## Plan and conduct field surveys



#### Overview

This standard is about planning and conducting survey work. The term 'survey' is open to broad interpretation because of the wide range of surveys that may be carried out in different contexts using a range of survey techniques. The survey will be related to the natural environment (on land or at sea) including biodiversity and public access.

For this standard, the surveys are likely to be of equivalent complexity to National Vegetation Classification (NVC), Phase Two Habitat Survey, British Trust for Ornithology Breeding Bird Census, Monkswood Butterfly transects, Environment Agency River Corridor or Joint Nature Conservancy Committee Intertidal surveys. Surveyors are expected to be competent in species identification.

Surveys may be of the following subjects: landscape features, flora and fauna, different habitat types, public access site and networks, historical and archaeological features, and human impact on the environment. Survey techniques include counting, sampling and mapping, and are increasingly likely to involve electronic recording and data analysis. In most surveys you will be expected to use both primary and secondary sources of data, for example using existing (secondary) data to plan your survey to collect new (primary) data.

You must ensure that you seek appropriate permissions, consents and licences prior to carrying out surveys. Permissions may relate to access to sites or access to information. Consents and licences include those under the Wildlife and Countryside Act, and under other relevant legislation. You are also expected to understand the differences between the terms 'monitoring', 'surveillance' and 'survey'.

This standard is for all environmental conservation staff who are closely involved with survey work and have responsibility for planning, conducting and reporting on surveys.

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# Performance criteria

#### You must be able to:

- Prepare for field surveys
- P1 identify survey objectives, specifications, legislative and access requirements and appropriate methodologies
- P2 identify any existing data relevant to the survey site and potential sources of data in accordance with the survey specifications
- P3 select and justify appropriate survey techniques in accordance with the survey objectives
- P4 ensure that your selected survey techniques are legal, safe and within the time and resource constraints
- P5 identify and obtain any necessary permissions, consents and licences
- P6 identify and establish the availability of required survey equipment
- P7 recognise the levels of your own competence and identify the need for expert advice and assistance
- P8 define the extent of the survey site and provide opportunities for clarification of the survey brief
- P9 ensure that your survey design provides for the effective storage of information Collect and record data from field surveys
- P10 ensure data is collected by applying the appropriate survey techniques and is accurate to the level required in the survey specifications
- P11 take prompt and appropriate action in cases where data cannot be obtained in accordance with the specifications
- P12 take note of any data not covered by the specifications, but potentially relevant to the survey and report it
- P13 carry out all work in accordance with relevant environmental and health and safety legislation, risk assessment requirements, codes of practice and company policies, including wildlife and access legislation
- P14 ensure that the effects of your work and access do not adversely affect the condition of survey sites
- P15 encourage any interested persons to ask questions or seek explanations, and provide them with appropriate information
- P16 produce proof of authority to conduct surveys on request
- P17 ensure all data is recorded fully and in the format specified

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# Knowledge and understanding

## You need to know and understand:

Prepare for field surveys

- K1 types of data that will be relevant to the survey
- K2 potential sources of data, their advantages and disadvantages and principles of use
- K3 where and how to obtain additional data relevant to the survey
- K4 organisational requirements concerning the types of survey adopted
- K5 your responsibilities under current environmental and health and safety legislation, codes of practice and company policies, including wildlife and access legislation
- K6 range of survey techniques available, their advantages and disadvantages and principles of use
- K7 circumstances in which permission, consent or licences are required for survey activities and the means of obtaining them
- K8 types and correct use of survey equipment
- K9 the importance of ensuring that the required levels of competence are available to undertake the survey
  - Collect and record data from field surveys
- K10 recognition of landscape features, flora and fauna, different habitat types, historical features, and the impact of humans on the environment (in accordance with the nature and objectives of the survey undertaken)
- K11 the importance of providing proof of authority when conducting a field survey
- K12 ways in which people can be encouraged to ask questions
- K13 the type of data which is relevant to the survey but not covered by the design
- K14 action in cases where the required data cannot be collected
- K15 actions to take in case of incidental damage or disturbance to habitat, wildlife or landscape
- K16 ways in which survey recording requirements vary according to the nature and objectives of the survey
- K17 the importance of seeking validation and verification of species identification
- K18 effective techniques for recording and storing survey data
- K19 data protection legislation for the storage of confidential information
- K20 your responsibilities under relevant environmental and health and safety legislation, codes of practice and company policies

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## Scope/range

Cources of data:

- 1 primary
- 2 secondary

Types of data:

- 3 qualitative
- 4 quantitative

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#### Glossary

Surveys may be of the following subjects: landscape features, flora and fauna, different habitat types, historical and archaeological features, and human impact on the environment. Survey techniques include counting, sampling and mapping.

For the purposes of this standard, the following definitions should be applied:

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

#### Survey techniques:

- · mapping/aerial photographs
- · use of GPS equipment and GIS software
- · counting
- trapping
- · ecological surveys

# Links To Other NOS

LANEnC8

## Plan and conduct field surveys



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