DRAFT Competency Standard for Ornithological Survey, Mitigation and Management

Notes:
a) To achieve an overall level of 'Capable' requires achievement of all criteria for both 'Foundation' as well as 'Capable'; 'Proficient' requires achievement of all criteria for all levels
b) 'Experience' means that you have done so on numerous occasions

All practitioners should have knowledge and understanding of:	
Ornithological survey, identification, and ecology	Understanding of: 1) Basic habitat requirements and preferences 2) Timing of breeding season 3) Seasonal behaviour, particularly timing of breeding and migratory behaviour 4) Foraging requirements and diet; and 5) Sensitivity to natural and anthropogenic environmental pressures.
Distribution	Knowledge of UK and, to a lesser extent, knowledge of international distribution in relation to UK migrant species, including an understanding of which parts of the UK support extensive populations. Including an understanding of how populations might vary seasonally and with migratory behaviour. Understanding of where there are introduced populations. Awareness of how to source information in relation to a specific project area.
Conservation status	Conservation status of naturally occurring bird species with reference to constituent parts of the UK. Understand where to look up international designations. Understanding of the key threats to bird species populations, range and survival and the reasons for their decline (e.g. habitat loss, habitat fragmentation, intentional disturbance, climate change etc.). Awareness of birds of conservation concern publications for relevant regions.
Health and Safety	Health and safety issues associated with ornithological survey including identifying safe survey and handling techniques and those related to survey specific risks (e.g. dusk surveys, working in proximity to water, remote locations, Weil's disease, ticks, fatigue and extreme weather etc.). Able to plan and undertake work in a safe manner.
Biosecurity	When surveying, awareness of appropriate biosecurity measures for self and other surveyors including cleaning of boots post survey and not transferring invasive non-native species material. Able to undertake the 'check, clean, dry' methodology and has an awareness of avian diseases, including avian flu.

Key references and reading list:	See relevant section of CIEEM's Good Practice Guidance for Habitats and Species V3 (May 2021) (see https://cieem.net/resource/good-practice-guidance-for-habitats-and-species/) and Bird Survey & Assessment Steering Group (2023). Bird Survey Guidelines for assessing ecological impacts. https://birdsurveyguidelines.org		
Competency Standards			
Activity	**Foundation**	**Capable**	**Proficient**
Advising on the requirements of legislation, policy and guidance or international standards (P3)	Awareness of key environmental policy and legislation and the level of protection afforded to species, including Wildlife and Countryside Act 1981 (as amended), The Wildlife (Northern Ireland) Order 1985 (as amended), and The Wildlife Act 1976 (as amended).	Knowledge and understanding of legislation and offences. Also understands priority species legislation and policy guidance in relevant geographic context. Can correctly interpret the legislation in regard to specific scenarios (e.g. site work and requirement for Schedule 1 licence), and is able to provide accurate advice.	Is regularly approached for advice and may provide training to other ecologists on policy and legislation in respect to birds. Experience with managing the risks to landowners, developers and/or contractors arising out of environmental, legal and policy requirements. May have experience of holding Schedule 1 licence.
Habitat/species survey design, planning and fieldwork (S1)	Awareness of sources of information on known occurrence and distribution of relevant bird species, such as BTO data sources. Able to check site and weather conditions prior to survey. Knowledgeable as to when bird surveys can be carried out (seasonal restrictions and weather conditions) and an appreciation of which species might require bespoke methods. Awareness of the main survey methods to survey different bird	Experience of understanding and evaluating sources of desk study data (e.g. BTO Data Report etc.) and using these data to inform the survey approach (e.g. records of notable or protected species). Experience of how adverse site or weather conditions may affect survey results. Experience of designing, planning and leading a variety of bird surveys, under standard scenarios, compliant with standard published	Significant experience of considering information relevant to the design of appropriate survey methods/schedules for complex or difficult sites (e.g. targeted species surveys), or bespoke methodology (e.g. acoustic or nocturnal surveys etc.). Provides training and guidance to surveyors, including specific site constraints e.g. designated sites, protected species, legal constraints.

	species across different habitats and seasons. Familiarity with BTO two- letter species codes and mapping procedure. Has assisted on surveys under supervision. Appreciates the confidentiality of particular survey results.	methodologies e.g. breeding birds and non-breeding bird surveys. Able to decide what additional data to collect on site to inform survey design. Experience of adapting survey design on site according to changing conditions or requirements.	Quality assures field data/samples and recognises errors/omissions in data. May be aware of survey standards and guidance applicable outside of main region / country of work.
Species identification, handling and population size (S2)	Has a basic knowledge of taxonomy and classification and can identify some common species, including by sound. Assists on standard species surveys. Is developing a knowledge of species surveying by working with or shadowing others. Is aware of legal and biosecurity issues and standard biosecurity protocols.	Can reliably identify by sight and/or sound all common birds expected within habitats on site. When identifying birds by sound, this should be done without reliance on automatic-identification apps. Carries out species-specific surveys and records findings in accordance with industry accepted good practice guidelines. Implements effective biosecurity protocols. Can, through a knowledge-based approach, identify unexpected or rarer species, by taking a written description, and where possible a photograph and / or recording of vocalisation, for identification out of the field (using visual and/or acoustic features). With the use of published data (e.g. BTO Data Report etc.), can	Can reliably identify by sight and sound (including most vocalisations) all birds expected within habitats on site, and can, through a knowledge-based approach, identify unexpected or rarer species. Accurately assesses population size/significance for both common and rare species.

		qualitatively assess population size/significance, where data are available to do so.	
Habitat Regulations Assessment (HRA) / Natura Impact Statements (NIS) (A2)	Demonstrates an understanding of the purpose of HRA/NIS and when it might be necessary. Has assisted in some elements of the process with a bird focus.	Able to evaluate/undertake screening and appropriate assessment of an HRA/NIS of limited scope or complexity relating to birds.	As project lead or lead assessor, able to assess/evaluate or undertake screening and appropriate assessment of an HRA/NIS in complex and challenging scenarios relating to birds.
Ecological assessment including Preliminary Ecological Appraisal (PEA) and Ecological Impact Assessment EcIA (A4)	Must have achieved at least 'Foundation' level in relation to 'Survey', specifically understanding of data accuracy. Able to accurately interpret results, with guidance from a supervisor, and form a sound judgement or hypothesis on the use of a site by birds, whilst acknowledging limitations and uncertainties.	Able to accurately interpret results and form a sound judgement or hypothesis of bird use of a site, based on the local population and distribution trends and vulnerabilities of particular species, in addition to site value, whilst acknowledging limitations and uncertainties.	Accurately interprets results relating to complex or non-standard projects or sites impacting bird populations and/or designated sites. Able to advise and train others. Fulfils an expert witness role or provides written advice for another ecologist in this role.
Providing specialist advice on ecological management and/or environmental schemes (M1)	Awareness of simple techniques for habitat/species management that can be used to manage and/or create habitats suitable for birds e.g. scrub creation.	Experience of standard habitat/species management projects or habitat creation techniques for birds, including those designed to adapt to/mitigate climate change effects.	Provides specialist technical advice on the likely suitability of different habitat/species management options and/or habitat creation and/or climate change adaptation techniques for particular bird species or bird assemblages.
Designing and preparing (M2), and	Knowledge of the design and/or implementation of simple habitat/species management,	Experience of the design of straightforward medium- and large-scale (or complex small-scale) species	Inputs to the design of medium to large-scale habitat/species management, mitigation,

implementing (M3) environmental management, mitigation, restoration and enhancement plans	mitigation, compensation and enhancement projects for birds e.g. reedbed creation. Awareness of the considerations that might present opportunities and constraints (e.g. land ownership, planning, and feasibility) in the design, preparation, and implementation of plans or projects.	management, mitigation, compensation and enhancement projects for birds, including the timing of development works.	compensation and enhancement plans or projects, particularly those that are complex, including habitats for specialist species. Designs effective monitoring schemes appropriate to the scale/impact of the project. Confidently and effectively leads project teams in large-scale species and/or habitat management projects, including ensuring the highest standards of biosecurity across whole sites/projects.
Interpretation (SM3)	Awareness of the importance of, and techniques for, interpreting data (e.g. acoustic analysis, territory analysis, collision risk modelling) and using appropriate presentation tools e.g. graphs and mapping. Awareness of how to structure a report to present data in a logical way, including a non-technical summary (e.g. CIEEM Guidelines for Ecological Report Writing).	Experience of interpreting data and evidence, while acknowledging limitations and uncertainties, and can draw and present valid conclusions. Interprets standard data independently, and more complex data and evidence under guidance. Interprets results to form a sound judgement or hypothesis e.g. of habitat use by birds.	Independently interprets complex data and produces accurate, factual and well written conclusions for a range of audiences as appropriate. Able to interpret bird survey data and environmental information as part of a non-standard, complex assessment.