Conduct field surveys



Overview

This standard covers conducting field surveys in accordance with the survey plan. It could also apply to conducting surveillance and monitoring.

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.

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

This standard is suitable for all environmental conservation staff who are closely involved with survey work and have responsibility for collecting and recording data from field surveys.

LANEnC4 Conduct field surveys

1

Conduct field surveys

Performance criteria

You must be able to:

- P1 clarify the purpose, scope and objectives of the survey, surveillance or monitoring and the specification for data collection and recording
- P2 clarify your role and responsibilities in the survey and your relationship to others
- P3 clarify any relevant site restrictions or designations that are in place
- P4 ensure you have any necessary permissions, consents or specific licences for both site access and species field data collection work
- P5 use survey equipment and materials safely and correctly when conducting field surveys
- P6 carry out all work in accordance with relevant environmental and health and safety legislation, risk assessment requirements, codes of practice and organisational policies
- P7 observe appropriate bio-security measures while conducting field surveys
- P8 conduct field surveys by applying the appropriate survey techniques and ensure data is accurate to the level required in the survey specifications
- P9 ensure that the data gathered is valid, reliable and sufficient
- P10 take prompt and appropriate action in accordance with the survey plan, where data cannot be obtained
- P11 take appropriate action when protected or invasive non-native species are identified
- P12 ensure that the effects of your work and access do not adversely affect the condition of the survey site
- P13 communicate with interested parties and encourage them to ask questions or seek explanations, and provide them with appropriate information
- P14 ensure all field survey data is recorded fully, in the format specified, and reported within the required timescales in accordance with the survey plan
- P15 ensure all work is carried out in accordance with relevant local, national and European legislation, guidance and codes of practice

Conduct field surveys

Knowledge and understanding

You need to know and understand:

- K1 the purpose, scope and objectives of the survey, surveillance or monitoring and the requirements for data collection and recording
- K2 the implications of relevant site restrictions or designations that are in place
- K3 the importance of having the relevant permissions, consents or licenses for both site access and species data collection
- K4 the importance of providing proof of authority when conducting a field survey
- K5 the importance of public liability and professional indemnity insurance
- K6 the survey equipment and materials required, how to use them safely and correctly and any restrictions or relevant legislative constraints specified within the area of work
- K7 the importance of wearing appropriate clothing, including personal protective equipment (PPE) where necessary
- K8 your responsibilities under relevant environmental and health and safety legislation, codes of practice and organisation policies
- K9 the importance of bio-security and the appropriate bio-security measures for the site
- K10 the relevance of landscape features, flora and fauna, different habitat types, and the impact of humans on the environment, in accordance with the survey plan
- K11 why different survey methodologies are used on different occasions and at different sites and why they should be implemented as specified
- K12 different field survey techniques and the principles of their use e.g. counting, estimating, sampling
- K13 the meaning of valid and reliable data and possible sources of error and bias in data collection
- K14 the type of data that could be relevant to the survey but that is not included in the specifications
- K15 the action to be taken in cases where unforeseen circumstances affect data collection e.g. weather conditions
- K16 the action to take when protected or invasive non-native species are identified, the organisational and legal requirements for this and possible consequencies of not taking action
- K17 the ways in which field surveys may impact on the habitat, wildlife or

Conduct field surveys

landscape and how to minimise this

- K18 the actions to take in case of accidental damage or disturbance to habitat, wildlife or landscape
- K19 the importance of seeking validation and verification of species identification
- K20 the importance of communicating with interested parties and providing them with information when conducting surveys
- K21 the limits of your expertise and where to seek advice
- K22 relevant local, national and European legislation, guidance and codes of practice

Conduct field surveys

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.

LANEnC4 (SQA Unit Code - HA0P 04) Conduct field surveys

Developed by	Lantra
Version number	1
Date Approved	December 2013
Indicative review date	December 2018
Validity	Current
Status	Original
Originating organisation	Lantra
Original URN	LANEnC4
Relevant occupations	Ranger; Access Officer, Conservation Officer; Ecologist; Environmental Management Officer
Suite	Environmental Conservation
Keywords	environment; survey; marine; landscape; site; data; habitat