

LANEnC5 (SQA Unit Code - HA0X 04)

Analyse data from field surveys and report findings



Overview

This standard covers analysing and reporting the findings of field surveys in accordance with the survey plan and specifications. It could also apply to findings from surveillance or monitoring. You may have collected the data yourself or it may have been collected by others.

A field survey is conducted to collect data that is used for a wide range of purposes such as:

- to identify what is present on site and determine their sensitivities to the proposed project
- to establish any requirements for more detailed/further surveys
- to identify key constraints to the proposed project and make recommendations
- to identify mitigation measures as far as possible
- to identify enhancement opportunities
- to form part of an ecological impact assessment

Surveys may be of the following subjects: landscape and marine features, flora and fauna, different habitat types, and human impact on the environment. Most surveys will involve both primary and secondary sources of data.

This standard is suitable for all those involved with the analysis and interpretation of data from field survey work. It is increasingly likely to involve electronic data analysis e.g. GIS.

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Performance criteria

You must be able to:

- P1 check there is sufficient valid and reliable data prior to the start of the analysis
- P2 check data has been collected in accordance with the survey plan and specifications
- P3 confirm data analysis methods to be used in accordance with the survey specifications
- P4 analyse field survey data using all available, relevant and current information
- P5 justify your interpretation of field survey data using rational argument and supporting evidence
- P6 take the appropriate action where the analysis of data reveals problems with its sufficiency, reliability or validity
- P7 produce accurate, unbiased results and conclusions
- P8 make recommendations that are realistic, relevant and clearly defined
- P9 seek feedback on survey interpretations prior to reporting where appropriate
- P10 produce a report that is accurate, complete and in a format that conforms to the survey specifications
- P11 ensure that your report contains the required supporting data in accordance with the survey specifications
- P12 ensure that your report presents information and conclusions in a manner that is appropriate for the recipients
- P13 make the report available to the appropriate people within the required timescale
- P14 ensure that presentation is suitable for the audience, where there is a requirement to present the report
- P15 reply to requests for further clarification and explanation of the report clearly and accurately within the specified timescale
- P16 maintain confidentiality of information in accordance with the survey specifications
- P17 record accurately issues of copyright and intellectual property rights

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Knowledge and understanding

You need to know and understand:

- K1 how to organise data for analysis
- K2 how to assess the sufficiency, validity and reliability of data
- K3 the limitations of different data sources
- K4 the actions to take when there are problems with sufficiency, validity and reliability
- K5 data analysis methods to be used in accordance with the survey specifications
- K6 different quantitative and qualitative analysis methods and their relative advantages and disadvantages
- K7 analysis and evaluation techniques that produce accurate and unbiased results
- K8 the limitations of different interpretation and evaluation methods
- K9 the significance of survey results in relation to the report recommendations
- K10 the specifications for the format of the report and the required supporting data
- K11 timescales within which reporting must take place and the reasons for this
- K12 ways of reporting and presenting information clearly and in a manner appropriate to the recipients eg. graphs, diagrams, photographs
- K13 relevant legal implications of the report findings
- K14 the importance of obtaining feedback on the analysis and interpretation of survey findings prior to reporting and who this should be obtained from
- K15 the appropriate people to receive copies of the report
- K16 who else may need to be informed of the findings e.g. local Biodiversity Action Plans, records offices
- K17 how to present the report to an audience in an appropriate and effective manner
- K18 means of obtaining and handling feedback from the recipients of the report
- K19 the importance of confidentiality and sensitivity of information
- K20 the importance of professional ethics in analysing, making recommendations and reporting on field surveys.

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Glossary

Survey: a one-off activity to collect data for a prescribed purpose e.g. baseline survey

Surveillance: a repeated survey building up a picture that can detect change but does not trigger action

Monitoring: repeated observations building up a picture that can detect change and trigger action

Sources of data:

- primary
- secondary

Types of data:

- qualitative
- quantitative

National and industry guidelines for surveys include:

National Vegetation Classification (NVC) Phase One Habitat Survey, British Trust for Ornithology Breeding Bird and Wetland Bird surveys, Bat Survey Guidelines, UK Butterfly Monitoring Scheme, Environment Agency River Corridor or Joint Nature Conservancy Committee Intertidal surveys.

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