

PROPOSED WINDFARM DEVELOPMENT CASTLEBANNY, CO. KILKENNY

BADGER SETT ASSESSMENT WITH RECOMMENDATIONS FOR MITIGATION

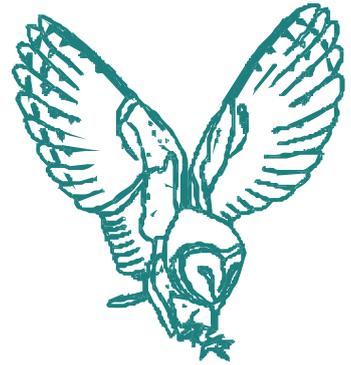
Report prepared for

BLACKTHORN ECOLOGY

by

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CONTENTS

	<i>Page no.</i>
1. INTRODUCTION	3
1.1 BACKGROUND INFORMATION	4
1.2 SITE DESCRIPTION	5
2. SETT INSPECTION AND TRAIL CAMERA	6
3. RESULTS OF SITE VISIT AND SETT INSPECTIONS	6
3.1 SETT S1	6
3.2 SETT S2	8
3.3 SETT S3	8
3.4 OTHER SIGNS	10
4. ASSESSMENT	10
4.1 POTENTIAL IMPACTS	11
4.1.1 <i>Considerations</i>	11
5. LEGAL STATUS AND CONSERVATION ISSUES	12
6. RECOMMENDATIONS	13
7. REFERENCES AND BIBLIOGRAPHY	17
8. APPENDICES	19
8.1 APPENDIX: PHOTOGRAPHIC RECORD	19
8.2 APPENDIX: EXTRACTS FROM WILDLIFE ACTS	31
8.3 APPENDIX: EXTRACT FROM NRA GUIDELINES - WORKS IN VICINITY OF BADGER SETTS	35

1. Introduction

An application is being prepared for a windfarm development at Castlebanny, Co. Kilkenny. The site is located c. 28km south of Kilkenny city.

Surveys conducted earlier in 2020 by ecologist Dr. George Smith identified a number of badger setts in the area, with one larger sett (sett S1) being situated close to the site of one of the proposed turbines (turbine no. 18).

Dr. Chris Smal of Ecological Solutions was invited to inspect the setts and provide advice on mitigation measures for the setts in the area. A visit to the site was undertaken on 7th August with Dr. Smith. This report details the results of the site visit and sett inspection along with recommendations for mitigation measures.

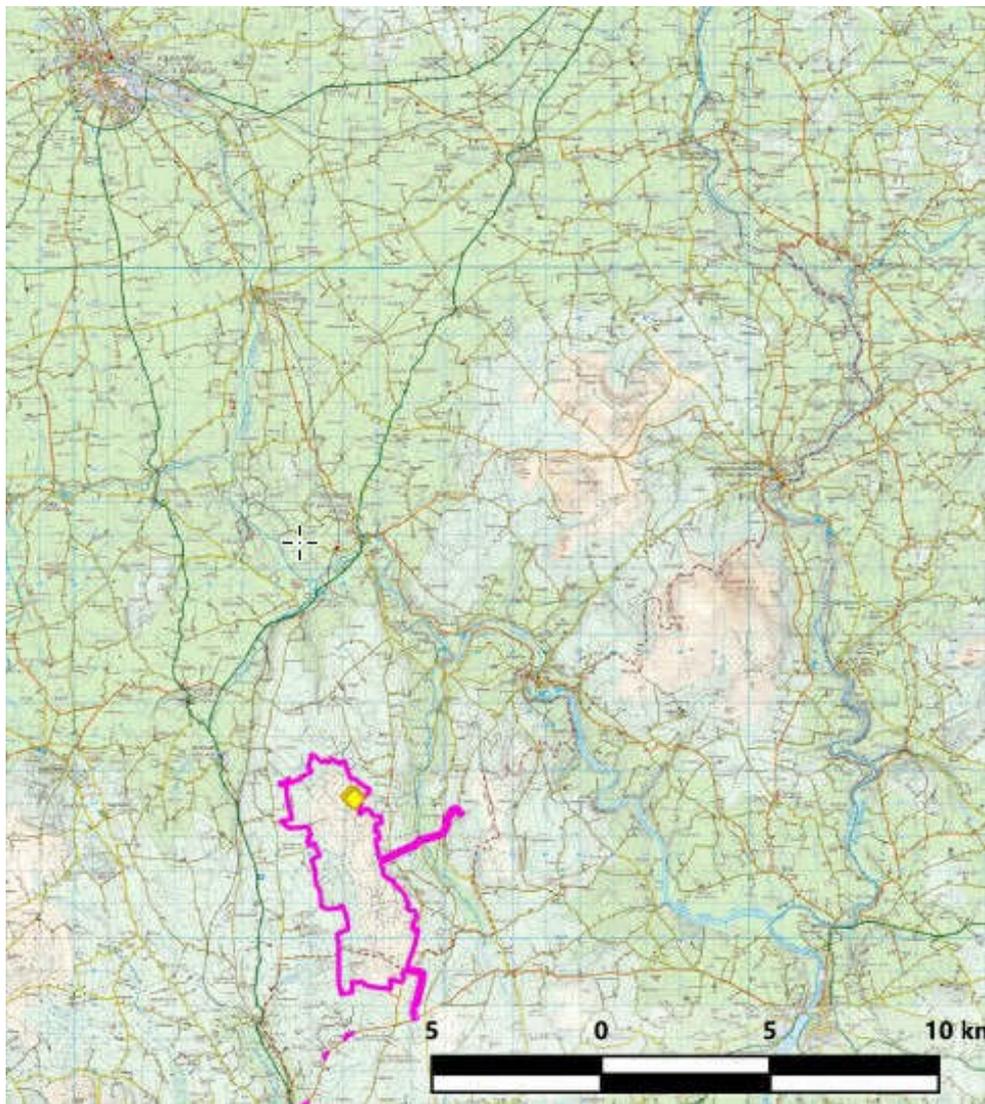


Figure 1. Location of the proposed windfarm at Castlebanny, south of Kilkenny city.



Figure 2. Approximate boundary of the proposed windfarm at Castlebanny.

1.1 Background information

Dr. Chris Smal, of Ecological Solutions, conducted the National Survey of badgers in Ireland (Smal, 1995) from 1989 to 1993, and has conducted considerable applied research on badgers for the National Parks and Wildlife Service and the Department of Agriculture since 1989. He has also produced the Guidelines for the Treatment of Badgers on National Road Schemes for the NRA, Ireland (NRA, 2005).

Badger issues have been addressed with reference to the author's own expertise as a senior badger consultant (e.g. Smal, C.M. [1995], *The Badger & Habitat Survey of Ireland*), and with reference to Harris et al (1994), *Problems with badgers*, Cox, (1993) *Badgers on site: a guide for developers and planners*, the *Design Manual for Roads and Bridges* (Highways Agency, UK) and the NRA Guidelines (opp. cited).

1.2 Site description



Figure 3. Aerial view of area with approximate site boundary.

The area is one of undulating upland with elevation varying from c. 170m asl to 250m asl at its highest point. Most of the area has been planted with coniferous trees – with large portions having been clear-felled in recent years as well. It is understood that most or all of the site is on Coillte property.

The cleared areas have an often dense cover of scrub species, principally bramble, willows, grasses and colonising plant species. The coniferous plantations present on the overall windfarm site vary in age. The area of mature plantation at which the large sett S1 is situated was thinned in 2017, with estimate of clear felling scheduled for around 2023 to 2024.

Sett S1 is located towards the north of the site as are the other two setts that have been identified in the vicinity of proposed turbine location T18 (see Figure 4 below).

Photographs of the general vicinity of the setts are included in the Appendices.

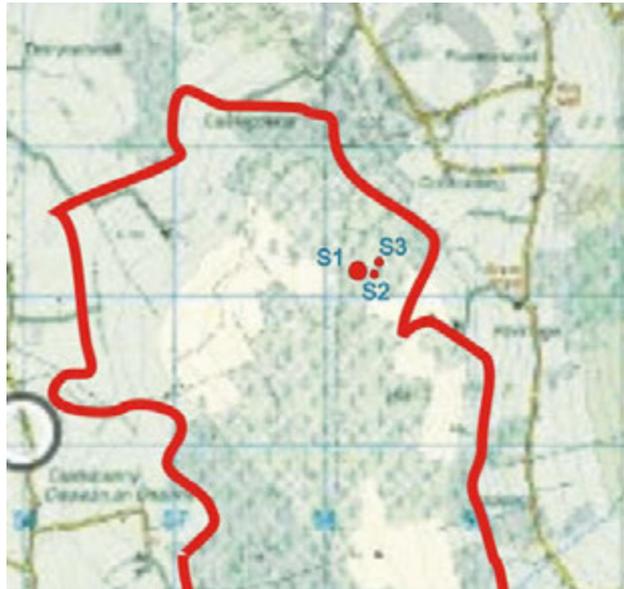


Figure 4. Approximate location of the badger setts at the north of the site area.

2. Sett inspection and trail camera

The site visit and sett inspection was conducted on 7th August 2020 in fair to good weather conditions (generally dry, overcast, calm, with some drizzle). All 3 setts that had been identified by Dr. Smith earlier were inspected. In addition, Dr. Smith had erected a trail camera at the largest of the setts for a period of c. 8 days earlier in July (7th to 15th July). This provided additional information on badger activity at this sett.

Whilst portions of the site in the vicinity of these setts was walked and searched for badger signs, most of the site for the windfarm proposal was not included in survey by Dr. Smal.

Badger survey is best conducted in late winter when vegetation has died back. Hence at the season of survey in August, conditions were not ideal. However, the areas of mature coniferous plantation on site had little ground cover and access was through the forestry was not difficult. The forest rides and areas that had been clear-felled had more cover with areas of bramble and scrub. The survey aimed to identify badger paths and foraging signs as well as inspecting badger activity at and in the vicinity of the known setts.

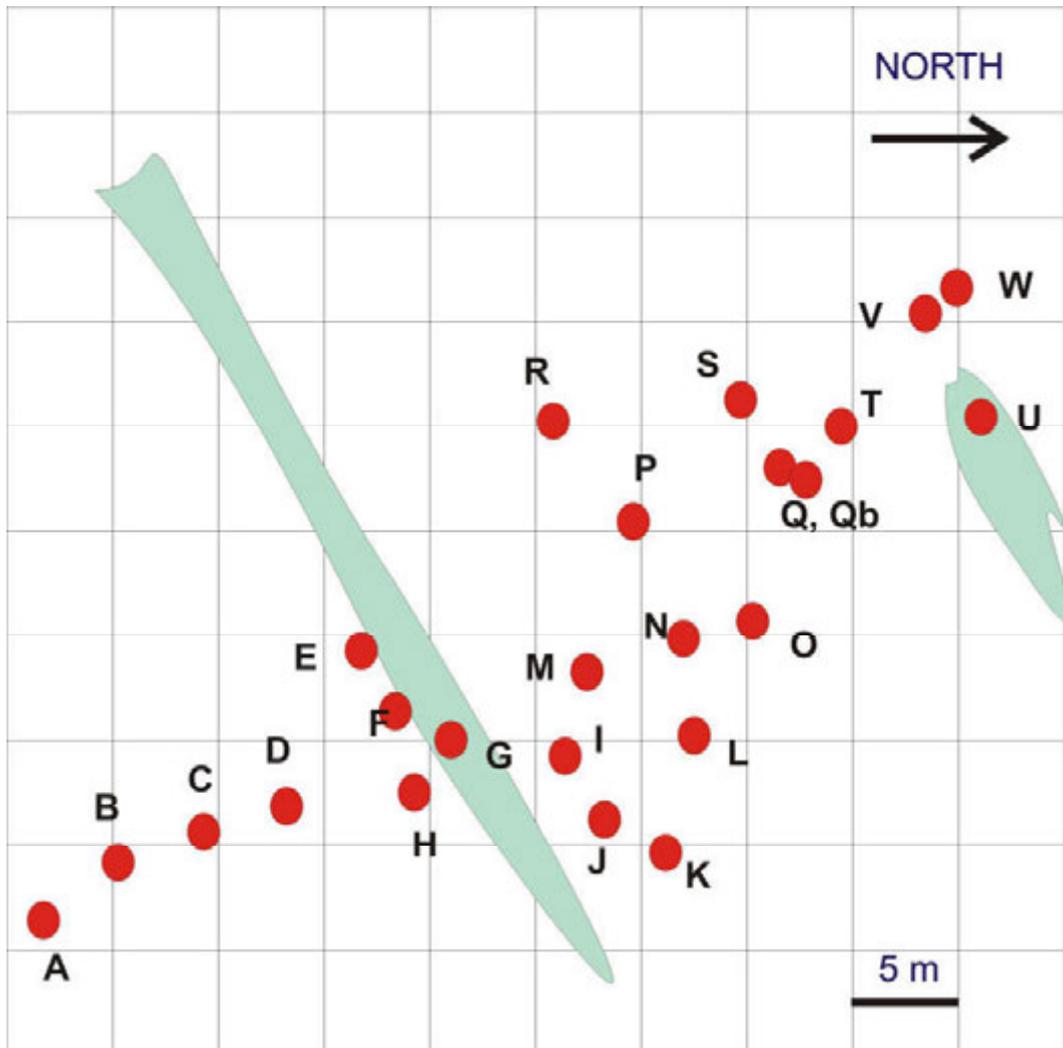
3. Results of site visit and sett inspections

3.1 Sett S1

The largest sett on site (sett S1) had 24 identified entrances, making this a significant sett by any standards in Ireland (Smal, C.M. 1995. *The Badger & Habitat Survey of Ireland*). As is the case with many of these large setts, not all the entrances were active. The sett was considered to be a Main sett – i.e. a breeding sett. Badger cubs born earlier in the year have usually started to explore outside of and away from the sett by June. By the time of this survey in August, badger groups can be somewhat dispersed with individual badgers often resting out in other setts in their territory. For these reasons, signs of activity at a main sett can be reduced at this season.

All of the entrances at sett S1 were recorded and photographed. It was considered that of the 24 entrances, 5 were active, 12 were in occasional use, and 7 were inactive or disused.

The sett was measured at stretching approximately 38 m from the entrance at the south to the furthest entrance at the north. A schematic sketch of the sett is shown in Figure 5.



Figure

5.

Schematic map of the sett entrances at sett S1. The blue areas mark larger fallen coniferous trees. Distances and locations approximate.

A description of each of the sett entrances is given in Table 1 below and a photograph of each sett entrance is included in the Appendices.

Whilst sett S1 was considered to be a Main sett, there was little bedding at any of the entrances – some moss was present, but there was a lack of grass bedding. Also, only one latrine was found, and that consisted of two pits, one with older dung. Few of the entrances were accompanied with large spoil heaps; large spoil heaps indicate a substantial or extensive tunnel system below ground and also chambers.

Sett S1 has been considered as one single sett as all entrances were relatively close to each other, none more than about 6m apart from the next. It is likely - given the soil conditions and lack of sizeable spoil heaps - that not all of the entrances are connected below ground.

Badgers usually pull in grasses, mosses and other vegetation as bedding for their chambers, refreshing it every so often. Again, the terrain in the mature plantation at sett S1 is imperfect, as there is a fair distance to the grassy areas nearby (to the west along the forest road). Again, with

the breeding season ended and cubs and adults that may have vacated the sett, there is expectation of less bedding to be observed at setts at this season – this would be the case at most breeding setts in any habitat at this season.

The location of Sett S1 is further referred to in the section on Assessment below. It is situated a considerable distance from good foraging grounds (badgers feed on earthworms on grasslands predominantly).

The reason for describing sett S1 in substantial detail – more than is usually required – is to ensure that in subsequent visits and prior to construction, the activity of badgers at the sett can be fully compared.

Badger groups in poorer habitats tend to be smaller than those present and foraging in prime habitat. With the relatively low level of activity observed at sett S1 in summer, the number of badgers present might be surmised to be low.

Thus, the trail camera information provided by the camera erected by Dr. Smith is very useful. During the week of observations, the camera revealed up to 3 badgers present in any one video. From 8th to 15th of July 2020, there were 27 video ‘captures’, with ‘captures’ on every day bar one during that week. The pictures show adults as well as cubs. In many instances, they were observed entering or leaving a sett entrance. Also, observations were made of badgers scratching themselves outside, and also scent-marking each other.

These camera observations (some are included in the Appendices) confirm the sett S1 to be a Main sett.

3.2 Sett S2

Sett S2 is situated c. 100m to the south-east of sett S1. This was a sett with just one entrance, below an old stone wall field boundary. In contrast to sett S1, the activity at this sett was significant. The sett had recent spoil with a large spoil heap of rubble and stone in the spoil. The entrance was clearly very active. In addition, a substantial latrine was located in the forestry c. 8m away. There were about 7 pits – though several had merged together so the count may be higher. There was fresh dung in copious amounts in 3 of these pits and copious older dung in the other 4 pits. There was no bedding evident at this sett.

The soil conditions at this sett were different from those at sett S1 – with the stony material in the spoil heap notable. That at sett S1 was more of peaty soils with sand and clay material present.

The sett was considered to be a Subsidiary sett. It is unlikely that the tunnel system within would be large enough to harbour 3 or 4 badgers as considered to be present in this group.

3.3 Sett S3

This was a small sett also situated below a stone wall former field boundary. The larger entrance was open with some recent activity. The second entrance showed no signs of activity. The sett was considered to be an Outlier sett.

Table 1. Details of sett entrances at Main sett S1

Entrance reference	Description	Activity
A	Deep entrance, open, but leaf and twig litter. Little spoil.	Occasional
B	5m to north of A. Deep, leaf litter. Cobwebs, but evidence of use.	Occasional
C	4m away from B. Little spoil. Leaf litter, but active furrow. Recent use.	Active
D	Under fallen tree, bark stripped off tree. Bark fragments in sett entrance, otherwise clean furrow. Very little spoil.	Occasional/active
E	5m from D. Under fallen tree. Quite deep. Leaf litter and twigs. No cobwebs. Appears inactive.	Inactive
F	'Muddy' entrance, little spoil. Clean, very active, badger prints. 1.5m to east of E.	Very active
G	2m to east of F. Fresh furrow and spoil, but small spoil. Stones in spoil. Twigs in entrance, has been active.	Occasional
H	2m to south-east of G. Deep entrance, some twigs but active recently. Little spoil.	Occasional
I	c. 5 m to north of H. Large entrance. Active, little spoil but freshly cleaned entrance. Deep.	Active
J	c. 1.2m to east of I. Deep, twigs present.	Occasional
K	3.5 m to north-east of J. Deep entrance, long, under roots of a tree. Open, twigs, leaf litter.	Occasional
L	6m to north of I. Little spoil but very active. Recently cleaned. Trail camera at this location	Active
M	5m to south-west of L. Under tree. Litter. Disused, no spoil	Disused
N	3m to north of M. Recent digging, spoil, but with cobwebs and moss in entrance	Occasional
O	2.5m to north of N. No recent use. Little spoil	Disused
P	Large entrance c. 4m to west of N. No recent digging, leaf litter but open.	Occasional/Active
Q	Recent spoil, fresh spoil, sandy/clays, twigs in entrance.	Occasional
Qb	Another small entrance 1m to north of Q also. Grassed over.	Disused
R	c. 3.5 m to south-west of P. Large entrance but with twigs and moss. No spoil.	Disused
S	Large entrance, grassed over.	Occasional
T	Fresh spoil, but grassed over. Clean open entrance, small spoil	Occasional
U	Under briars and large fallen tree. Hard to access. Very large entrance, clean, spoil spread out. One old latrine pit with dung.	Active
V	c. 3.5m to west. Under root of fallen tree. Grassed over.	Disused
W	c. 3.5 m to north-west of V. Under roots of fallen tree.	Appears disused.

Table 2. Details of the 3 setts identified on site

Sett reference	Location and habitat	Type of sett	Description
S1	Mature plantation GPS at south: S 58250 34194 approx.	Main sett	c. 24 entrances. Extends over c. 38 metres from entrance A to entrance W. 5/12/7 (active/ occasional/ disused).
S2	Mature plantation GPS: S 58313 34121	Subsidiary sett	In old field boundary stone wall. Large fresh spoil, single entrance, very active, recent spoil. Large latrine close nearby. 3 pits very fresh dung, copious dung, 4 pits older dung.
S3	Mature plantation GPS: S 58340 34198	Outlier sett	In old field boundary stone wall. 2 entrance, larger entrance on south side. Larger entrance open, recent activity. Small/medium spoil. 1/1/0 (active/ occasional/ disused).

3.4 Other signs

A number of paths were identified on site, more so in the vicinity of sett S2. At the season of survey (summer) paths in vegetated areas are always difficult to find due to heavy grass growth and bramble cover. So no clear badger paths were evident along the rides that were walked but paths leading from the forestry towards these rides were observed and followed as best as possible. There was very little cover of ground vegetation within the woodland so search was not constrained. Nevertheless, the number of distinct badger paths was relatively few.

There was presence of deer in the area with deer pellets quite frequent within the forestry. These paths would be shared by a variety of mammals – including badgers, deer and foxes (fox signs were frequent). Pine marten presence was also noted (fresh scat).

4. Assessment

There is a badger group present in the area with its Main sett (breeding sett) present at sett S1. The other 2 setts known on site have been considered as a Subsidiary sett and an Outlier sett. A badger group would typically have between 3 and 10 setts within its territory and it is likely that there are other setts in the overall area of the proposed development but these will be away from any of the proposed turbines (as these areas have been surveyed by Dr. Smith).

Badgers are common in most of the Irish countryside and would have a density in the region of 2 social groups per km² in the country overall, with a typical territory size of about 40ha. There are typically 3 to 5 badgers in a social group.

However, the habitats on site in the vicinity of the three setts here are quite poor for badgers. Badgers rely in main part on earthworms in grassland pastures, whilst they do feed on a variety of invertebrates, small mammals, and also fruits in season. In upland or moorland landscapes a badger group might consist of just 1 or 2 individuals and have a territory size of more than 1 km². The landscape here may be considered as somewhat intermediate in terms of expected badger density, therefore.

The characteristics of the badger group here are somewhat unusual as mentioned earlier. It is untypical to find large setts centred within large areas of coniferous plantation as the foraging habitat within the plantation is poor. However, it is common to find Main setts within the edge or close to the edge of forestry where there is pasture grassland nearby. Forestry provides cover for badgers, there is relative lack of disturbance, and the foraging areas are nearby. In this case (re. sett S1), the grassland foraging areas are situated around the forestry but at some considerable distance – estimated at c. 340m to the east or alternatively 570m to the west, with further distances to grasslands to the north and south.

Commonly, the Main sett for a badger group is situated centrally or quite centrally within its territory. In this case, this could be the circumstance but that would suggest a very large territory size for the badger group present. It is unclear how old the sett S1 is, and it is possible that it was in existence before the area was planted. This does not seem that likely - as the planting process would have disturbed any sett present at that time considerably. Furthermore, the rough or rushy grasslands and their stone wall boundaries would have been quite exposed and not considered to be a good location for a breeding sett in the landscape present prior to the afforestation.

4.1 Potential impacts

Developments within an area in which badgers / badger groups are present are subject to the following types of impact:

- i) direct impact on badger setts – destruction of all or part of a sett.
- ii) disturbance to badgers at setts close to construction works. Such impacts may be slight near smaller setts or could be significant near Main setts – especially during the breeding season. Badgers might desert a sett due to disturbance.
- iii) mortality or potential harm to badgers during construction or operation phase, e.g. by collisions with traffic, falling into open trenches etc.
- iv) loss of foraging habitat within the badger group's territory.

4.1.1 Considerations

In relation to above items:

- i) Turbine T18 has been moved further away from badger sett S1, so there will be no direct impacts on the sett.
- ii) Disturbance to badgers at the breeding sett is an issue, especially during the breeding season. This can be addressed by appropriate mitigation measures.
- iii) Risks of harm or mortality of badgers during construction works are potential and can be addressed by appropriate mitigation measures.
- iv) The badger group in this area is certain to have a large territory. The footprints of turbine installations and the areas required for their construction form a small part of the overall site area and of the likely territory of the badger group known on site. The foraging habitats in the areas in which the turbines are to be located are poor, as noted earlier. Therefore, it is considered that loss of foraging habitat for this badger group would not be significant.

5. Legal status and conservation issues

A number of mammalian species are protected under the Wildlife Act (1976) and Wildlife [Amendment] Acts (2000 to 2012). These include the badger (which is also a Red Data Book species). However, the badger is a relatively common species and ubiquitous through much of the Irish countryside (Smal, 1995).

It is standard best practice to make special provisions for badgers affected by development. Whilst the species is common in much of the Irish landscape, badgers are notable for their practice of constructing large underground tunnel and chamber systems (setts). Provisions are made for their humane removal or for their conservation on site where feasible or practicable. The Wildlife [Amendment] Act (2000) protects all resting places of protected species.

The Wildlife Act of 1976 gave protection to a number of species, including the badger. The Wildlife Act of 2000 gave additional protection to certain species and their resting and breeding places – details below. The provisions of this Act apply to this windfarm development. The Wildlife Act of 2012 included minor amendments not relevant to badgers.

Extracts from the Acts are included in the Appendices.

Principal extract re. badgers

TABLE

(5) Any person who -

(d) wilfully interferes with or destroys the breeding place or resting place of any protected wild animal, shall be guilty of an offence.

(7) Notwithstanding subsection (5) of this section, it shall not be an offence for a person -
(a) while engaged in agriculture, aquaculture, fishing, forestry or turbarry, unintentionally to injure or kill a protected wild animal, or (c) while constructing a road or while carrying on any archaeological operation, building operation or work of engineering construction, or while constructing or carrying on such other operation or work as may be prescribed, unintentionally to kill or injure such an animal or unintentionally to destroy or injure the breeding place or resting place of such an animal,
(full extract in Appendices)

Considerations

- 1 Should any interference or disturbance be required at or near sett S1 (or any other setts), a licence will be required from NPWS to allow such actions to proceed.
- 2 The felling of trees at or in the vicinity of sett S1 (or any other sett) either by Coillte or the developers of this windfarm will require a licence from NPWS to proceed. Forestry operations are not exempt as is clear from above clauses of the Wildlife Act.

6. Recommendations

A number of recommendations follow arising from the location of sett S1 which is relatively close to proposed turbine location T18. It is noted that this location has been adjusted from an earlier position which was much closer to sett S1.

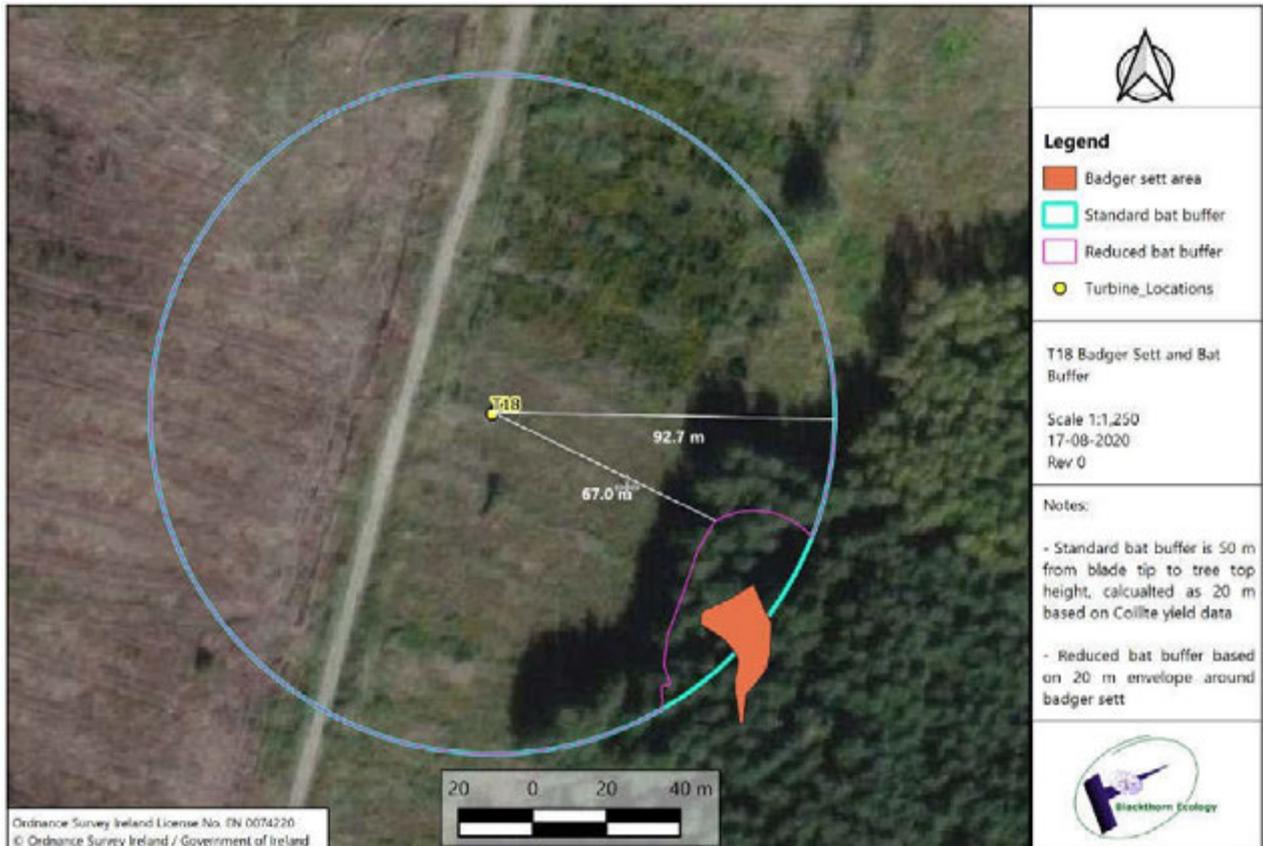


Figure 6. Map of locations of turbine T18 and sett S1.

1 *Pre-construction survey*

The sett S1 and other setts should be checked for activity and sett status prior to construction in their vicinity commencing. The sett may have been expanded or perhaps have become disused. Additional setts may be present in the construction areas.

2 *Pre-construction survey – areas of scrub*

Whilst this report has emphasis on the 3 setts identified, other setts may be present in areas within the overall site proposal. Areas of scrub, thicket stage conifer plantation and clear fell are often very difficult if not impossible to search - and season of survey for badgers may not have been appropriate at initial survey. Pre-construction surveys should be conducted when scrub such as bramble and other vegetation has died back after frosts in early winter. The best period for survey is January to March, whilst December to mid-April can be entertained.

- 3 *Monitoring of scrub and tree clearance prior to construction*
Where scrub or thicket stage conifer plantation is impenetrable at development locations (turbine placements and access roads etc.) and cannot be searched for badger setts, an ecologist or zoologist should monitor removal of scrub, young conifers and other vegetation to ensure that no setts are present.

Figure 7. Map of location of turbine T18, its footprint and area required for construction and



erection of the turbine; also location of sett S1.

- 4 *Exclusion zone for sett S1*
An exclusion zone of 20m minimum is required from the sett entrances at sett S1. In practice, this refers to a distance of 20m from the extremity of the sett at its west but also to its north (and also in the case of tree felling to the south and east also – when this might be required in the future).
A post and rail fence should be erected at 20m from the western and northern sett entrances or at the edge of forest whichever is larger. This should be erected before any other construction or tree felling takes place in this area, and suitable hazard signs erected (e.g. *Keep Out. No Construction Traffic. Wildlife Protection Zone*).
No heavy machinery should be used within 30m of badger setts (unless carried out under licence); lighter machinery (generally wheeled vehicles) should not be used within 20m of a sett entrance (NRA Guidelines 2005).
Refer to an extract from the NRA Guidelines for site works in the vicinity of badger setts in the Appendix for additional information.

- 5 *Existing plantation trees*

The plantation area – mature trees – within 20m of sett S1 must be left in situ and not felled – in order to maintain a non-interference zone of 20m.

It is also considered that it would be preferable that no felling of mature trees takes place within the 92.7m bat buffer zone circled in Figure 6. The portion of trees to the north of the sett but within of the bat buffer zone is small and might be retained.

6 *Season of construction and larger exclusion zone for construction activities*

It is recommended that any construction works or tree felling in the vicinity of Main sett S1 be conducted outside of the badger breeding season which is 1st December to end June (hence operations may be conducted from 1st July to 30th November).

If such works are to be entertained within the badger breeding season, then no works should be conducted within 50m of sett S1 as minimum (best practice), but this zone needs to be expanded to 150m in the instance of blasting, rock piling, or similar operations.

It is considered that the construction footprint re. turbine T18 at 48.7m (Figure 7) is adequate in this circumstance.

7 *Tree felling in future years*

Any tree felling or clear felling in future years whether by Coillte or by the developer will require a badger licence from NPWS if such is within 30m of the sett (or 50m if such felling is to be conducted during the breeding season).

If any badger sett is known to those responsible for tree felling then impacts on the breeding or resting place of a protected species *cannot be considered as unintentional*.

In this regard, it is recommended that a badger licence be applied for prior to any tree felling so that adequate mitigation measures can be taken to ensure the welfare of badgers present at sett S1 or any other setts present on site.

8 *Protection of badgers at construction works*

At any of the construction sites required for the windfarm development, badgers are at risk of falling into open trenches.

During construction, open trenches must incorporate facilities for badgers (and other wildlife, such as otters, foxes, hedgehogs etc.) to escape, by means of:

- gently sloping earth/peat incline to be left at the end of each day's operation – at each end of open trenches.
- timber escape planks at c. 50m intervals along the trench should be left in place at the end of each day's operations; these should usually be placed at right-angles to the trench.
- occasional earth/peat bridges to allow badgers to cross the trench during construction – or wooden boards may be used to similar effect.
- it is a general recommendation that works be limited to daylight hours where feasible to allow badgers to forage at dawn, dusk, and at night.
- trenches will, preferably, not be kept open for more than 2-3 days.

Additional comment re. requirement for a badger licence from NPWS

- 1 NPWS will not entertain a request for a badger licence prior to planning approval for any development scheme.
- 2 It is considered that a badger licence is required if works or tree felling operations are conducted within 30m of Main sett S1 (and other known setts).
- 3 It is considered that a badger licence is required if works or tree felling operations are conducted within 50m (48.7m is acceptable) of Main sett S1 during the badger breeding season.
- 4 It is considered that a badger licence is required if blasting or rock piling works are conducted within 150m of Main sett S1 during the badger breeding season.

NB the application is made by the badger expert involved in oversight of such works or tree felling and not by the developer or forestry company. The conditions of a licence granted by NPWS may require additional mitigation measures to be taken.

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8. APPENDICES

8.1 Appendix: Photographic record

Plate 1. View of plantation just to south of the sett S1 area. Also clear fell in foreground.



Plate 2. General view of area to south of S1. Clear felled areas.



Plate 3. Area to south of the plantation area where S1 is situated.



Plate 4. Overview of sett at its southern portion, with several entrances visible. Little ground cover. View includes entrances A and B.



Plate 5 below left. Entrance A.

Plate 6 below right. Entrance B.



Plate 7 (left). Entrance C.



Plate 8. Entrance D.



Plate 9. Entrance E.



Plate 10 (right). Entrance F.



Plate 11 (left). Entrance G.

Plate 12. Entrance H.



Plate 13. view of the central portion of the sett area at S1.



Plate 14. Entrance I.



Proposed windfarm development, Castlebanny, Co. Kilkenny

Plate 15. Entrance J.



Plate 16 (left).
Entrance K.



Plate 17 (far right).
Entrance L.



Plate 18. Entrance M.



Plate 19. Entrance N.



Plate 20. Entrance O.



Plate 21. Entrance P.



Plate 22. Overview of the sett area at the northern portion of the sett area.



Plate 23. View of sett area towards west.



Plate 24 (left). Entrance Q.



Plate 25 (right). Entrance Qb.



Plate 26. Entrance R.



Plate 27. Entrance S.



Plate 28. Entrance T.



Plates 29 and 30. Sett entrance U - under fallen tree. Latrine pits next to this entrance also.



Plate 31 (left).
Entrance V.



Plate 32 (right).
Entrance W.



Proposed windfarm development, Castlebanny, Co. Kilkenny



Plates 32 and 33. Sett S2. Large active entrance.

Plates 34 and 35. Large active badger latrine next to sett S2.



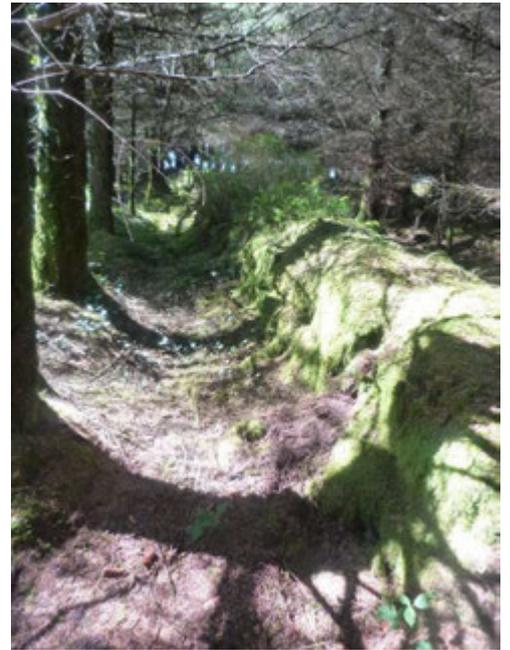


Plate 36. Smaller entrance at sett S2.

Plate 37. Old field stonewall boundary, with sett S3.

Plate 38. View of landscape to east of the plantation area at which the 3 setts are situated.



Plate 39. View of landscape and ride to east of the plantation area at which the 3 setts are situated.



Plate 40. Badger approaching sett entrances at sett S1. 8th July 2020.

These photographs from trail camera video provide by Dr. George Smith.



Plate 41. Two badgers at sett S1, 8th July 2020.



Plate 42. Three badgers at sett S1, 11th July 2020. At sett entrance.



8.2 Appendix: Extracts from Wildlife Acts

Wildlife (Amendment) Act 2000:

TABLE

(5) Any person who—

(d) wilfully interferes with or destroys the breeding place or resting place of any protected wild animal,

shall be guilty of an offence.

(7) Notwithstanding subsection (5) of this section, it shall not be an offence for a person –

(a) while engaged in agriculture, aquaculture, fishing, forestry or turbarry, unintentionally to injure or kill a protected wild animal, or

(c) while constructing a road or while carrying on any archaeological operation, building operation or work of engineering construction, or while constructing or carrying on such other operation or work as may be prescribed, unintentionally to kill or injure such an animal or unintentionally to destroy or injure the breeding place or resting place of such an animal, or

(d) to capture an injured or disabled protected wild animal, or the orphaned and dependant young of such an animal, for the purpose of killing it humanely or with the intention of tending it and later releasing it when, but only when, the said animal or its dependant young, as the case may be, are no longer disabled or dependant, or

(e) to kill humanely a protected wild animal which is either injured in the manner described in paragraph (a) of this subsection or captured in the manner described in paragraph (d) of this subsection or so to kill a protected wild animal injured in the circumstances described in paragraph (c) of this subsection and where the animal is so injured or disabled that there is no reasonable chance of its recovering,

(iv) anything which is duly done pursuant to a licence or other permission granted or issued pursuant to the Wildlife Acts, 1976 and 2000, or which is duly done pursuant to any other statute or statutory instrument, which is permitted to be done under such a statute or instrument or which is done pursuant to and in accordance with a licence or other permission granted or issued pursuant to such a statute or instrument or anything caused by or which results from, or is consequent upon or the effect of any other act or thing which is lawfully done.

(9) In any proceedings for an offence under this section it shall not be necessary for the prosecution to prove that any act constituting (whether in whole or in part) the alleged offence was done otherwise than while the defendant was

engaged in agriculture, aquaculture, fishing, forestry or turbary.

Wildlife Act 1976

Enforcement of protection of wild animals (other than wild birds).

23.—(1) Subject to subsection (2) hereof, this section applies to any animal which is of a species of fauna specified in the [Fifth Schedule](#) to this Act.

(2) Subject to subsection (3) of this section, the Minister may, after consultation with the Minister for Agriculture and Fisheries, by regulations provide that—

(a) an animal of a species of fauna specified in the regulations (not being a species specified in the [Fifth Schedule](#) to this Act) shall be an animal to which this section applies,

(b) an animal of a species of fauna specified both in the regulations and in the said Fifth Schedule shall not be an animal to which this section applies,

(c) in such places or areas as are specified in the regulations and as regards such period or periods as are so specified, subsection (5) of this section shall not have effect either, as may be so specified, generally or as regards such species of animal as are so specified,

and in case any regulations under this subsection are for the time being in force, this section shall be construed and have effect subject to and in accordance with them.

(3) Regulations under this section—

(a) which provide that an animal of any species of fish or aquatic invertebrate shall be an animal to which this section applies, or

(b) the effect of which when made would be that this section would, for so long as the regulations are in force, cease to apply to animals which are of such a species,

shall be made or amended by the Minister only with the concurrence of the Minister for Agriculture and Fisheries who shall indicate his concurrence by signing the regulations.

(4) An animal to which this section for the time being applies is in this Act referred to as a protected wild animal.

(5) Any person who—

(a) hunts a protected wild animal which is not an exempted wild mammal otherwise than under and in accordance with a permission or licence granted by the Minister under this Act,

(b) hunts an exempted wild mammal otherwise than,

(i) under and in accordance with such a permission or a licence granted by the Minister under this Act other than section 29, or

(ii) under and in accordance with a licence granted by the Minister under [section 29](#) of this Act and (also) on a day, or during a period of days, specified in a relevant order under [section 25](#) of this Act,

(c) injures a protected wild animal otherwise than while hunting it,

(i) in case the protected wild animal is not an exempted wild mammal, under and in accordance with such a permission or a licence granted by the Minister under this Act,

(ii) in case the protected wild animal is an exempted wild mammal, either,

(A) under and in accordance with such a permission or a licence granted by the Minister under this Act other than section 29, or

(B) in the manner and on a day, or during a period of days, mentioned in subparagraph (ii) of paragraph (b) of this subsection,

(d) wilfully interferes with or destroys the breeding place of any protected wild animal,

shall be guilty of an offence.

(6) The Minister may grant a licence to a person to capture or humanely kill or capture and humanely kill at any time a protected wild animal of a species specified in the licence for such educational, scientific or other purpose as shall be specified in the licence.

(7) Notwithstanding subsection (5) of this section, it shall not be an offence for a person—

(a) while engaged in agriculture, fishing or forestry, or in zoology or in any other scientific pursuit, unintentionally to injure or kill a protected wild animal, or

(b) while so engaged to interfere with or destroy the breeding place of such an animal, or

(c) while constructing a road or while carrying on any archaeological operation, building operation or work of engineering construction, or while constructing or carrying on such other operation or work as may be prescribed, to kill or injure such an animal or to destroy or injure the breeding place of such an animal, or

(d) to capture an injured or disabled protected wild animal for the purpose of killing it humanely or with the intention of tending it and of later releasing it, or

(e) to kill humanely a protected wild animal which is either injured in the manner described in paragraph (a) of this subsection or captured in the manner described in paragraph (d) of this subsection, or so to kill a protected wild animal injured in the circumstances described in paragraph (c) of this subsection,

and nothing in this section shall make unlawful,

(i) the taking and killing of hares by coursing at a regulated coursing match which is held both during a period specified as regards hares in a hares order and in a place to which such order applies,

(ii) the hunting of hares by means of a pack of beagles or harriers both during a period specified as regards hares in a hares order and in a place to which the order applies,

(iii) anything which [section 3](#) (3) of the [Whale Fisheries Act, 1937](#) , permits to be done, or

(iv) anything which is duly done pursuant to a statute (other than this Act) or statutory instrument, which is permitted to be done under such a statute or instrument or which is done pursuant to and in accordance with a licence or other permission granted or issued pursuant to such a statute or instrument or anything caused by or which results from, or is consequent upon or the effect of any other act or thing which is lawfully done.

(8) In any proceedings for an offence under this section relating to a protected wild animal which is of a species other than a species specified in [Part II](#) of the [Fourth Schedule](#) to this Act, it shall be a defence for the defendant to prove that any capturing or killing complained of was urgently necessary for the purpose of stopping damage described in [section 42](#) (1) of this Act being caused and that in the particular circumstances of the case it was not practical for him to apply to the Minister beforehand for a permission under [section 42](#) of this Act and that the defendant reasonably believed that damage mentioned in the said

section 42 (1) was being caused by the protected wild animal to which the alleged offence relates or by protected wild animals of the same species as that of such protected wild animal.

(9) In any proceedings for an offence under this section it shall not be necessary for the prosecution to prove that any act constituting (whether in whole or in part) the alleged offence was done otherwise than while the defendant was engaged in agriculture, fishing or forestry, or in zoology or in another scientific pursuit.

(10) Proceedings for an offence under this section may be taken in any District Court District, and in case such proceedings are taken and apart from this section the Justice before whom the proceedings are brought would not have jurisdiction to hear and determine the proceedings, then for the purpose of conferring such jurisdiction the offence may be treated as having been committed within the District Court District to which such Justice is assigned.

(11) The Minister may by regulations provide that—

(a) subsection (8) of this section shall have effect in relation to any proceedings for offences under this section relating to protected wild animals of a species specified both in [Part II](#) of the [Fourth Schedule](#) to this Act and in the regulations,

(b) the said subsection (8) shall not have effect in relation to any such proceedings relating to protected wild animals of a species specified in the regulations,

and the said subsection (8) shall have effect accordingly.

Wildlife Act 1976 contd:

Fifth Schedule
Animals referred to in
Section 23

[Section 23.](#)

Land Mammals

Badger	Hedgehog
Bat species	Otter
Deer species	Pine Marten
Hare species	Red Squirrel

8.3 Appendix: Extract from NRA Guidelines - works in vicinity of badger setts

GUIDELINES FOR SITE WORKS IN THE VICINITY OF BADGER SETTS

The following provisions should apply to all construction works:

- Badger sett tunnel systems can extend up to c. 20m from sett entrances. Therefore, no heavy machinery should be used within 30m of badger setts (unless carried out under licence); lighter machinery (generally wheeled vehicles) should not be used within 20m of a sett entrance; light work, such as digging by hand or scrub clearance should not take place within 10m of sett entrances.
- During the breeding season (December to June inclusive), none of the above works should be undertaken within 50m of active setts nor blasting or pile driving within 150m of active setts.
- Following consultation with the NPWS and badger experts, works closer to active setts may take place during the breeding season provided appropriate mitigation measures are in place, e.g. sett screening, restricted working hours, etc.

In order to comply with these constraints:

- All affected badger setts should be clearly marked and the extent of bounds prohibited for vehicles clearly marked by fencing and signage. Bunting is an option on a temporary basis. Hazard tape is inadequate as it is prone to deterioration and damage by wind or cattle etc.
- All contractors/operators on site should be made fully aware of the procedures pertaining to each sett on site.
- Construction activities within the vicinity of affected setts may commence once these setts have been evacuated and destroyed under licence from the NPWS. Where affected setts do not require destruction, construction works may commence once recommended alternative mitigation measures to address the badger issues have been complied with.
- In almost all circumstances, works close to badger setts may only be conducted under the supervision of a qualified expert under licence from the NPWS.

All contractors/operators on site should be made fully aware of the procedures pertaining to each sett on site.