

Competency Standard for Hazel Dormouse Survey, Mitigation and Management

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Notes:

a) 'Capable' level requires achievement of all criteria for both 'basic' as well as 'capable'; 'accomplished' 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:				
Dormouse ecology and	1) Annual cycle and the timing for breeding/hibernation;			
behaviour	2) Typical home ranges, dispersal distances and patterns (i.e. greater dispersal distances when/where resources scarce/in			
	less good quality habitats);			
	3) Habitat and micro-habitat requirements a	and competition for resources;		
	4) Population structure and dynamics and h	ow this may vary in different landscapes.		
Distribution	UK distribution, including stronghold areas ar	nd where to expect to find them in lower/highe	r numbers.	
Conservation status	Conservation status with reference to constit	uent parts of UK and Europe as a whole. Under	rstanding of the key threats to	
	the species and the reasons for their decline (e.g. habitat loss and degradation, habitat fragmentation, predation, climate			
Health and safety	Health and safety issues associated with dorn	nouse survey including identifying safe survey t	echniques (including Covid-19	
incutin and surcey	handling policies) and those related to survey	$v_{\rm specific risks}$ (e.g. trip hazards ticks cuts and	scratches) Able to plan and	
	undertake work in a safe manner.			
Biosecurity	Understanding the risks of activities in relation to biosecurity and take relevant precautions (e.g. to avoid the spread of			
	Covid-19 or other zoonoses between surveyors and dormice, and to avoid the spread of invasive non-native species and tree			
	and plant pests and diseases)			
Key References and	See relevant section of CIEEM's See relevant section of CIEEM's Good Practice Guidance for Habitats and Species V3 (May			
Reading List	<u>2021)</u>			
Competency Standards				
Activity	Basic	Capable	Accomplished	
Policy and Legislation	Aware of key legislation and national policy,	Good knowledge and understanding of	Is regularly approached for	
(P1.1)	with a basic understanding of the different	legislation, offences and national policy.	advice and may provide	
	levels of protection afforded by the	Can correctly interpret the legislation in	training to other ecologists on	
	legislation.	regard to specific scenarios (e.g. site work),	policy and legislation in respect	

	Aware of when survey licences/mitigation licences are required (can provide examples of typical licensable and non-licensable development activities). Assisting licensed ecologists with surveys and may be an accredited agent on a survey licence.	and able to provide accurate advice regarding legislative compliance. Experience of successful licensing application processes and aware of the three tests/considerations necessary to obtain a licence and the available licensing approaches (conventional and Defra's Licensing Policies in England). Has a good understanding of what is an appropriate level of mitigation. Qualified to hold a survey licence, and may have been a named ecologist or accredited agent on a mitigation licence.	to dormice. Experience with managing the risks to landowners, developers and contractors arising out of environmental, legal and policy requirements. Has in-depth knowledge of the different approaches to licensing where relevant, e.g. where Defra's Licensing Policies may be applicable in England. Holds a survey licence and is likely to have been named ecologist or accredited agent on a dormouse mitigation licence. Able to lead consultation with relevant authorities.
Survey (S1.1) Sources of information	Aware of sources of information on known occurrence and distribution of dormice (including local biological/environmental records and local contacts/ local mammal groups/PTES National Dormouse Monitoring Programme and National Dormouse Database, as well as freely available information e.g. MAGIC and planning portals).	Experience of obtaining and interpreting desk study information as part of standard, non-complex assessment. Awareness of when data is sensitive and, where client- owned, that permission is granted before release to third party or used in publication. Able to interpret available data, their validity and use in different scenarios. Able to make sound assumptions in the absence of data.	Experience of obtaining and interpreting desk study information as part of complex assessment. Able to interpret available data, their validity and use in complex scenarios.
Survey (S1.2) Habitat suitability assessment	Aware of dormouse habitat requirements and ability to assess the suitability of habitats for dormice. Able to identify key areas of suitable dormouse habitat and identify key key tree,	Able to lead dormouse habitat assessments. Able to quantify suitability (e.g. as negligible, poor, good or exceptional).	Is regularly approached for advice and may provide training to other ecologists on assessing habitat suitability.

	shrub and climbing plant species of value for dormice.	Experience of finding dormice in a range of habitats and able to identify key plant species utilised for food and nest materials. Good understanding of the value of different landscape structures, and the impact on habitat suitability of gaps, for dormice in different regions of the UK. Awareness of examples of atypical habitats where dormice have been found.	
Survey (S1.3) presence/likely absence	Aware of typical methods used to survey (i.e. natural nest searches, nut searches, nest tube surveys and nest box surveys), survey objectives, and a basic understanding of appropriate seasonal restrictions and suitable weather conditions for survey. Aware of the key field signs for identification of dormice and ability to identify signs under supervision. Has experience in installing dormouse tubes and boxes, including practicalities of checking them (i.e. use of large clear bag, sleeves rolled up, use of scales, recording sheets, and what to record (weight, sex, age class). Able to reference points system to confirm likely absence. Has assisted on surveys under supervision. Able to identify and distinguish between dormice, other small mammals and non-	Experience of leading surveys for dormice. Consistently demonstrates the correct identification of dormice and their signs at all life stages, and ability to sex dormice. Able to effectively design and implement surveys across a landscape to determine presence/absence and gain some understanding of distribution in the landscape at different times of the year. Able to effectively coordinate surveys suitable for a specific outcome, e.g. mitigation licence application. Knowledge of when to curtail or modify survey techniques due to unsuitable weather, predation, welfare of target and non-target species, etc. Awareness of what constitutes a limitation, such as abundance of natural nest sites, adverse weather conditions, geographical location, nest box/nest tube positioning, false negatives/positives and access can have on survey results, and ability to	Is regularly approached for advice and may provide training to other ecologists on undertaking dormouse surveys. Regularly designs and coordinates effective surveys for major development projects or large-scale conservation projects, or can demonstrate an equivalent level of experience through a long period of surveying at smaller sites. Some appreciation of population dynamics and movements in landscape / use of resources at different times of year. Knowledge of more discreet reasons for survey bias and can interpret with a level of confidence when drawing conclusions.

	native edible dormouse, and their signs, under supervision. Awareness of the difference between nuts eaten by dormice and other small mammals, squirrels and birds. Aware of health and safety issues commonly associated with surveying for dormice (e.g. stinging insects such as hornets/bees in nest boxes). Aware of biosecurity considerations in relation to re-using survey equipment on different sites, preventing transmission of	document these constraints accordingly. Understands survey bias when setting out survey limitations. Competent to hold or be named as an accredited agent on a survey licence/be a registered person or accredited agent on a survey class licence. Experienced in differentiating nuts eaten by dormice from other small mammals, squirrels and birds.	Able to provide quality assurance for more complex surveys. Awareness of emerging / novel survey methods or new technology (e.g. eDNA, footprint tunnels, camera trapping, hair tubes, radio tracking, static detector acoustic monitoring) for potential added value to traditional survey methods in certain circumstances.
	of dormice, and preventing spread of invasive non-native species.		
Impact assessment (A4)	Must have achieved at least 'Capable' level in relation to 'Survey'. Able to accurately interpret survey results, with guidance from a supervisor, to form a sound judgement or hypothesis of dormouse use of a site whilst acknowledging limitations and uncertainties. Able to relate the assessment of impacts from the site to the local population and immediate off site connected habitats and populations. Understand the impacts of the proposed works on dormice populations and how the need for mitigation may influence the project design (e.g. timings of works).	Able to accurately interpret results, including any constraints identified, to form a sound judgement or hypothesis of dormouse use of a site based on local population distribution, site value and the wider local population through to regional populations, whilst acknowledging limitations and uncertainties. Able to identify the potential impacts of a project on a dormouse population e.g. habitat loss, fragmentation, habitat creation etc, and how the design and mitigation strategy should be informed by the mitigation hierarchy.	Must have achieved at least 'Accomplished' in relation to 'Survey'. Able to accurately interpret results relating to major development projects or large- scale conservation projects impacting more than one dormouse population, and often over longer time periods. Able to form a sound judgement or hypothesis of dormouse use of the site(s) whilst acknowledging limitations and uncertainties. Can use data and project

			knowledge to accurately determine impacts at all levels. Is regularly approached for advice and may provide training to other ecologists.
Mitigation design (M2)	Aware of standard mitigation techniques and when they could be used.	Able to clearly explain the different approaches to mitigation and licensing, and design an effective mitigation solution for the lifetime of the project.	Must have achieved at least 'Capable' level in relation to 'Implementing effective mitigation'. Has experience of leading on the implementation of mitigation strategies for multiple schemes. Able to design effective mitigation solutions for large/complex projects affecting multiple populations. Is regularly approached for advice and may provide training to other ecologists.
Implementing effective mitigation (M3.1)	Must have achieved at least 'Capable' level in relation to 'Survey'. Understands standard mitigation licence requirements, including timing of development works, mitigation techniques, welfare/safety issues and habitat creation. May have assisted mitigation implementation under supervision.	Experience of overseeing effective mitigation implementation, including precautionary working methods, finger-tip searches (with experience of identifying summer and hibernation nests) and clearance of habitat using suitable techniques (including summer persuasion technique and two staged clearance technique). Experience of effective installation of dormouse boxes, habitat creation and connectivity features as appropriate. Confident in delivering tool- box talks.	Provides advice and training to other ecologists on mitigation implementation. Has experience of implementing mitigation on major developments or conservation projects large in scale and over extended timetables. May have experience of dormouse translocation under a mitigation licence.

		Experience in monitoring the effectiveness of habitat/species management to ensure that outcomes are achieved and implementing remedial action if required. May have been named as an accredited agent, or been the named ecologist, on a mitigation licence.	
Implementing effective mitigation (M3.2) Handling and welfare	Able to safely handle hazel dormice under supervision. Able to communicate clearly with contractors on the approach to habitat clearance.	Must have achieved at least 'Capable' level in relation to 'Implementing effective mitigation M3.1'. Able to safely handle hazel dormice and other small mammals, accurately age and sex them whilst ensuring their welfare. Awareness of licensing bodies' procedures for reporting any accidental deaths or injury during surveys. Knowledge of when to curtail or modify mitigation techniques due to unsuitable weather, predation, welfare of target and non-target species, etc.	Provides advice and training to other ecologists on handling.
Advising on habitat management (M1)	Aware of basic habitat requirements (active and hibernation periods), standard management techniques and when they could be used.	Knowledge of different approaches to habitat management including changes in existing management regimes (e.g. introducing coppicing in woodland), changes to frequency of existing management (e.g. reduction in frequency of hedgerow trimming) and other habitat enhancement measures. Able to demonstrate understanding of how management changes may negatively impact dormice in the short term, and to set an appropriate scale and programme for	Able to design appropriate management regime in complex cases, with SMART objectives. Is regularly approached for advice and may provide training to other ecologists.

		habitat management to minimise negative impacts. Able to explain the rationale behind habitat management actions and to set SMART objectives for them.	
Interpretation and evidence-based reporting (SM3)	Aware of sources of information on known occurrence and distribution of dormice (including local biological/environmental records and the PTES National Dormouse Monitoring Programme). Able to obtain and interpret data under supervision and report accurately, including presence/likely absence and an awareness of population size, whilst acknowledging limitations and uncertainties.	Able to obtain and interpret data as part of standard, non-complex assessment, including presence/likely absence with an understanding of population size. Able to interpret results to form a sound judgement or hypothesis of habitat/site use whilst acknowledging limitations and uncertainties.	Able to interpret data as part of a non-standard, complex assessment including description of perceived population dynamics. Leads and advises others on collection and interpretation of data from all relevant available sources. Demonstrates detailed understanding of data
			limitations.