



**Douglas West Wind Farm
Draft Species Protection Plan**

Appendix 7.9

Prepared by: Rachael Iveson; Rafe Dewar

Reviewed by: Brian Henry

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Tel: 0141 342 5404

Web: www.macarthurgreen.com

Address: 95 South Woodside Road | Glasgow | G20 6NT

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1. INTRODUCTION

MacArthur Green has prepared this Draft Species Protection Plan (SPP) on behalf of the Applicant to ensure all reasonable protection measures are undertaken with regards to protected species on Douglas West Wind Farm site (referred to within this report as the 'Revised Development'). The SPP is to be implemented during construction and decommissioning phases of the Revised Development.

In summary, the Draft SPP has been produced to ensure the adequate consideration of protected species interests into all construction and decommissioning activities within the Revised Development site to safeguard the resident populations and ensure compliance with the relevant nature conservation legislation (see Annex 1).

The SPP will be a live document subject to review and updating, and will assist site staff in the protection of species during construction and decommission, under the guidance of the Ecological Clerk of Works (ECoW).

2. BACKGROUND INFORMATION

The baseline protected species surveys of the site were carried out in September and October 2014 and April 2015, with a follow-up survey in May 2017. A bat roost assessment was conducted in May 2015. This SPP is designed to reflect the results of the surveys and the distinct ecology and distributions of protected species within the site.

Protected species surveys conducted as part of the Environmental Impact Assessment (EIA) process found evidence of otter (*Lutra lutra*) and badger (*Meles meles*) using the site. There was no evidence of water vole (*Arvicola amphibius*), red squirrel (*Sciurus vulgaris*), great crested newt (*Triturus cristatus*) or pine marten (*Martes martes*) using the site.

Four bat species, namely common pipistrelle (*Pipistrellus pipistrellus*), soprano pipistrelle (*Pipistrellus pygmaeus*), *Myotis* sp., and *Nyctalus* sp., were recorded within the site. Medium risk (common and soprano pipistrelle bats) and low risk (*Myotis* sp.) species were all recorded in 2014 (refer to Appendix 7.6) and high risk (*Nyctalus* sp.) species were recorded in 2015 and are expected to occur in low numbers. The results showed bat species foraging and commuting within the site in low numbers, mainly along watercourses and the edge of the conifer plantation. The derelict building outwith the site to the north has a confirmed bat roost.

Signs of otter were present within the site; spraints were recorded along Poniel Water and Shiel Burn and potential holts and resting up sites (couches) were also recorded (refer to EIA Appendix 7.2 and EIA Confidential Annex C.1 and EIA Confidential Figures C7.1 and C7.3 for more details).

The presence of badger was confirmed through identification of latrines and prints within the site. Outlier setts were also recorded in the site (refer to EIA Confidential Annex C.2 for full survey results and EIA Confidential Figures C7.2 and C7.4).

No reptiles were recorded during any surveys within the site. The dilapidated building at Brackenside may provide some suitable hibernacula features. The areas of the heath vegetation recorded across large areas of the site may provide varied structure and micro-topography suitable for basking and foraging reptiles. Although no signs of reptiles were observed during the survey this does not confirm their absence from the site.

The open mire and grassland habitats found within the site have the potential to support terrestrial invertebrates, although no wood or stone piles were found.

3. AIMS & OBJECTIVES OF THE SPECIES PROTECTION PLAN

The Aim of the SPP is to ensure all reasonable precautions are taken by the Applicant and their contractors to safeguard protected species from disturbance, injury and death and to protect any structure or place, which any such protected species uses for breeding, resting, shelter or protection during the construction and decommissioning of the Revised Development.

The Aim of the SPP will be fulfilled by the Applicant adopting the following objectives throughout the construction and decommissioning of the Revised Development:

- a) Objective A - Implement a monitoring and protection plan for protected species;
- b) Objective B – Follow an approved procedure if an active feature is found; and
- c) Objective C – Ensure adequate education and awareness of site personnel.

Objective A addresses the monitoring procedure to be followed to ensure that the Aim of this SPP is achieved. Objective B covers the detailed procedure in the event of a protected species feature being discovered. Objective C addresses the educational needs of appropriate personnel on the site to further reduce the risk of an offence being committed. The procedures to be adopted that will fulfil these objectives are detailed in Section 6.

4. RESPONSIBILITIES

The overall responsibility for ensuring that the planning conditions and the conditions of any licence granted are adhered to, in particular those conditions relating to protected species, will lie with the Applicant. Personnel responsible for the day-to-day implementation of the SPP are detailed in Table 1 below.

Role of Ecological Clerk of Works

The Ecological Clerk of Works (ECoW) will have the specific remit of monitoring compliance with the SPP during the construction and decommissioning phases and reporting any issues to the Applicant's Construction Project Management Team. The ECoW's role shall involve direct monitoring of all activities in the site to the extent the ECoW considers this to be required, and/or training of nominated

personnel to carry these out in a manner likely to minimise the potential for impact on the protected species. The ECoW will also agree changes to construction operations to prevent breaches of the SPP.

TABLE 1. SPP RESPONSIBILITIES	
Task	Responsibility
Implementation of the SPP	The Applicant’s Construction Project Management Team
Monitoring and Review of the SPP	Ecological Clerk of Works
Regular site monitoring for protected species and associated protected features, for: otter, badger, bats, reptiles, water vole.	Ecological Clerk of Works or a suitably qualified ecological surveyor
On-going watching brief for the above	All site personnel

5. THE POTENTIAL IMPACTS OF DEVELOPMENT

Impacts on protected species can result from the physical effects of construction such as soil stripping, road laying, turbine foundation construction and noise disturbance. These operations can negatively affect protected species in a number of ways including:

- (i) Abandonment of a holt/burrow/roost/den/sett/pond etc. due to disturbance;
- (ii) Abandonment of dependant young due to disturbance;
- (iii) Damage to or destruction of a protected feature or species;
- (iv) Damage to navigation/commuting routes (i.e. ditches, burns, fence lines etc.);
- (v) Fragmentation of territories;
- (vi) Damage to foraging areas (e.g. areas containing amphibians or fish in the case of otter);
- (vii) Contamination of water;
- (viii) Disturbance to a protected species that results in behaviour that negatively impacts their life stage; and
- (ix) Accidental injury or death to species by machinery, tools or vehicles.

6. PROCEDURES FOR PROTECTING PROTECTED SPECIES

This section details the procedures to be followed to ensure all reasonable precautions have been adopted to protect species from disturbance, injury and death and to protect any structure or place that any such species uses for breeding, resting, shelter or protection.

The level of disturbance free zones for each species is shown in Table 2 below. If other protected species are identified prior to commencement or during construction or operation suitable buffer zones will be advised by the ECoW and agreed in consultation with Scottish Natural Heritage (SNH).

TABLE 2. LEVEL OF PROTECTION AND RECOMMENDED DISTURBANCE FREE ZONES		
Species Feature	Level of Protection	Disturbance Free Zone
Otter (holts, etc.)	European	30/200 metres ¹
Bat (roost)	European	30/200 metres ²
Badger (sett)	National	30/100 metres ³
Water Vole (burrow)	National	5-10 metres ⁴
Red Squirrel (drey)	National	50 metres
Pine Marten (den)	National	30 metres
Reptiles (hibernacula)	National	n/a ⁵

¹The disturbance zone will be 30 m unless a breeding/natal holt is identified, in such an instance the disturbance zone will be increased to 200 m.

² The disturbance zone will be 30 m, however turbines must be positioned 200 m from potential roost habitats (Natural England, 2014).

³ Disturbance is defined by SNH as any new procedure that approaches within a minimum of 30 m of a sett margin. For piling or blasting activities this buffer zone is extended to 100 m.

⁴ Dependent on burrow location and bank profile.

⁵ Due to the more limited nature of their protection and their ability to avoid machinery etc. during their active phase, no specified disturbance zone for reptiles is given; however if a hibernacula is discovered an appropriate disturbance exclusion zone will be demarcated.

Objective A - Monitoring and Protection Plan

Monitoring Plan

The results from recent surveys show that protected features for otter and badger exist within the site. There is potential for other protected species to move into the area. Therefore, it is important that the disturbance buffers outlined in Table 2 are adhered to and the measures outlined in the 'Protection Plan' are followed (as detailed below). As other evidence of otter and badger were seen within the site, such as feeding signs and spraints/latrines, it will be the duty of the ECoW to check the status of the protected species and associated protected features immediately prior to construction activity progressing across the site and to continue spot checks during construction for any new protected features in the vicinity of the construction works.

Where construction work is staggered across the site, any watercourses or suitable habitat for badger setts within the vicinity of the works due to be carried out should be monitored and checked

immediately prior to the commencement of works. This should occur during each phase of construction.

Arrangements for pre-construction ecological monitoring will be conducted within 6 months of construction commencement as set out in a Construction Environmental Management Plan (CEMP).

Guidelines detailing the monitoring of protected species and associated protected features by the ECoW or suitably qualified ecological surveyor are described below for completeness:

Potential Features

(a) European Protected Species - fauna (otters and bats):

Further checks of the potential features will be completed during construction and all potential protection features will be clearly demarcated.

- (i) If the potential protection feature remains unoccupied, construction may occur in the area, but not damaging the potential feature under close supervision by the ECoW; or
- (ii) If the status of the feature changes to occupied then the under-noted procedure for occupied sites will be followed. The ECoW will be responsible for this survey work as required.

(b) Nationally Protected Species (badger, water vole, red squirrel, pine marten and reptiles)

Surveys of the potential features will be completed during construction and all sites will be clearly demarcated:

- (i) If the status remains as unoccupied, construction may occur in the area, but not damaging the existing feature, under close supervision by the Ecological Clerk of Works; or
- (ii) If the status of the feature changes to occupied then the under-noted procedure for occupied features will be followed.

Occupied Features

(a) European Protected Species - fauna (otters and bats)

Where an occupied feature exists within the site or disturbance free zone, and the infrastructure cannot be micro-sited away:

- (i) A licence to disturb will be applied for to SNH; or
- (ii) A licence to damage or destroy will be applied for to SNH if there are no reasonable alternatives.

(b) National Protected Species (badger, water vole, red squirrel, pine marten and reptiles)

- (i) Where an active badger sett exists within the site or disturbance zone, and the infrastructure cannot be micro-sited away, it may be necessary to undertake a relocation exercise. This is a licensed activity which will require prior authorisation from SNH.

Guidance for this process has been produced by SNH, who should be consulted throughout.

- (ii) Where a water vole burrow, red squirrel drey or pine marten den exists within the site or disturbance zone, and the infrastructure cannot be microsited away, the Applicant will discuss appropriate mitigation and any licensing requirements with SNH.
- (iii) Where reptiles are found to be occupying any infrastructure during their hibernation period and the infrastructure cannot be microsited away, the Applicant will discuss appropriate mitigation with the ECoW and SNH. Reptiles are capable of actively avoiding disturbances during their active phase.

Protection Plan

Other Mammals

As previously mentioned otter and badger are using the site. It is possible that other mammals may move into the site. In addition to the mitigation measures detailed above, further steps should be implemented to reduce general disturbance during construction and decommissioning from the Revised Development:

- Covering/securing all excavations and piping or provision of an 'exit route' where covering is not practical;
- Night time working will be minimised to reduce disturbance to nocturnal and diurnal fauna. Where this is not possible, directional lighting away from features (including mammal paths, tree lines and watercourses) will be used to minimise light disturbance;
- A speed limit of 15 mph for all vehicles on site will help to reduce disturbance and mortality to protected species; and
- Watercourse crossings will be designed to allow the passage small mammals on the site.

Objective B – Procedure if Active Feature is Found

Procedure if previously unrecorded active feature or protected species found in advance of construction activity

If an active feature or protected species is found by the ECoW's monitoring in advance of construction activity progressing across the site, the following text outlines the procedure to be followed.

If Obstruction, Damage or Destruction (ODD) to a protected species is likely, a location specific ODD risk assessment will be completed. This will consider all potential mitigation measures to avoid ODD. This may include micrositing of infrastructure away from the location and out-with the disturbance zone and the demarcation of the protected site.

If Disturbance is likely, a location specific Disturbance Risk Assessment will be completed. This should firstly consider revision to the disturbance zone as a result of the site-specific topography and habitat quality (e.g. if a ridge lies between activity and a holt then the disturbance zone may be reduced). Also, other measures which could reduce disturbance to an acceptable level should be considered (including micrositing and the demarcation of the protected site).

The Disturbance or ODD risk assessments will be submitted to SNH for consideration.

If it is not possible to microsite and, in consideration of the risk assessment, SNH determines that ODD and/or significant levels of Disturbance is likely to occur, the procedures described in Objective A will be adopted for unoccupied and occupied features. If there is uncertainty over whether the feature is occupied a precautionary approach will be adopted and occupancy will be assumed.

Procedure if previously unrecorded protected feature or species found during construction

In the event of any site personnel discovering an unrecorded protected feature or protected species, the following procedure must be followed:

- (i) Work should stop immediately within the specified disturbance zone;
- (ii) The ECoW should be contacted;
- (iii) The location should be checked by the ECoW to determine the nature of the new find; and
- (iv) If the protected species or feature is confirmed then the procedure detailed in Objective A above should be followed.

Objective C - Education and Awareness

The Applicant will provide the necessary education and awareness as part of a site induction to all site personnel with regard to the protection of protected species that are or could be present on the site, in particular the actions that should be taken if protected species are seen within the site. All site personnel (including contractors and sub-contractors) will be informed of the objectives of the SPP to ensure they are aware of any species present on the site.

This information will include as a minimum:

- (i) The requirements and use of the SPP;
- (ii) Identification of protected species and features;
- (iii) Key risk activities and sensitive areas; and
- (iv) Site personnel responsible for dealing with protected species.

The Applicant will undertake that any person found on the site by them to be disregarding the terms of the SPP is immediately expelled from the site until such time that it is appropriate for them to be allowed to return. In general such persons will need to undertake retraining in the use and application of the SPP to ensure the impact on protected species is minimised.

REFERENCES AND RELEVANT LEGISLATION AND GUIDANCE

- Capreolus Wildlife Consultancy. (2005). *The ecology and conservation of water voles in upland habitats*. Scottish Natural Heritage Commissioned Report No. 099 (ROAME No. F99AC320).
- European Commission. (1979). *Directive 79/409/EEC: Conservation of Wild Birds*. HMSO, London.
- European Commission. (1992). *Directive 92/43/EEC: Conservation of Natural Habitats and of Wild Flora and Fauna*. HMSO, London.
- Forestry Commission. (2006). *Forest operations and red squirrels in Scotland's forests – the law and good practice*. FCS Guidance Note 33.
- HMSO. (1994). *Biodiversity: The UK Action Plan*. HMSO, London.
- HMSO. (1981). *Wildlife & Countryside Act 1981*. HMSO, London.
- HMSO. (1994). *The Conservation (Natural Habitats, &c.) Regulations 1994*. HMSO, London.
- HMSO. (1992). *Protection of Badgers Act 1992*. HMSO, London.
- Hundt, L. (2012) *Bat Surveys: Good Practice Guidelines, 2nd edition*. Bat Conservation Trust ISBN-13: 9781872745985.
- Mitchell-Jones, A. J. (2004). *Bat Mitigation Guidelines*. English Nature, Peterborough.
- Mitchell-Jones, A. J. & McLeish, A. P. (2004). *Bat Workers Manual – 3rd Edition*. JNCC, Peterborough.
- Morris, P.A., Morris, M.J., MacPhearson, D., Jefferies, D.J., Strachan, R & Woodroffe, G.L. (1998). *Estimating numbers of the water vole *Arvicola terrestris*: a correction to the published method*. Journal of Zoology 246: 61 – 62.
- Natural England (2014). *Bats and onshore wind turbines: interim guidance*. TIN051. Third Edition.
- Scottish Natural Heritage. (2001). *Scotland's Wildlife: Badgers and Development*. SNH, Battleby.
- Scottish Natural Heritage. (1997). *Scotland's Wildlife: Otters and Development*. SNH, Battleby.
- Strachan, R., Moorhouse, T. & Gelling, M. (2011). *Water Vole Conservation Handbook 3rd Edition*. Wildlife Conservation Research Unit, Oxford.

ANNEX 1 LEGAL PROTECTION

Bats and **Otters** receive protection under the Conservation Regulations (1994) (as amended) only¹.

Conservation (Natural Habitats, &c.) Regulations 1994 (as amended)

Under Regulation 39 (1) it is an offence to:

- (a) deliberately or recklessly to capture, injure or kill a wild animal of a European protected species;
- (b) deliberately or recklessly:
 - (i) to harass a wild animal or group of wild animals of a European protected species;
 - (ii) to disturb such an animal while it is occupying a structure or place which it uses for shelter or protection;
 - (iii) to disturb such an animal while it is rearing or otherwise caring for its young;
 - (iv) to obstruct access to a breeding site or resting place of such an animal, or otherwise to deny the animal use of the breeding site or resting place including bat roost sites;
 - (v) to disturb such an animal in a manner that is, or in circumstances which are, likely to significantly affect the local distribution or abundance of the species to which it belongs; or
 - (vi) to disturb such an animal in a manner that is, or in circumstances which are, likely to impair its ability to survive, breed or reproduce, or rear or otherwise care for its young;
- (c) deliberately or recklessly to take or destroy the eggs of such an animal; or
- (d) to damage or destroy a breeding site or resting place of such an animal.

Regulation 44 (2e) allows a licence to be granted for the activities noted in Regulation 39 such that:

Preserving public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment.

¹ The Conservation Amendment (Scotland) Regulations (2007) removed EPS from Schedule 5 and 8 of the Wildlife and Countryside Act 1981.

Water Vole is not protected by Section 9, subsection 1 of the Wildlife and Countryside Act but is covered by Section 9, subsection 4 and Section 10².

Wildlife and Countryside Act (1981)
Nature Conservation (Scotland) Act 2004

Under Section 9 Subsection 1³ it is an offence to:

- Intentionally or recklessly kill, injure or take any wild animal included in Schedule 5.

Under Section 9, Subsection 4, Paragraphs (a) and (b)⁴, it is an offence to:

- Intentionally or recklessly damage or destroy, or obstruct access to, any structure or place which any wild animal included in Schedule 5 uses for shelter or protection.
- Intentionally or recklessly disturb any such animal while it is occupying a structure or place which it uses for that purpose.

Under Section 10, Subsection 3, Paragraph (c)⁴, any person shall not be guilty of an offence by reason of:

- Any act made unlawful by that section if he shows:
 - (a) That each of the conditions specified in subsection (3A) was satisfied in relation to the carrying out of the unlawful act; or
 - (b) That the unlawful act was carried out in relation to an animal bred and, at the time the act was carried out, lawfully held in captivity.
- Section 3A states those conditions referred to in Subsection 3c are:
 - (a) That the unlawful act was the incidental result of a lawful operation or other activity;
 - (b) That the person who carried out the lawful operation or other activity:
 - (i) took reasonable precautions for the purpose of avoiding carrying out the unlawful act; or
 - (ii) did not foresee, and could not reasonably have foreseen, that the unlawful act would be an incidental result of the carrying out of the lawful operation or other activity; and
- a. That the person who carried out the unlawful act took, immediately upon the consequence of that act becoming apparent to the person, such steps as were reasonably practicable in the circumstances to minimise the damage or disturbance to the wild animal, or the damage or obstruction to the structure or place, in relation to which the unlawful act was carried out.

² as amended by the Nature Conservation (Scotland) Act 2004

³ as amended by the Nature Conservation (Scotland) Act 2004

Red squirrels and pine martens are protected by the following legislation:

Wildlife and Countryside Act (1981)
Nature Conservation (Scotland) Act 2004

Under Section 9, Subsection 1, it is an offence to:

Intentionally or recklessly:

- Kill, injure or take any wild animal listed on Schedule 5;
- Damages or destroys or obstructs access to, any structure or place that any animal listed on Schedule 5 uses for shelter or protection;
- Disturbs any such animal while it is occupying a structure or place which is uses for that purpose
- Sell, offer or expose for sale, or possess or transport for the purpose of sale, any live or dead wild animal included in Schedule 5, or any part of, or anything derived from, such an animal.
- Publish or cause to be published any advertisement likely to be understood as conveying that he buys or sells, or intends to buy or sell, any of those things.

Badgers are protected under the Protection of Badgers Act 1992 (as amended by the Nature Conservation (Scotland) Act 2004 (as amended)).

The following applies under this legislation:

Part 1.–

(1) A person is guilty of an offence if, except as permitted by or under this Act, he wilfully kills, injures or takes, or attempts to kill, injure or take, a badger.

(2) If, in any proceedings for an offence under subsection (1) above consisting of attempting to kill, injure or take a badger, there is evidence from which it could reasonably be concluded that at the material time the accused was attempting to kill, injure or take a badger, he shall be presumed to have been attempting to kill, injure or take a badger unless the contrary is shown.

(3) A person is guilty of an offence if, except as permitted by or under this Act, he has in his possession or under his control any dead badger or any part of, or anything derived from, a dead badger.

Part 3. –

(1) A person is guilty of an offence if, except as permitted by or under this Act, he interferes with a badger sett by doing any of the following things–

- (a) damaging a badger sett or any part of it;
- (b) destroying a badger sett;
- (c) obstructing access to, or any entrance of, a badger sett;
- (d) causing a dog to enter a badger sett; or
- (e) disturbing a badger when it is occupying a badger sett,

intending to do any of those things or being reckless as to whether his actions would have any of those consequences.

(2) A person is guilty of an offence if, except as permitted by or under this Act, he knowingly causes or permits to be done an act which is made unlawful by subsection (1) above.

Reptiles

The three native species of **reptile** to Scotland are protected by the following legislation:

Wildlife and Countryside Act (1981)

Nature Conservation (Scotland) Act 2004

Under Section 9 Subsection 1⁴ it is an offence to:

- Intentionally or recklessly kill, injure or take any wild animal included in Schedule 5.

Under Section 9, Subsection 5, Paragraphs (a) and (b)⁴, it is an offence to:

- Sell, offer or expose for sale, or possess or transport for the purpose of sale, any live or dead wild animal included in Schedule 5, or any part of, or anything derived from, such an animal.
- Publish or cause to be published any advertisement likely to be understood as conveying that he buys or sells, or intends to buy or sell, any of those things.

Under Section 10, Subsection 3, Paragraph (c)⁴, any person shall not be guilty of an offence by reason of:

- Any act made unlawful by that section if he shows:
 - (a) That each of the conditions specified in subsection (3A) was satisfied in relation to the carrying out of the unlawful act; or
 - (b) That the unlawful act was carried out in relation to an animal bred and, at the time the act was carried out, lawfully held in captivity.
- Section 3A states those conditions referred to in Subsection 3c are:
 - (a) That the unlawful act was the incidental result of a lawful operation or other activity;
 - (b) That the person who carried out the lawful operation or other activity:
 - (i) took reasonable precautions for the purpose of avoiding carrying out the unlawful act; or
 - (ii) did not foresee, and could not reasonably have foreseen, that the unlawful act would be an incidental result of the carrying out of the lawful operation or other activity; and
- a. That the person who carried out the unlawful act took, immediately upon the consequence of that act becoming apparent to the person, such steps as were reasonably practicable in the circumstances to minimise the damage or disturbance to

⁴ as amended by the Nature Conservation (Scotland) Act 2004

the wild animal, or the damage or obstruction to the structure or place, in relation to which the unlawful act was carried out.