

Plan and oversee field surveys

Overview

This standard covers planning and overseeing field surveys. It could also apply to planning and overseeing surveillance and monitoring.

The standard includes confirming the purpose, scope and objectives of the survey, determining effective survey methodologies and systems for data collection, allocating work to surveyors and overseeing the collection and analysis of data.

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

Field 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.

You must ensure that you seek appropriate permissions, consents and licences prior to carrying out field surveys.

This standard is suitable for those with overall responsibility for planning and overseeing field surveys.

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Performance criteria

You must be able to:

- P1 confirm the purpose, scope and objectives of the survey, surveillance or monitoring and the timescale for completion
- P2 confirm the study area of the site to be surveyed
- P3 confirm the format for the presentation of results and findings
- P4 identify any relevant site restrictions or designations that are in place
- P5 identify and obtain any necessary permissions, consents or specific licenses for both site access and species field data collection work
- P6 identify potential sources of information and existing data relevant to the field survey to be undertaken
- P7 communicate with interested parties regarding the field survey where appropriate
- P8 identify appropriate survey methodologies that enable the required data to be obtained with minimum damage or disturbance to the site
- P9 select appropriate survey techniques that are legal and safe and in accordance with the survey objectives
- P10 plan and identify resource requirements including surveyors, equipment and materials
- P11 ensure a risk assessment is carried out and procedures are in place to protect the health and safety of those undertaking the survey and other users of the site
- P12 ensure appropriate measures are in place to protect the bio-security of the site
- P13 select suitable formats and systems for capturing and storing data which conform to relevant data standards
- P14 plan appropriate data analysis methods that allow valid and reliable conclusions to be drawn
- P15 develop a plan and specifications for the survey that contains all relevant information to enable the survey to be carried out, given the resources available and any time constraints
- P16 allocate work to the surveyors and provide all necessary details to enable them to complete their job
- P17 oversee data collection and analysis at optimal frequencies to ensure that it is being done correctly
- P18 take the appropriate action where there are deviations from the plan
- P19 ensure all work is carried out in accordance with relevant local, national and European legislation, guidance and codes of practice

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Knowledge and understanding

You need to know and understand:

- K1 the purpose, scope and objectives of the survey, surveillance or monitoring and the time constraints
- K2 use of secondary data sources when planning the field survey and methodologies
- K3 the importance of primary data collection to the credibility of the survey
- K4 factors to consider when planning field surveys
- K5 the implications of relevant site restrictions or designations that are in place
- K6 the circumstances in which permission, consent or specific licences are required for site access or species field data collection work, and the means of obtaining these
- K7 the importance of communicating with interested parties and the methods of communication that are likely to promote understanding and positive relationships
- K8 the range of survey techniques available, their advantages and disadvantages and the principles of their use e.g. counting, sampling, mapping
- K9 types of field survey equipment available including where the use of technology may be effective e.g. GPS, radar tracking
- K10 the importance of ensuring that the surveyors have the required levels of competence to undertake the survey
- K11 your responsibilities for site safety under relevant environmental and health and safety legislation, codes of practice and organisation policies
- K12 the importance of bio-security in preventing introduction to, or escape/release from, the survey site, and appropriate bio-security measures
- K13 how to optimise the use of resources when planning and overseeing field surveys given the complexity of the task in hand, the resources available (including people, equipment and materials), the time of year and any other relevant factors
- K14 how to select suitable formats and systems for capturing information that can be used by those who are to implement them
- K15 how to ensure that data is valid and reliable and possible sources of error and bias
- K16 how to produce a plan and specifications which contain all of the relevant information to enable the survey to be carried out

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- K17 the effective methods of preparing and briefing those who will be involved in the data collection and analysis
- K18 the importance of overseeing the survey for quality control to ensure a high standard is maintained and consistency/standardisation between surveyors
- K19 possible actions to take when there are problems with the collection of data
- K20 effective methods of presenting information that meet the audience requirements and their use of the information
- K21 relevant local, national and European legislation, guidance and codes of practice

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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

Techniques could include:

- mapping/aerial photographs
- use of GPS, radar tracking, audio telemetry and other technology
- counting and estimating
- sampling
- trapping

Sources of data:

- primary
- secondary

Types of data:

- qualitative
- quantitative

National and industry guidelines for surveys includes:

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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