

Competency Standard for Water Vole Survey, Mitigation and Management

SEPTEMBER 2026

CIEEM

Acknowledgements

Development of this Competency Standard was informed by the Ecological Competences: Skills and Process document developed by the team at Atkins (2019).

Many thanks to those who contributed to the development of this Standard: Joanne Bates (Mott MacDonald Ltd); Mike Dean (MD Ecology), Rachel Fine (Mott MacDonald Ltd); Marie Fleming (Ove Arup); Aline Gomes (Atkins); James Girgis (Atkins); Will Holden (RSK Biocensus); Owen Peat (WSP); Philip Preston (TetraTech).

Notes

a) Achievement of the **Capable** level requires meeting all criteria at both **Foundation** and **Capable** levels. Achievement of the **Proficient** level requires meeting all criteria across all three levels.

b) '**Experience**' means that you have done so on numerous occasions.

All practitioners should have knowledge and understanding of:	
Water vole ecology and behaviour	Understanding of: 1) Habitat requirements and preferences 2) Population structure and dynamics and how this may vary in different landscapes 3) Breeding season and typical reproduction rates 4) Wintering behaviour 5) Diet 6) Approximate territory ranges/sizes and territorial interactions by males and females 7) Typical dispersal distances and time of year of dispersal 8) Typical life expectancy 9) Range of predators and anti-predation behaviours; mink ecology, behaviour and distribution, adaptations to predating water voles, and how this affects water vole populations
Distribution	Knowledge of UK distribution, including an understanding of which parts of the UK support extensive populations, which parts have small or vulnerable colonies. Understanding of the importance of knowing where there have been local extinctions and where there have been re-introductions and awareness of how to source this information in relation to a specific project or area.
Conservation status	Knowledge of conservation status with reference to constituent parts of UK and Europe as a whole. Understanding of the key threats to water voles and the reasons for their decline.
Health and safety	Knowledge and understanding of health and safety issues associated with these surveys including identifying safe survey techniques such as using boats, waders etc. Able to recognise other safety issues associated with working by/ in water - e.g. water level, flow, silt, risk of leptospirosis etc. Able to plan and undertake work in a safe manner incorporating appropriate personal hygiene measures.
Biosecurity	When undertaking surveying and handling water voles awareness of appropriate biosecurity measures for self and other surveyors including cleaning and disinfecting equipment before deploying, making sure that mink traps are washed, clean and dried before moving to another area, etc. Awareness of aquatic non-native species. Undertake as standard appropriate biosecurity measures (use DEFRA-approved disinfectants) relating to working near water (both still and flowing) and working with animals. Able to undertake the 'check, clean, dry' methodology.
Key References and Reading List	See relevant section of CIEEM's Good Practice Guidance for Habitats and Species V3 (May 2021) https://cieem.net/resource/good-practice-guidance-for-habitats-and-species/).

Competency Standards			
Activity	**Foundation**	**Capable**	**Proficient**
Policy and Legislation (P1)	Aware of key legislation (WCA 1981) and level of protection afforded to the species. Aware of local assessments for the species or introduction. Aware of licences available for water voles and general licence issues. May have been an accredited agent for a licence. Awareness of the principles of ecological assessment (avoid - mitigate - compensate) and their importance to inform project decisions. Awareness of the planning process and any updates concerning water voles.	Good knowledge and understanding of legislation and offences (capture, kill, injure, damage, destroy or obstruct access to any structure or place used for shelter or disturb whilst occupying a place of shelter etc.). Knowledge of the incidental result defence, water vole conservation licences and experience of successful licensing application processes. Can correctly interpret the legislation in regard to specific scenarios (e.g. site work) and is able to provide accurate advice. Consistently able to suggest correct licence route for a project. Competent to be named as an accredited agent, or been the named ecologist, on a licence.	Is regularly approached for advice and may provide training to other ecologists on policy and legislation in respect to water voles. Has in-depth knowledge and experience of water vole licences and holding licences.
Survey (S1.1)	Knowledge of sources of information on known occurrence and distribution of water voles (including local biological/environmental records and local contacts/ otter/mammal group). Awareness of the principles of ecological assessment (avoid – mitigate – compensate) and their importance to inform project decisions.	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.	N/A

Competency Standards			
Activity	**Foundation**	**Capable**	**Proficient**
Survey (S1.2)	Knowledge of when water vole surveys can be carried out (seasonal restrictions and weather conditions, water levels etc.) and an understanding of geographical context. Knowledge of main survey methods used to survey for water voles. Has assisted on surveys under supervision. Aware of key field signs for identification of water voles. Able to identify signs under supervision. Able to effectively assess the suitability of the habitat for water voles. Aware of potential issues with identification of water voles and other commonly encountered species. Aware of the need to record when uncertain and collect scale images or field signs when appropriate for verification later. Aware of how to correctly identify mink field signs and the importance of doing so. Awareness of the planning process and any updates concerning water voles.	Experience of leading surveys for water voles. Consistently demonstrates the correct identification of water vole field signs. Able to effectively design and coordinate surveys suitable for a specific outcome e.g. licence application. Awareness of what effect limitations, such as adverse weather conditions washing away signs, access limitations and effect population dynamics have on visibility of field signs and able to document these constraints accordingly. Understands survey bias when setting out survey limitations. Competent to be named as an accredited agent, or been the named ecologist, on a licence.	Is regularly approached for advice and may provide training to other ecologists on undertaking water vole surveys and identification of field signs. Regularly designs and coordinates effective surveys for major development projects or large catchment-based conservation projects, or can demonstrate an equivalent level of experience through a long period of surveying at smaller sites. Able to provide quality assurance for more complex surveys.

Competency Standards			
Activity	**Foundation**	**Capable**	**Proficient**
Impact assessment (A4)	Must have achieved at least 'Capable' level in relation to 'Survey'. Able to accurately interpret results, with guidance from a supervisor, to form a sound judgement or hypothesis of water vole use of a site based on site value 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 water vole populations and how the mitigation may influence the design and mitigation strategy.	Able to accurately interpret survey results, including any constraints identified, to form a sound judgement or hypothesis of water vole use of a site based on local population distribution, trends and vulnerabilities in addition to site value and the wider local population through to regional populations. Able to assess the impacts of the proposed works on water vole populations and how the mitigation will influence the design and mitigation strategy by applying the mitigation hierarchy .	Must have achieved at least 'Proficient' in relation to 'Survey'. Accurately interprets results relating to major development-projects impacting more than one water vole population to form a sound judgement or hypothesis of water vole use of the site(s) whilst acknowledging limitations and uncertainties. Able to relate the assessment and impacts across the multiple populations, their interactions and the future sustainability

Competency Standards			
Activity	**Foundation**	**Capable**	**Proficient**
Mitigation and compensation design (M2)	Aware of standard avoidance and mitigation techniques, such as siting works to avoid burrows, safe working distances from burrows and seasonal timing of works to minimise disturbance, and when they could be used.	Designs appropriate mitigation in standard non-complex cases, including timing of development works, protective fencing, displacement, and trapping. Good knowledge of the limitations of trapping and displacement, and able to select the appropriate option in different scenarios. Demonstrates understanding of existing limitations on water vole populations and address these through mitigation or compensation. Able to follow the mitigation and compensation options that will have the least impact to water vole populations. Understand the need for licences in different situations and have knowledge of the licensing process. Able to advise client on best practice, risks and uncertainties with various approaches. Able to clearly articulate, evidence and justify the best conservation option. Understand the timeline of the works including legal timing constraints and ensure that early advice/ guidance is provided to the client to allow for on-site receptors where applicable. Experience of designing compensation habitat including enhancing or creating areas to act as suitable receptor sites which are appropriate for the site conditions and local area and ensuring that the client understand the timing implications of some of the proposed measures. Experience in use of different methods to aid rapid establishment of habitat to reduce impact on water vole population, including mink control.	Must have achieved at least 'Capable' level in relation to 'Implementing effective mitigation'. Designs appropriate mitigation and compensation in non-standard and complex cases.

Competency Standards			
Activity	**Foundation**	**Capable**	**Proficient**
Implementing effective mitigation (M3) Displacement	Must have achieved at least 'Capable' level in relation to 'Survey'. Understands licence requirements of displacement. Will have assisted with overseeing displacement, including destructive searches, under supervision.	Experience of planning and direct oversight of contractors/machine operators undertaking displacement operations, including destructive searches. Knowledge of the use of water drawdown as a technique to aid displacement. Competent to be licensed to undertake displacement.	Is regularly approached for advice and may provide training to other ecologists in relation to undertaking displacement operations.
Implementing effective mitigation (M3) Trapping (including care and release of captured animals)	Must have achieved at least 'Capable' level in relation to 'Survey'. Aware of live trapping procedures and welfare/ safety issues including safe and effective positioning and operation of traps. May have assisted with trapping under supervision. Aware of the use of mink rafts for monitoring and capture of mink. Able to check mink rafts for evidence of mink. Aware of the soft-release protocol.	Experience of the safe design and installation of effective exclusion fencing in trapping projects. Experience of setting and rebaiting traps and handling water voles in a range of situations, with appropriate consideration of welfare/safety issues. Knowledge of when to curtail trapping for bad weather, predation etc. Competent to be named as an accredited agent, or been the named ecologist, on a trapping licence. Able to handle live water voles safely and accurately record biometric data. Able to weigh, assess animal condition (including identifying signs of disease), sex water voles and their breeding condition and humanely mark/tag water voles. Experienced in following the soft release protocol and able to safely release following examination. Experienced in the safe transportation of water voles.	Has been the named ecologist on a trapping licence. Has extensive knowledge of water vole husbandry whilst in captive care and advises others. Is regularly approached for advice and may provide training to other ecologists. Extensive experience of successful trapping, handling and husbandry following best practice.
Advising on management (M1)	Able to provide instruction, guidance and supervision to contractors on site according to method statement. Has basic knowledge of habitat requirements for water voles e.g. favourable vegetation; bank management; control of predators. Able to monitor for effectiveness and recommend further actions if management has not been a success.	Experience of designing site-specific management plans, planting regime and methods to improve bank suitability and water habitat quality. Able to provide advice on additional measures if results show that management is not working. Experience in designing an appropriate water vole and habitat monitoring plan. Understanding of the different techniques to ensure that operational management of watercourses is carried out in a sensitive manner i.e. grass cutting, weed cutting and de-silting	Is regularly approached for advice and may provide training to other ecologists on undertaking habitat management operations across complex sites. Understanding of the different techniques to ensure that operational management of watercourses is carried out in a sensitive manner i.e. grass cutting, weed cutting and de-silting

Competency Standards			
Activity	**Foundation**	**Capable**	**Proficient**
Interpretation (SM3)	Able to obtain and interpret metadata information under supervision and report accurately whilst acknowledging limitations and uncertainties.	Able to interpret results to form a sound judgement or hypothesis of water vole use of a habitat/ site whilst acknowledging limitations and uncertainties.	Able to obtain and interpret metadata information as part of a non-standard, complex assessment. Able to interpret results to form a sound judgement or hypothesis of water vole use of a habitat/ site whilst acknowledging limitations and uncertainties for complex and non-standard scenarios.



CIEEM
Grosvenor Court
Ampfield Hill, Ampfield
Romsey, SO51 9BD

© 2026 Chartered Institute of Ecology
& Environmental Management
Company Number: RC000861
Registered Charity (England and Wales): 1189915.
Registered Charity (Scotland): SC054698

CIEEM