radiocarbon customers, publicise how to find out about radiocarbon dates, ie date lists and indices.
- For the dendrochronology customers, show them how to find out about CfA reports.
- Either improve or scrap the 'what you want' memo.
- Clarify the form-filling process. Many respondents felt that they took too long to fill in and were unnecessary. Either streamline them or explain their use.

Appendix A. Survey Errors and weighting

Weighting

The data were weighted to take account of the differing profiles of radiocarbon, dendrochronology, and neither between the population and the returned sample. A grossing-up weight was used. This means that the weighted figures appear to represent the entire population of 155. The weights given to each group are shown in the table below:

| Type | Weight |
|------------------|--------|
| Radiocarbon | 2.07 |
| Dendrochronology | 2.52 |
| Neither | 2.75 |

Errors

For unweighted data the standard error around a percentage p can be calculated as:

$$s.e.(p) = \sqrt{(1-f) \frac{p(1-p)}{n}} \quad \text{Equation 1}$$

where n is the number of data points in the sample and f is the sampling fraction $f = n/N$ where N is the number of data points in the population. For example a percentage of $p=75\%$, $n=71$ and $N=155$ would give:

$$s.e.(p) = \sqrt{\left(1 - \frac{71}{155}\right) \frac{0.75 \times (1-0.75)}{71}} \quad \text{Equation 2}$$
$$= 0.04$$

A 95% confidence interval around the value is then calculated by:

$$[p - 1.96 \times s.e.(p), p + 1.96 \times s.e.(p)] \quad \text{Equation 3}$$

For weighted data the standard errors need to be multiplied by a design factor. This takes account of the extra error associated by pretending that the entire population responded to the survey. For this survey with the gross-up weighting reported in the tables, the design factor is 1.38. When dealing with weighted percentages, all standard errors should be multiplied by this amount before calculating confidence intervals.

Appendix B. The questionnaire

ID:

Scientific Dating Customer Questionnaire

Thank you for taking the time to complete this questionnaire. Your views are important in helping us improve the service we provide. Please mark an X in the box for each question.

1a) Which of the following English Heritage Dating services have you used?

Dendro ☐ 14C ☐ Advice ☐ Other (please state) _____

1b) How frequent is your contact with the English Heritage Dating Service (EHDS)?

Weekly ☐ Every few weeks ☐ Every few months ☐
Once a year ☐ Less than once a year ☐

1c) By what means do you communicate with the EHDS? (Please cross all that apply)

E-Mail ☐ Telephone ☐ Via post ☐
In person ☐

1d) Please rate the following statements concerning EHDS:

| | Strongly Agree | Slightly Agree | Slightly Disagree | Strongly Disagree |
|---|--------------------------|--------------------------|--------------------------|--------------------------|
| The advice arrived in good time | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| The advice was easy to understand | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| The advice was realistic | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| The progress of the job was communicated well | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| The dating arrived in good time | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| The report was easy to understand | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

1e) Please rate your understanding of how to get help from EHDS:

Understand fully ☐ Understand partially ☐ Do not understand at all ☐

1f) How useful do you find the EHDS guidelines?

Very useful ☐ Fairly useful ☐ Not very useful ☐ Not at all useful ☐

1g) By what means would you most like to receive advice from EHDS?

E-Mail ☐ Telephone ☐ Post ☐ Other (please state) _____

1h) Have you been to a Scientific Dating Training Day?

Yes ☐ No ☐ Don't know ☐

If yes at 1h)

1i) How can the Scientific Dating training given by EHDS be improved?

1j) Do you feel that the training EHDS offers should be made available to conservation professionals?

Yes ☐ No ☐ Don't know ☐

1k) Please rate the overall service provided by EHDS:

Excellent ☐ Very good ☐ Good ☐ Average ☐ Poor ☐

1l) If you have any further comments on the service, please indicate below:

Please continue on to the next section of the questionnaire.

The next section is about the English Heritage Radiocarbon Dating Service (EHRDS). Please answer these questions thinking only about the EHRDS.

2a) How often do you use the EHRDS?

Once a week ☐ Once a month ☐ Once every few months ☐
 Once a year ☐ Less than once a year ☐

2b) Thinking of the last time you used the radiocarbon service, how useful did you find the service?

Very useful ☐ Fairly useful ☐ Not very useful ☐ Not at all useful ☐

2c) Please rate the service you received from EHRDS on the following areas.

| | Very good | Fairly good | Not very good | Not at all good |
|----------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| The quality of the output | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| The timeliness of delivery | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| The usefulness of the results | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Help with sample selection | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Help with calibration | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Help with mathematical modelling | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

**2d) Please rank the following in order of importance for the radiocarbon dating supplied by EHRDS:
 (Please cross one in each column)**

| | First | Second | Third | Fourth |
|-------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Speed | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Accuracy* | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Precision* | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Reliability | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

* For example, "William the Conqueror invaded England in AD 950 +/- 150 years" is accurate but imprecise.
 "William the Conqueror invaded England in AD 1090 +/- 10 years" is inaccurate but precise.
 "William the Conqueror invaded England in AD 1070 +/- 5 years" is accurate and precise.

2e Which of the following have you used to access information about existing radiocarbon dates (tick all that apply):

Radiocarbon date lists ☐

The CBA index of radiocarbon dates ☐

Archaeological publications ☐

Archaeological "grey literature" ☐

SMR ☐

The radiocarbon laboratory websites ☐

2f) What could EHRDS do to improve their service?

2g) Please rate the overall service provided by EHRDS:

Excellent ☐

Very good ☐

Good ☐

Average ☐

Poor ☐

2h) If you have any further comments on the service, please indicate below:

Thank you for taking the time to complete these questions. If you have any queries about the survey please contact Andrew Parnell at 0114 269 0320 or at andrewcparnell@yahoo.co.uk.

The following questions are about the English Heritage Dendrochronology Dating Service (EHDDS). Please answer these questions thinking only about the EHDDS.

3a) How often do you use the EHDDS?

Once a week ☐ Once a month ☐ Once every few months ☐
Once a year ☐ Less than once a year ☐

3b) Thinking of the last time you used the EHDDS service, how useful did you find the service?

Very useful ☐ Fairly useful ☐ Not very useful ☐ Not at all useful ☐

3c) How useful do you find the Centre for Archaeology (CfA) Reports?

Very useful ☐ Fairly useful ☐ Not very useful ☐ Not at all useful ☐

3d) What could EHDDS do to improve their reports? (please write in)

3e) How well do you understand the criteria for funding dendrochronology projects?

Understand fully ☐ Understand partially ☐ Do not understand at all ☐

3f) Please rate the service you received from EHDDS on the following areas.

Strongly Agree Slightly Agree Slightly Disagree Strongly Disagree

| | | | | |
|--------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| The information arrived in good time | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| The forms provided were helpful | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| The 'what you want' memo was helpful | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| The results were useful | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

3g) Do you feel that Dendrochronology should come standard with recording analysis where appropriate?

Yes ☐ No ☐ Don't know ☐

3h) Which of the following have you used to access information about existing tree-ring dates (tick all that apply):

| | | | |
|------------------------------------|--------------------------|-------------------------------|--------------------------|
| Vernacular architecture date lists | <input type="checkbox"/> | VAG dendrochronology database | <input type="checkbox"/> |
| CfA report summaries | <input type="checkbox"/> | Publications | <input type="checkbox"/> |

3i) Do you know how to find out which buildings have CfA reports?

Yes ☐ No ☐ Don't know ☐

3j) Please rate the overall service provided by EHDDS:

Excellent ☐ Very good ☐ Good ☐ Average ☐ Poor ☐

3k) If you have any further comments on the service, please indicate below:

Thank you for taking the time to complete these questions. If you have any queries about the survey please contact Andrew Parnell at 0114 269 0320 or at andrewcparnell@yahoo.co.uk.

Appendix C. Survey tables

Overall Section

| Unweighted | Total | | Weighted | Total | |
|---|-------|-----|---|-------|-----|
| | count | % | | count | % |
| Services used | | | Services used | | |
| Dendro | 29 | 41% | Dendro | 69 | 45% |
| 14C | 53 | 75% | 14C | 109 | 70% |
| Advice | 35 | 49% | Advice | 75 | 49% |
| Frequency of contact with EHDS | | | Frequency of contact with EHDS | | |
| Weekly | 3 | 4% | Weekly | 6 | 4% |
| Every few weeks | 5 | 7% | Every few weeks | 10 | 7% |
| Every few months | 31 | 44% | Every few months | 66 | 43% |
| Once a year | 14 | 20% | Once a year | 33 | 21% |
| Less than once a year | 16 | 23% | Less than once a year | 35 | 23% |
| No Answer | 2 | 3% | No Answer | 4 | 3% |
| Usual communication method | | | Usual communication method | | |
| Email | 62 | 87% | Email | 135 | 87% |
| Phone | 57 | 80% | Phone | 123 | 79% |
| Post | 40 | 56% | Post | 85 | 55% |
| In person | 27 | 38% | In person | 56 | 36% |
| The advice arrived in good time | | | The advice arrived in good time | | |
| Strongly Agree | 41 | 58% | Strongly Agree | 90 | 58% |
| Slightly Agree | 21 | 30% | Slightly Agree | 46 | 30% |
| Slightly Disagree | 4 | 6% | Slightly Disagree | 9 | 6% |
| No answer | 5 | 7% | No answer | 10 | 7% |
| The advice was easy to understand | | | The advice was easy to understand | | |
| Strongly Agree | 45 | 63% | Strongly Agree | 99 | 64% |
| Slightly Agree | 21 | 30% | Slightly Agree | 45 | 29% |
| No answer | 5 | 7% | No answer | 10 | 7% |
| The advice was realistic | | | The advice was realistic | | |
| Strongly Agree | 44 | 62% | Strongly Agree | 98 | 63% |
| Slightly Agree | 18 | 25% | Slightly Agree | 39 | 25% |
| Slightly Disagree | 2 | 3% | Slightly Disagree | 4 | 3% |
| No answer | 7 | 10% | No answer | 14 | 9% |
| The progress of the job was well communicated | | | The progress of the job was well communicated | | |
| Strongly Agree | 27 | 38% | Strongly Agree | 59 | 38% |
| Slightly Agree | 25 | 35% | Slightly Agree | 55 | 36% |
| Slightly Disagree | 10 | 14% | Slightly Disagree | 21 | 13% |
| Strongly Disagree | 3 | 4% | Strongly Disagree | 6 | 4% |
| No answer | 6 | 8% | No answer | 14 | 9% |
| The dating arrived in good time | | | The dating arrived in good time | | |
| Strongly Agree | 31 | 44% | Strongly Agree | 67 | 43% |
| Slightly Agree | 20 | 28% | Slightly Agree | 44 | 28% |
| Slightly Disagree | 9 | 13% | Slightly Disagree | 20 | 13% |
| Strongly Disagree | 4 | 6% | Strongly Disagree | 8 | 5% |
| No answer | 7 | 10% | No answer | 16 | 10% |
| The report was easy to understand | | | The report was easy to understand | | |
| Strongly Agree | 40 | 56% | Strongly Agree | 88 | 57% |
| Slightly Agree | 22 | 31% | Slightly Agree | 47 | 30% |
| Slightly Disagree | 2 | 3% | Slightly Disagree | 5 | 3% |
| Strongly Disagree | 1 | 1% | Strongly Disagree | 2 | 1% |
| No answer | 6 | 8% | No answer | 13 | 9% |
| Understanding of how to get help from EHDS | | | Understanding of how to get help from EHDS | | |
| Understand fully | 39 | 55% | Understand fully | 85 | 55% |
| Understand partially | 28 | 39% | Understand partially | 61 | 40% |
| Do not understand at all | 1 | 1% | Do not understand at all | 3 | 2% |
| No answer | 3 | 4% | No answer | 6 | 4% |
| How useful find EHDS guidelines | | | How useful find EHDS guidelines | | |
| Very useful | 22 | 31% | Very useful | 49 | 32% |
| Fairly useful | 28 | 39% | Fairly useful | 60 | 39% |
| Not very useful | 2 | 3% | Not very useful | 4 | 3% |

Radiocarbon section

| Unweighted | Total | | Weighted | Total | |
|--|-------|-----|--|-------|-----|
| | count | % | | count | % |
| Frequency of contact with EHRDS | | | Frequency of contact with EHRDS | | |
| Weekly | 2 | 4% | Weekly | 4 | 4% |
| Every few weeks | 1 | 2% | Every few weeks | 2 | 2% |
| Every few months | 14 | 30% | Every few months | 28 | 30% |
| Once a year | 7 | 15% | Once a year | 14 | 15% |
| Less than once a year | 20 | 43% | Less than once a year | 40 | 43% |
| No answer | 2 | 4% | No answer | 4 | 4% |
| How useful find radiocarbon service | | | How useful find radiocarbon service | | |
| Very useful | 33 | 72% | Very useful | 65 | 72% |
| Fairly useful | 10 | 22% | Fairly useful | 20 | 22% |
| Not very useful | 2 | 4% | Not very useful | 4 | 4% |
| No answer | 1 | 2% | No answer | 2 | 2% |
| Rating- "the quality of the output" | | | Rating- "the quality of the output" | | |
| Very good | 33 | 72% | Very good | 65 | 72% |
| Fairly Good | 10 | 22% | Fairly Good | 20 | 22% |
| No answer | 3 | 7% | No answer | 6 | 7% |
| Rating- "the timeliness of of delivery" | | | Rating- "the timeliness of of delivery" | | |
| Very good | 17 | 37% | Very good | 34 | 37% |
| Fairly Good | 18 | 39% | Fairly Good | 36 | 39% |
| Not very good | 6 | 13% | Not very good | 12 | 13% |
| Not at all good | 4 | 9% | Not at all good | 8 | 9% |
| No answer | 1 | 2% | No answer | 2 | 2% |
| Rating- "the usefulness of the results" | | | Rating- "the usefulness of the results" | | |
| Very good | 33 | 72% | Very good | 65 | 72% |
| Fairly Good | 10 | 22% | Fairly Good | 20 | 22% |
| Not very good | 1 | 2% | Not very good | 2 | 2% |
| No answer | 2 | 4% | No answer | 4 | 4% |
| Rating- "help with sample selection" | | | Rating- "help with sample selection" | | |
| Very good | 33 | 72% | Very good | 65 | 72% |
| Fairly Good | 8 | 17% | Fairly Good | 16 | 17% |
| Not at all good | 2 | 4% | Not at all good | 4 | 4% |
| No answer | 3 | 7% | No answer | 6 | 7% |
| Rating- "help with calibration" | | | Rating- "help with calibration" | | |
| Very good | 36 | 78% | Very good | 71 | 78% |
| Fairly Good | 5 | 11% | Fairly Good | 10 | 11% |
| Not very good | 1 | 2% | Not very good | 2 | 2% |
| No answer | 4 | 9% | No answer | 8 | 9% |
| Rating- "help with mathematical modelling" | | | Rating- "help with mathematical modelling" | | |
| Very good | 33 | 72% | Very good | 65 | 72% |
| Fairly Good | 3 | 7% | Fairly Good | 6 | 7% |
| Not at all good | 1 | 2% | Not at all good | 2 | 2% |
| No answer | 9 | 20% | No answer | 18 | 20% |
| Rating in importance "speed" | | | Rating in importance "speed" | | |
| First | 1 | 2% | First | 2 | 2% |
| Second | 4 | 9% | Second | 8 | 9% |
| Third | 11 | 24% | Third | 22 | 24% |
| Fourth | 26 | 57% | Fourth | 51 | 57% |
| No answer | 4 | 9% | No answer | 8 | 9% |
| Rating in importance "accuracy" | | | Rating in importance "accuracy" | | |
| First | 21 | 46% | First | 42 | 46% |
| Second | 12 | 26% | Second | 24 | 26% |
| Third | 4 | 9% | Third | 8 | 9% |
| Fourth | 4 | 9% | Fourth | 8 | 9% |
| No answer | 5 | 11% | No answer | 10 | 11% |
| Rating in importance "precision" | | | Rating in importance "precision" | | |
| First | 7 | 15% | First | 14 | 15% |
| Second | 20 | 43% | Second | 40 | 43% |
| Third | 11 | 24% | Third | 22 | 24% |

Dendrochronology Section

| Unweighted | | Total | | Weighted | | Total |
|---|--|-------|-----|---|--|---------|
| | | count | % | | | count % |
| Frequency of use of EHDDS | | | | Frequency of use of EHDDS | | |
| Once a week | | 0 | 0% | Once a week | | 0 0% |
| Once a month | | 2 | 10% | Once a month | | 5 10% |
| Once every few months | | 6 | 29% | Once every few months | | 15 29% |
| Once a year | | 7 | 33% | Once a year | | 18 33% |
| Less than once a year | | 2 | 10% | Less than once a year | | 5 10% |
| No answer | | 4 | 19% | No answer | | 10 19% |
| How useful found EHDDS | | | | How useful found EHDDS | | |
| Very useful | | 16 | 76% | Very useful | | 40 76% |
| Fairly useful | | 2 | 10% | Fairly useful | | 5 10% |
| No answer | | 3 | 14% | No answer | | 8 14% |
| How useful found CFA reports | | | | How useful found CFA reports | | |
| Very useful | | 12 | 57% | Very useful | | 30 57% |
| Fairly useful | | 4 | 19% | Fairly useful | | 10 19% |
| Not very useful | | 1 | 5% | Not very useful | | 3 5% |
| No answer | | 4 | 19% | No answer | | 10 19% |
| Rating- understanding of criteria for funding dendrochronology projects | | | | Rating- understanding of criteria for funding dendrochronology projects | | |
| Understand fully | | 8 | 38% | Understand fully | | 20 38% |
| Understand partially | | 8 | 38% | Understand partially | | 20 38% |
| Do not understand at all | | 2 | 10% | Do not understand at all | | 5 10% |
| No answer | | 3 | 14% | No answer | | 8 14% |
| Rating "the information arrived in good time" | | | | Rating "the information arrived in good time" | | |
| Strongly Agree | | 9 | 43% | Strongly Agree | | 23 43% |
| Slightly Agree | | 7 | 33% | Slightly Agree | | 18 33% |
| Slightly Disagree | | 2 | 10% | Slightly Disagree | | 5 10% |
| No answer | | 3 | 14% | No answer | | 8 14% |
| Rating "the forms provided were helpful" | | | | Rating "the forms provided were helpful" | | |
| Strongly Agree | | 8 | 38% | Strongly Agree | | 20 38% |
| Slightly Agree | | 9 | 43% | Slightly Agree | | 23 43% |
| Slightly Disagree | | 1 | 5% | Slightly Disagree | | 3 5% |
| No answer | | 3 | 14% | No answer | | 8 14% |
| Rating "the what you want memo was helpful" | | | | Rating "the what you want memo was helpful" | | |
| Strongly Agree | | 4 | 19% | Strongly Agree | | 10 19% |
| Slightly Agree | | 7 | 33% | Slightly Agree | | 18 33% |
| Slightly Disagree | | 1 | 5% | Slightly Disagree | | 3 5% |
| No answer | | 9 | 43% | No answer | | 23 43% |
| Rating "the results were useful" | | | | Rating "the results were useful" | | |
| Strongly Agree | | 16 | 76% | Strongly Agree | | 40 76% |
| Slightly Agree | | 1 | 5% | Slightly Agree | | 3 5% |
| Slightly Disagree | | 1 | 5% | Slightly Disagree | | 3 5% |
| No answer | | 3 | 14% | No answer | | 8 14% |
| Whether dendrochronology should come standard with recording analysis | | | | Whether dendrochronology should come standard with recording analysis | | |
| Yes | | 12 | 57% | Yes | | 30 57% |
| No | | 2 | 10% | No | | 5 10% |
| Don't Know | | 4 | 19% | Don't Know | | 10 19% |
| No answer | | 3 | 14% | No answer | | 8 14% |
| Used to access information about tree-ring dates | | | | Used to access information about tree-ring dates | | |
| Vernacular architecture date lists | | 6 | 29% | Vernacular architecture date lists | | 15 29% |
| VAG dendrochronology database | | 6 | 29% | VAG dendrochronology database | | 15 29% |
| CfA report summaries | | 10 | 48% | CfA report summaries | | 25 48% |
| Publications | | 9 | 43% | Publications | | 23 43% |
| Whether know how to find out which buildings have CfA reports | | | | Whether know how to find out which buildings have CfA reports | | |
| Yes | | 4 | 19% | Yes | | 10 19% |
| No | | 13 | 62% | No | | 33 62% |

Appendix D. Open-ended answers

MAIN SECTION

Q1a Which of the following EH dating services have you used - other?

Radiocarbon

Help with editing

Dendro

Neither

Q1g By what means would you most like to receive advice from EHDS - other?

Radiocarbon

In person as appropriate

Dendro

Neither

Q1i How can the Scientific Dating training given by EHDS be improved?

Radiocarbon

By better publicising its existence

Didn't even know they existed

Give more worked through examples relevant to participants

I would like to attend one

Include other methods such as TL dating; perhaps have an advanced course as well as an introductory one - and a workshop to try and engender more creativity in indexing independent methods of dating and refining est. techniques

More frequent training days

More personnel - I'd like some training in further applications of Oxcal

Repeated to incorporate latest developments (eg OSL)

Thought the day I went to, some years ago now, was very good. Updated seminars would be very useful.

Dendro

I thought it was really good!

Needs repeating/updating every 3-4 years

Some time ago - cannot remember specifics

The non specialist day for conservation officers in NE region worked extremely well

The training was given at the Bristol office, but on a day when only 4 out of 40 people could attend

Neither

The training is excellent, the only improvement I can suggest is to make it available more frequently

Q11) If you have any further comments on the service, please indicate below:

Radiocarbon

14C guidelines needed. Dendro updated

A short advice/best practice brochure would be very useful on the lines of the archaeometallurgy document used on their training day

EHDS clearly try to do their best - as the sending of this questionnaire indicates! Well done EHDS

I have had so little contact in recent years and under the present conditions my views are inadequate for your purpose. My knowledge has been acquired over 40 years of lecturing and researching.

I would like the opportunity to attend a scientific dating training day. I would also like information about other dating techniques other than C14 and dendro particularly for modern sediments

Personnel give good advice, but are too busy for it always to arrive on time. Problems with Oxford lab have been partly responsible; advice is occasionally not entirely logical.

Post-doctoral research assistant has had the bulk of contact - he is also filling in a form. Don't need advice on 14C dates

The dendro service, both from Sheffield and Nottingham has been excellent and most useful

Too many forms

Would like to know/receive details re the scientific training days

In my experience, the personnel give good advice, but are too busy for it always to arrive on time. Problems with Oxford Laboratory have been partly responsible for too late arrival of dates. Advice is occasionally not entirely logical, ie the reasons for not carrying out dates are sometimes not justified in relation to other dates that are approved.

C14 – for various reasons the service can be very slow with the consequence that project programmes can be severely delayed. In fairness this could be the result of an ?????? timetable and lack of consultation on our behalf.

Dendro

Reports are overlong and tend to include too much background on the subject which is repetitive. An early draft of general results would be useful

Excellent service, maintaining??? ???? standards and providing ever-growing and more valuable data as the system develops. For example, there is now more data on Essex and Suffolk tube?? frames?? derived from more research. Staff are very knowledgeable, friendly and accessible. Would have used the service more, but pressure of work put this as lower priority last year (to detriment of some projects). I won't make the same mistake this year.

Neither

I have to admit to some uncertainty over communications links with EHDS: ?direct ?via Regional Science Advisor (tend to go for latter because of local base)

I rely on this service for doing my job

RADIOCARBON SECTION

Q2f) What could EHRDS do to improve their service?

Explain Bayesian Statistics!

I do not feel qualified to answer this

I think that the accompanying report could be a little more expansive

Improve speed & precision would be useful

Improve timing. My results come 5 months later than originally planned - almost too late for the publication

Issue info to clients promptly, even if only provisional. Complete reports sooner and enter a positive dialogue about probs with dates

Little

More staff to increase availability. Offer training in Oxcal and generally

My most recent experience has not been good. Dates sent to me by an interested colleague but not by EHDS from who no info received. The date lists you send are extremely interesting and I hope to continue to receive these and the report summaries

Produce guidance on: sampling, contextual relationships, desired conventions for expression & calibration & a how to novice guide for oxcal

Provide a clearer explanation of the calibration methods and of statistical modelling of dates

Put advice on a website (if they already have, then advertise it better!)

Reduce the amount of form-filling

Simplify forms - they're repetitive and take a long time to complete

Streamline & redesign radiocarbon sample forms. Adopt a more consistent approach to dating carbon fractions from peat/sediment samples

Streamline and redesign radiocarbon submission forms. adopt a more consistent approach to dating carbon fractions from peat/sediment samples.

The amount of paperwork required per date is quite extensive-could be diminished

When dates have been submitted through EHDS I think that dates should be sent to the person who has requested them or at least they should receive some information rapidly as otherwise projects can be held up for very long periods of time

Write a 'guidelines' for radiocarbon dating along the lines of other EH guidelines publications. Guidance on what to date from peats is especially needed

Speed up! The service can be/is at times too slow.

Provide national contextual data on new dates if possible. Is there a single database which holds all new dates that become available?

Q2h) If you have any further comments on the service, please indicate below:

If 2f) is not possible it should be made clearer the time needed to complete both application and feedback forms (for instance in feedback made on project design task allocation)

It can be a nerve wracking experience phoning for advice. many years ago I was made to feel very ignorant and small when asking a question about sampling- so possibly staff might remember their field is specialist. Some confusion over who can use the service

Problems with dates from the Oxford lab have been largely responsible for long delays in obtaining dates, rather patronising attitude at EH. This has led to delays waiting for dates to be released and to a lack of adequate explanation for decisions taken such as combining dates when asked not to, not addressing conflicts in dating adequately in some cases.

Question 2d I was unsure whether you wanted my first -> fourth choice or whether I could say 2 categories were first choice

Should publicize your guidelines booklets which are very useful to the non-specialist

Training would be welcomed

(1) The EHRDS sample submission process is currently very time consuming, largely due to the amount of paperwork that must accompany each sample. The completion of EH radiocarbon sample forms (each 4 pages long, with one form required per sample) also involves, in my opinion, much unnecessary duplication of information. Furthermore the forms appear to have been designed for end-use by researchers dealing primarily with archaeological samples. Consequently for submission of palaeoenvironmental or palaeoecological samples not all sections/questions posed on these forms are particularly relevant. This aspect of the EHRDSS would benefit from a review of current procedure, with streamlining and redesign of the submission forms a priority. Putting the forms on the EH website and allowing on-line completion and submission might also be worth considering since this would help reduce paperwork.

(2) In my opinion the customer would obtain greater benefit from radiocarbon results if EHRDS adopted a more consistent approach to the dating of carbon fractions from peat/sediment samples. It is not particularly useful when some results are returned as a single age-estimate on bulk peat, whilst others are returned as two or more age-estimates of fractions of the peat (ie humic acid, fine and/or coarse humin). This can pose serious problems for interpretation of site chronologies, particularly where dates on separate carbon fractions obtained from the same sample are statistically different (ie not overlapping in time). Any dating of separate carbon fractions in preference to bulk peat needs to be agreed in advance between the customer, EHRDS, and if necessary the laboratory dating the sample.

It can be a never-racking experience phoning for advice. Many years ago I was made to feel very ignorant and small when asking a question about sampling - so possibly staff might remember that their field is specialist. There is some confusion in the archaeological profession about who can and who cannot call upon EHRDS - just EH-funded projects or not?

Sorry not more helpful, but my most recent experience has not been good. Dates sent to me by an interested colleague but not by EHDS from who his information received re Normanton G (???) The date lists that you send are extremely interesting and I hope to continue to receive these and the report summaries.

Good communication is essential for dating needs throughout any project. Also making dates clear with reports written with greater clarity.

Service on the whole is very good + advice we have received useful. Need to know how reliable labs are so updates on the aspect from the team would be useful.

DENDRO SECTION

Q3d) What could EHDDS do to improve their reports?

Ideally - but not essential - by inclusion of site photos of building and some timbers

Co-ordinate with architectural investigation team to provide greater context for their reports

Include more info on conversion techniques of the timber (the dendro person sees these close up)

Leave out all the general background stuff. Make the data sheets more user friendly. Issue advance reports in draft.

Sometimes the building analysis could be better understood and integrated

There seems to be a large % of scientific data in relation to the discussion of the dating info but perhaps this is inevitable

Combining work with building analyst yields by far best results as dendro info can then be discussed(??) and incorporated. Also areas for sampling can be discussed with building analyst

Q3k) If you have any further comments on the service, please indicate below:

A little more detail on reports would be good. Slightly speedier reporting would help, on occasion.

Overall an important resource to have available.

As a user I often don't know I will need the service of dendro until 2 or 3 months beforehand whereas the DDS rightly want to know who and what needs dendro at the beginning of the year. A little more flexibility would be helpful but I can see that in budgeting terms it might be difficult to provide. The other issue I would like to raise is that of delivery or reports post sampling. For me the dendro is intended to inform decisions on repair(??) projects so timely delivery is important! I realise that availability of trained dendrochronologists is an issue but I do think this aspect needs to be tackled.

The dendro service is a vital part of the overall co-ordination of building analysis, and EH provides an extremely valuable service, which would be very difficult to replace.

To help with Qu 3i perhaps there could be an annual report to all clients showing all the buildings dates the previous year with annual ????? and even a 5 year index

More frequent reminders by email would be most useful (this is by far the easiest way of responding) - also could include an electronic dendro request form. Not sure when to use dendro - whether it is at all limited by resources (as am aware of limitations of no's of practitioners). Guidance on this would be helpful.