

Manor Farm, Manor Road, Hayling Island

Ecological Assessment for Solar Array

Prepared on behalf of Adams Hendry Consulting Ltd

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1.0 Introduction

Background

- 1.1 PV Ecology was commissioned in October 2014 to carry out an ecological assessment of an area of land off Manor Road, Hayling Island (grid reference SU 71992 01006). This assessment will contribute to a planning application submitted by the client to Havant Borough Council for a solar array on the land.
- 1.2 This report describes the current ecological baseline of the site, based on the findings of a site visit and review of existing protected sites and habitats data. The results set out within this report are valid for one year from the issue date. A follow up site visit will be required to determine if there are any changes to the ecological status of the site after a year.

Site Description

- 1.3 The field in which the solar array is proposed is approximately 2.7 ha of grazing land situated centrally within the island (**Appendix A**). The land where the solar array is proposed is representative of the rest of the field. The field is bordered by hedgerow and trees to the north and west side and by a path with hedgerow beyond on the eastern side. Farm buildings are present to the south-eastern corner of the field and a compost facility is located to the south of the field. The cabling associated with the solar array will pass through the farmyard to a 'switch room'. Apart from the compost facility the southern side is open (apart from a wire fence) and leads out onto other fields used for arable farming.
- 1.4 The field where the solar array is proposed has been identified as H49E within the Solent Wader and Brent Goose Strategy, for which it has 'uncertain potential for waders and brent geese'. The field directly to the north of the site has been identified as a Site of Importance for Nature Conservation (SINC). The site is situated less than 700m to the east of the coast line which has been identified as Special Protection Area (SPA), Special Area of Conservation (SAC) and Ramsar, in part because of the populations of geese and waders.

Brief

- 1.5 To carry out an Ecological Assessment of the land within the footprint of the proposed solar array and to inform the landowners of any ecological implications related to the proposals.

2.0 Methodologies

Desk Study

- 2.1 The desk study methodology is based upon guidelines set out by the Chartered Institute of Environmental and Ecological Management (CIEEM, 2012). A data-gathering exercise was undertaken to obtain any available information relating to statutory and non-statutory nature conservation sites and priority habitats and species (**Table 3.1**).
- 2.2 In order to make a thorough assessment of the potential impact of the proposals upon biodiversity resources, data was requested for:
- Statutory and non-statutory sites of nature conservation interest located on or within 1km of the site;
 - Brent Geese and Wader Habitats located on or within 1km of the site; and
 - Protected species data within 1km

Table 1: Summary of information sources used for the Desk Study

Organisation / Source	Information Sought
HBIC	Local species records including Brent geese and waders. Non-statutory nature conservation sites.
MAGIC	Statutory sites and BAP Priority habitats within 1km of the site.
Ordnance Survey Maps	Large scale habitat information and identification of off-site habitats which may require consideration (such as ponds).

Ecological Assessment

- 2.3 The site was visited on the 17th October 2014. The survey employed techniques based on standard Phase I Habitat Survey methods (CIEEM, 2012). Habitat types on and adjacent to the site were identified according to standard habitat definitions.
- 2.4 The collection of botanical information focused on the dominant and/or key indicator species for each habitat, to allow allocation of habitats to the standard Phase I habitat types and where relevant to identify any BAP habitats which are present on site.
- 2.5 The Ecological Assessment survey methodology was 'extended' in accordance with EIA guidelines (EIA, 1995) and current CIEEM Technical Guidance (CIEEM, 2012) to include an assessment of the potential for habitats on or immediately adjacent to the site to support legally protected or conservation-notable species. The location and nature of any signs of the presence of protected species (such as droppings, footprints, burrows, etc.) were documented and mapped accordingly. Indicative methods for protected species are outlined below.

Bats

- 2.6 Existing trees on site were assessed for their potential to support roosting bats. Particular attention was paid to the following features:

- Holes and crevices;
 - Ivy covering;
 - Cracked or peeling bark; and
 - Evidence of droppings, feeding remains and/or oil staining from bat fur.
- 2.7 The foraging and commuting potential of the site was assessed for bats by looking at the area and vegetation, at both the site and landscape scale

Badgers

- 2.8 Any area that could be used for foraging or could potentially contain a badger sett were surveyed and any signs noted including:
- Evidence of active or disused setts;
 - Evidence of potential badger diggings;
 - Latrines / dung pits;
 - Evidence of badger foraging ('snuffle holes');
 - Footprints; and
 - Badger hairs.

Birds

- 2.9 Any habitat features, for example, scrub, trees and hedgerows which could potentially be used by nesting birds, were surveyed and any nesting activity was noted. The habitat was also assessed regarding its potential for bird activity.

Dormice

- 2.10 The suitability of the habitat was assessed for dormice. Any small mammal feeding signs were checked and assessed, including:
- Examination of hazel nuts; and
 - Evidence of nest building.

Great Crested Newts

- 2.11 Ponds within the vicinity of the site were noted and the potential of the land to act as a commuting route, shelter or foraging resource for great crested newts was assessed. Areas of standing water present on-site were assessed in accordance with current Habitat Suitability Assessment guidance (Oldham *et al.*, 2000) for their potential to support breeding newts.

Reptiles

- 2.12 Habitat features that could be suitable as hibernacula, foraging or basking areas were noted. Extant refugia were lifted and examined for evidence of reptiles, including sloughs (shed skins).

3.0 Results

Desk Study

Nature Conservation Sites

- 3.1 The field where the solar array is proposed has been identified as H49E within the Solent Wader and Brent Goose Strategy, for which it has 'uncertain potential for waders and brent geese'. The field directly to the north of the site has been identified as a Site of Importance for Nature Conservation (SINC), a non-statutory designated site. The site is situated less than 700m to the east of the coast line which has been designated as Special Protection Area (SPA), Special Area of Conservation (SAC) and Ramsar, in part because of the populations of geese and waders.

Protected and Notable Species

- 3.2 A data search of protected and notable species within 1km of the application site was conducted via Hampshire Biodiversity Information Centre (HBIC). As the list is extensive, key records are detailed where relevant throughout the report.

Ecological Assessment of Site

Habitats

- 3.3 The site is composed of a field approximately 2.7 hectares in size, divided into separate compartments or strips by wire fencing. The solar array is proposed for a small corner of the field and measures approximately 3750m². An electric cable is proposed to run from the array to a switch room, attached to a barn nearby – a section of the cable will run below ground level and sections of the cable will run above ground level. Habitats near to the site or habitats impacted by the proposals can be divided into the following categories:
- Species poor semi-improved grassland grazed by cattle
 - Hedgerow
 - Rough grassland
 - Arable land
 - Hard standing
- 3.4 These habitats are described in further detail below.

Species poor semi-improved grassland

- 3.5 The majority of the site consisted of perennial rye grass, cocks foot, cats ear, ribwort plantain with some patches of thistle. The number of species was low and the site was grazed by cattle (**Figure 1**). The site was divided up into sections running east/west by wire fencing and electric wire.



Figure 1: Field where solar array is proposed

Hedgerow

- 3.6 A hedgerow bordered the southern and eastern side of the area proposed for the solar array (**Figure 2/3**). Species included field maple, dogwood, hawthorn and spindle. A row of sycamore was present within the hedgerow to the east. Ruderal species were present at the base of the eastern side of the hedgerow and these included mallow, ragwort, nettle and rape.



Figure 2: Hedgerow to south of area proposed for solar array



Figure 3: Hedgerow with sycamore to east of area proposed for solar array

Rough grassland

- 3.7 An area of rough grassland (**Figure 4**) is located immediately to the east of the area proposed for the solar array, just to the west of the hedge. This contained similar species to the grassland area however it was separated from the grazing area by electric fencing and therefore was not regularly managed or grazed and contained more ruderal species such as nettles.



Figure 4: Hedgerow along eastern boundary

Arable Land

- 3.8 To the south of the field where the solar array is proposed is an area of arable land (**Figure 5**).



Figure 5: Arable land to the south

Hard standing

- 3.9 The cable connecting the solar array to the proposed switch room is proposed to be trenched through the hedgerow to the east from where it will pass above ground along the side of a barn, before it is trenched below ground level again through the farm yard (**Figure 6**), before finally passing along above ground level and connecting to the switch room on the side of the barn (**Figure 7**).



Figure 6: Farmyard through which the cable will be trenched



Figure 7: Barn where switch room is attached externally

Protected and/or notable species

Badgers

- 3.10 No evidence of badger (*Meles meles*) setts, dung pits, latrines or foraging signs were found during the survey of the site. A data search did not reveal any records for this species within 1km of the site.

Bats

- 3.11 Mature trees to the east of the area proposed for the solar array are unsuitable for roosting bats. The hedgerows on site have high value for foraging bats and the open areas of grassland and arable have low value for foraging and commuting bats. At least five species of bats have been recorded within 1km of the site.

Birds

- 3.12 No birds were recorded on site during the survey. A range of farmland birds, geese and waders have been recorded locally within 1km of the site. None of these records are thought to be from the site itself.
- 3.13 The Brent geese and wader records were reviewed and are set out in **Appendix B**. The table of records from 2002 until more recently are set out below, this includes more recent 'interim data' in the second table below. The site code in the left hand column corresponds with the map codes in **Appendix B**.

Table 2: Summary of wader and Brent goose records within 1km of the site

Site Code	Maximum Count of Waders in 2010 strategy	Wader Site Classification in 2010 strategy	Maximum Count of Brent Geese in 2010 strategy	Brent Goose Site Classification in 2010 strategy	Brent Geese found in 2002 strategy	Data Summary	Easting	Northing
H34A	0	Uncertain	9	Uncertain		Brent in 2010 strategy	471126	100529
H34B	0	Uncertain	0		Yes	Positive records from 2002 strategy only	471259	100462
H34D	7	Uncertain	0			Waders in 2010 strategy	471240	100210
H40A	0	Uncertain	400	Uncertain	Yes	Brent in 2010 strategy	472948	100350
H44	0		0		Yes	Positive records from 2002 strategy only	472539	100175
H46A	0	Uncertain	0			Surveyed for 2010 strategy without positive results	471911	100091
H47	0	Uncertain	0			Surveyed for 2010 strategy without positive results	472169	100584
H48A	0	Uncertain	51	Uncertain	Yes	Brent in 2010 strategy	471594	102064
H48B	0	Uncertain	0			Surveyed for 2010 strategy without positive results	471586	101765
H48C	97	Uncertain	1000	Important	Yes	Waders and Brent in 2010 strategy	471504	101558
H48D	45	Uncertain	375	Uncertain	Yes	Waders and Brent in 2010 strategy	471501	101327
H48E	0	No recorded use	0		Yes	Positive records from 2002 strategy only	471469	101154
H48F	138	Uncertain	0		Yes	Waders in 2010 strategy	471455	100934
H48G	53	Uncertain	150	Uncertain	Yes	Waders and Brent in 2010 strategy	471328	100625
H49A	180	Uncertain	0		Yes	Waders in 2010 strategy	471907	101548
H49B	141	Uncertain	1	Uncertain		Waders and Brent in 2010 strategy	471766	101294
H49C	0	Uncertain	0		Yes	Positive records from 2002 strategy only	471947	101292
H49D	0	Uncertain	0		Yes	Positive records from 2002 strategy only	472154	101279
H49E	0	Uncertain	0			Surveyed for 2010 strategy without positive results	471950	101059
H49F	0	Uncertain	0		Yes	Positive records from 2002 strategy only	472230	101058
H49G	24	Uncertain	0			Waders in 2010 strategy	471854	100856

Site Code	Maximum Count of Waders in 2010 strategy	Wader Site Classification in 2010 strategy	Maximum Count of Brent Geese in 2010 strategy	Brent Goose Site Classification in 2010 strategy	Brent Geese found in 2002 strategy	Data Summary	Easting	Northing
H49H	19	Uncertain	750	Important	Yes	Waders and Brent in 2010 strategy	471741	100645
H49I	29	Uncertain	0	Uncertain	Yes	Waders in 2010 strategy	472313	100776
H49J	0	Uncertain	0			Surveyed for 2010 strategy without positive results	471693	101080
H50A	0	Uncertain	0			Surveyed for 2010 strategy without positive results	472453	101048
H50B	1	Uncertain	460	Important	Yes	Waders and Brent in 2010 strategy	472614	100907
H50C	3	Uncertain	52	Uncertain		Waders and Brent in 2010 strategy	472800	100735
H51	144	Uncertain	1200	Important	Yes	Waders and Brent in 2010 strategy	472566	101486
H52A	54	Uncertain	1	Uncertain		Waders and Brent in 2010 strategy	471957	101889
H52B	0	Uncertain	0			Surveyed for 2010 strategy without positive results	471769	101928
H53E	0	Uncertain	0			Surveyed for 2010 strategy without positive results	471800	102100
H55	0	Uncertain	0			Surveyed for 2010 strategy without positive results	472419	101778
H56	0	Uncertain	33	Uncertain	Yes	Brent in 2010 strategy	472750	101886
H60U	41	Uncertain	0	Uncertain		Waders in 2010 strategy	472293	102018
H60V	0	Uncertain	0		Yes	Positive records from 2002 strategy only	472384	101959
H89	250	Uncertain	75	Uncertain		Waders and Brent in 2010 strategy	472991	101447

Site Code	Area of Site (Ha)	Central Grid Reference of Site	Have Waders been Recorded by Goosewatch Volunteers?	Have Brent Geese been Recorded by Goosewatch Volunteers?	Maximum number of Waders Recorded	Maximum number of Brent Geese Recorded
H48C	6.88	SU715015	Yes	Yes	1	1
H48D	7.61	SU715012	Yes	Yes	64	80
H48E	3.25	SU714011		Yes	0	80
H48F	7.61	SU714009	Yes	Yes	271	1
H48G	10.27	SU713006	Yes	Yes	5	25
H49A	11.30	SU719015		Yes	0	620
H49G	9.55	SU718008	Yes	Yes	3	80
H49H	9.95	SU717006	Yes		22	0
H56	7.14	SU727019		Yes	0	1
H40A	31.23	SU729003		Yes	0	500

Dormice

- 3.14 No evidence of dormouse presence was found at the time of survey and no dormice records were returned by the data search. The hedgerows are suitable for dormice but are not well connected into areas of more optimal habitat.

Great Crested Newts

- 3.15 No evidence of amphibian presence was found at the time of survey and no ponds were directly impacted by the proposals. The nearest pond to the site was located within Manor Farm at grid reference SU 72091 00878 to the south and another pond was located a little further to the south-east at grid reference SU 72312 00779.

Plants

- 3.16 No protected plant species were found to be present on-site at the time of survey.

Reptiles

- 3.17 Hedgerow bases and areas of rough grassland were located outside of the area proposed for the solar array, however the cable will pass through an area of rough grassland and hedgerow to the east of the area.

Other species (including amphibians, invertebrates and crustaceans)

- 3.18 No other species of protected and/or notable fauna was found to be present on-site at the time of survey.

4.0 Analysis and Impact Assessment

Statutory Nature Conservation Sites

- 4.1 The site is situated less than 700m to the east of the coast line which has been identified as Special Protection Area (SPA), Special Area of Conservation (SAC) and Ramsar, in part because of the populations of geese and waders. The proposals are of a relatively small scale and are unlikely to impact directly or indirectly upon the designated coastal areas.
- 4.2 The field where the solar array is proposed has been identified as H49E within the Solent Wader and Brent Goose Strategy, for which it has 'uncertain potential for waders and brent geese'. Inland fields, although not part of the SPA are important habitat for the species for which the SPA was designated and therefore are offered protection through the planning system. The proposals will result in the loss of a small section (3750m²) of field that has some limited potential for waders, most notably lapwings although it is possible that other species of waders may use the field irregularly and probably in low numbers or single figures. The field is unsuitable for Brent Geese due to the habitat, lack of openness and fences which compartmentalise it. Additionally the composting facility adjacent to the field, to the south, produces a considerable amount of noise irregularly which is not conducive to foraging or roosting birds.

Non-Statutory Nature Conservation Sites

- 4.3 The field directly to the north of the site has been identified as a Site of Importance for Nature Conservation (SINC) due to Brent geese. This site is separated from the field containing the proposed solar array by a tall hedgerow and is unlikely to be impacted directly or indirectly by the proposals.

Habitats

- 4.4 The ecological importance of each of the habitats present on-site has been assessed according to its relevance to the UK BAP, Local BAPs, Section 41 of the NERC Act, its ability to support protected or notable species and the likelihood of negative impact upon it as a result of the current proposal. The assessment is summarised further below.

Species poor semi-improved grassland

- 4.5 The field where the solar array is proposed is 2.7 hectares. The solar array will cover an area of 3750m², 14% of the area of the field, however it must be noted that the majority of the habitat below each solar panel will remain relatively unchanged and can still be grazed by sheep or cut, and therefore the ecological impact in terms of widespread species is negligible in the absence of mitigation. The loss of the habitat in relation to waders which may use the field is more difficult to quantify in the absence of bird survey records for the site, however it is likely to be low in the absence of mitigation.
- 4.6 The loss or change of habitat for other protected species is likely to be negligible.
- 4.7 Opportunities exist in order to improve the habitat for biodiversity on site by sowing wildflowers below the panels and managing these appropriately – a management plan would need to be agreed in order to do this.

Hedgerow

- 4.8 Hedgerows perform an important function within the landscape, acting as 'ecological corridors' connecting areas of habitat within the site boundaries and connecting habitats on-site with those off-site. Any loss of hedgerow may have an impact on birds, bats and reptiles. The proposals are unlikely to impact significantly on hedgerows and are able to avoid the hedgerows along the southern side and eastern side with the panels. The cable required in order to connect the panels to the switch room is proposed to pass through the hedgerow to the east and in order to do this it will need to be dug into a trench which will disturb the base of the hedgerow. The trench is approximately 1m wide and would need to be dug under ecological supervision to prevent harm to reptiles which may be present and birds which may be nesting. The works can ideally be timed to avoid impacts to these species and should therefore be undertaken in the period November – February under ecological supervision so that any potential hibernacula can be avoided.
- 4.9 The hedgerow is not well connected into areas of woodland and therefore although it is suitable for dormice, it is not well connected into areas of more optimal dormice habitat which would be required to sustain a population. Additionally there are no known dormice records on the island so the impact on dormice is likely to be negligible.

Rough grassland

- 4.10 The area of rough grassland has potential for reptiles, however this area will remain unimpacted by the solar panels and will only be impacted by the proposed trench for the electric cable connecting the array to the switch room. Any impacts from the trench should be undertaken under ecological supervision in order to prevent harm to reptiles.

Arable land

- 4.11 The large area of arable land to the south and south-west of the proposed solar array has been shown to support flocks of Brent geese and small numbers of waders. This field known as H49G in the Solent and Wader Brent Goose Strategy has no hedges

between it and the proposed solar array. The erection of the solar array during the construction phase may cause some short term disruption through noise and visual disturbance, however this is only likely to take place over a relatively short period of time and the impact is therefore likely to be negligible, even if carried out while birds are using the site. It must be noted that the composting facility has machinery that is particularly noisy and the construction of the solar array will be insignificant in relation to this.

- 4.12 It would be possible to time the construction period of the array to avoid times when geese or waders may be present (like at high tide or during months when the birds are not present) or works could be undertaken under ecological supervision and stopped when birds are roosting or foraging.

Protected and Notable Species

Bats

- 4.13 All the trees and buildings impacted by the proposals are unsuitable for roosting bats. The habitats will not be impacted significantly by roosting bats.

Birds

- 4.14 Impacts to birds are dealt with in the sections on habitats. Further survey work will be required for Brent geese and waders over the winter period in order to determine the impact of the proposals on these birds if new habitat cannot be created that is more beneficial to these birds on site.

Badgers

- 4.15 The proposals are unlikely to impact on badgers.

Dormice

- 4.16 The proposals are unlikely to impact on dormice.

Great Crested Newts

- 4.17 There are no known records of great crested newts on Hayling Island. The site is located approximately 140m from the nearest pond, located within the farm grounds, surrounded by hard standing. The pond will not be impacted directly by the proposals and the proposals are relatively small scale with a short construction period and are unlikely to impact on newts terrestrially, if present locally.

Plants

- 4.18 No protected and/or notable plant species were found to be present within the site boundaries or within the immediate vicinity of the site.

Reptiles

- 4.19 A small area of reptile habitat will be impacted by the proposals. No further survey work is deemed necessary for reptiles, however a watching brief by an experienced ecologist will be needed for the installation of the cable where it cuts through the hedgerow and rough grassland to ensure reptiles are not harmed by the proposals.

Other Species (including amphibians, invertebrates and crustaceans)

- 4.20 No other protected species will be affected by the proposals.

5.0 Requirements and Recommendations

Further measures required to mitigate against the effects of the proposals

- 5.1 As the site is likely to have relatively low value for Brent geese and waders it is advised that new habitat creation will mitigate for any small loss in foraging habitat for waders due to the proposals. The creation of a similar area of enhanced habitat (*like-for-like*) similar to what has been lost will need to be created and managed for a period of time to match that of the proposed solar array. This enhanced habitat will take the form of a scrape that will be fenced off from grazing animals and agricultural activities during the winter period, with details to be set out in a management plan. If this can not be shown then further surveys to determine the value for Brent geese and Waders will be required to ascertain the exact value of the site to these birds associated with the nearby SPA/SAC.

Nesting Birds

- 5.2 To avoid contravention of protected species legislation, any vegetation removal associated with the development must be scheduled to avoid peak bird nesting season (which runs from 01st March to 01st August, inclusive), unless prior inspection by an ecologist concludes that there are no nesting birds present immediately prior to the commencement of works. If the presence of nesting birds is confirmed, any works which may disturb them will be delayed until the young birds have fledged the nest of their own accord.

Reptiles

- 5.3 Any work impacting on the rough grassland or hedgerow will need to be undertaken under ecological supervision.

Further measures recommended to enhance ecology at the site scale

- 5.4 Opportunities exist in order to improve the habitat for biodiversity on site by sowing wildflowers below the panels and managing these appropriately – a management plan would need to be agreed in order to do this.

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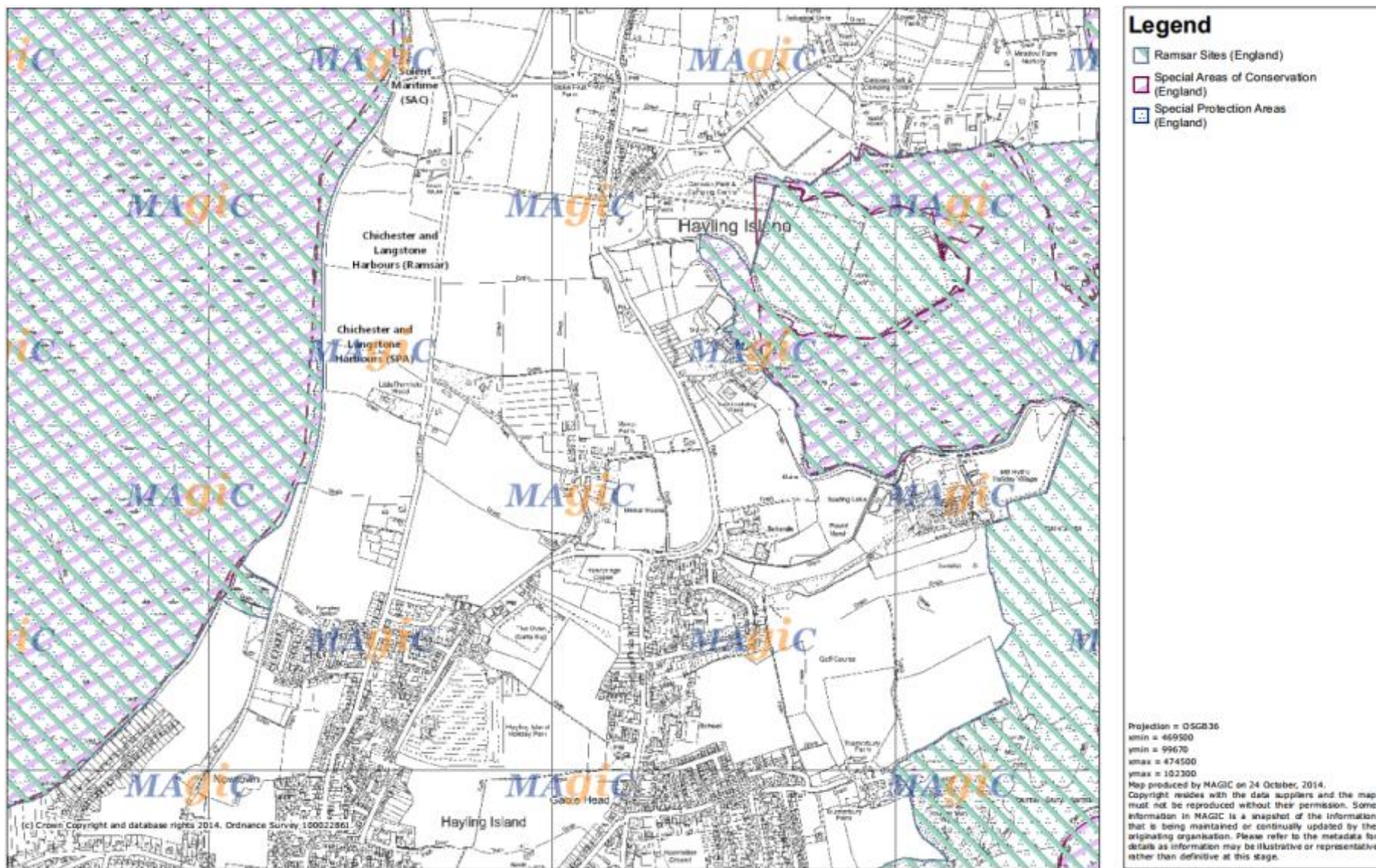
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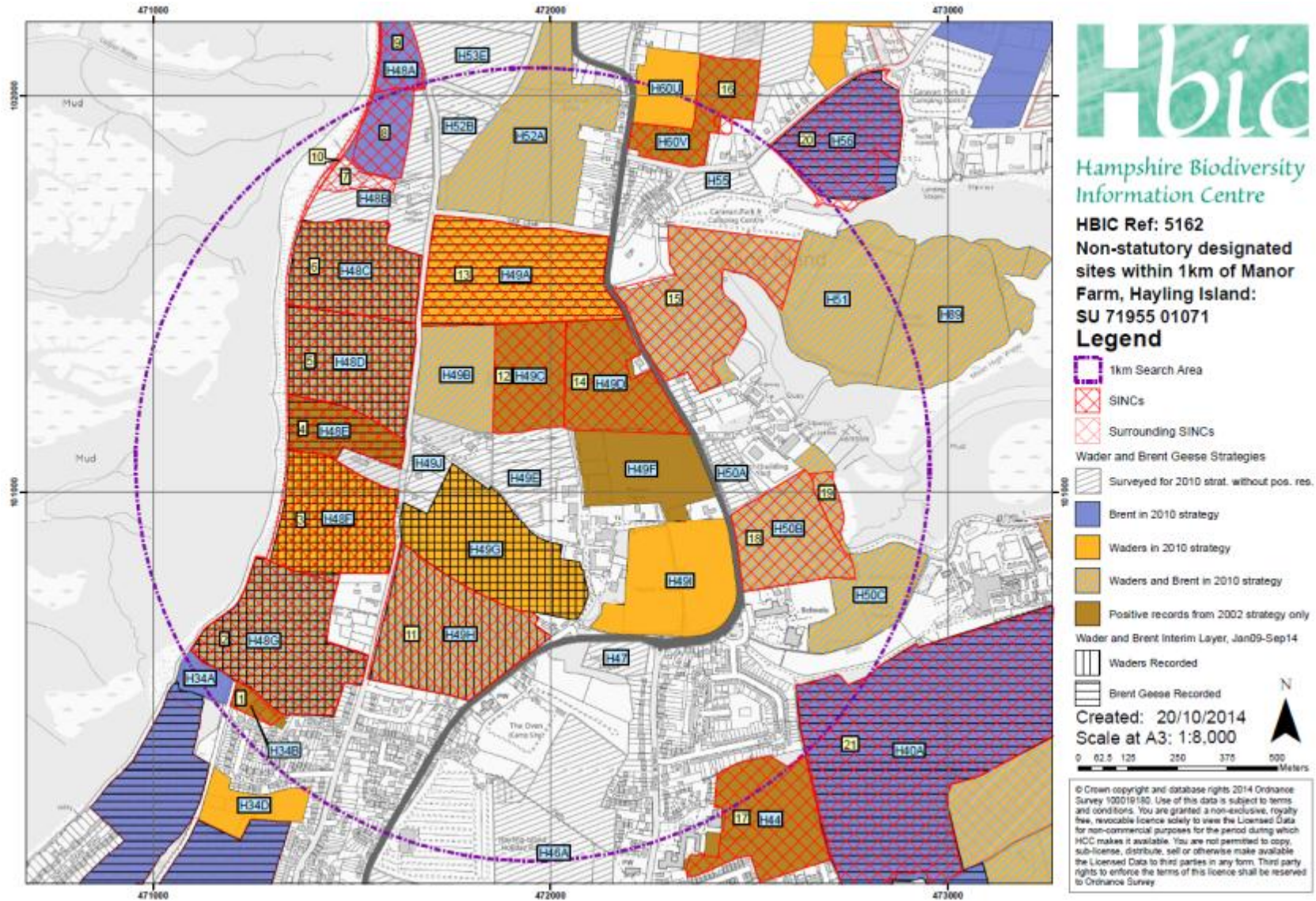
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Appendices

Appendix A: Site location and statutory designated sites



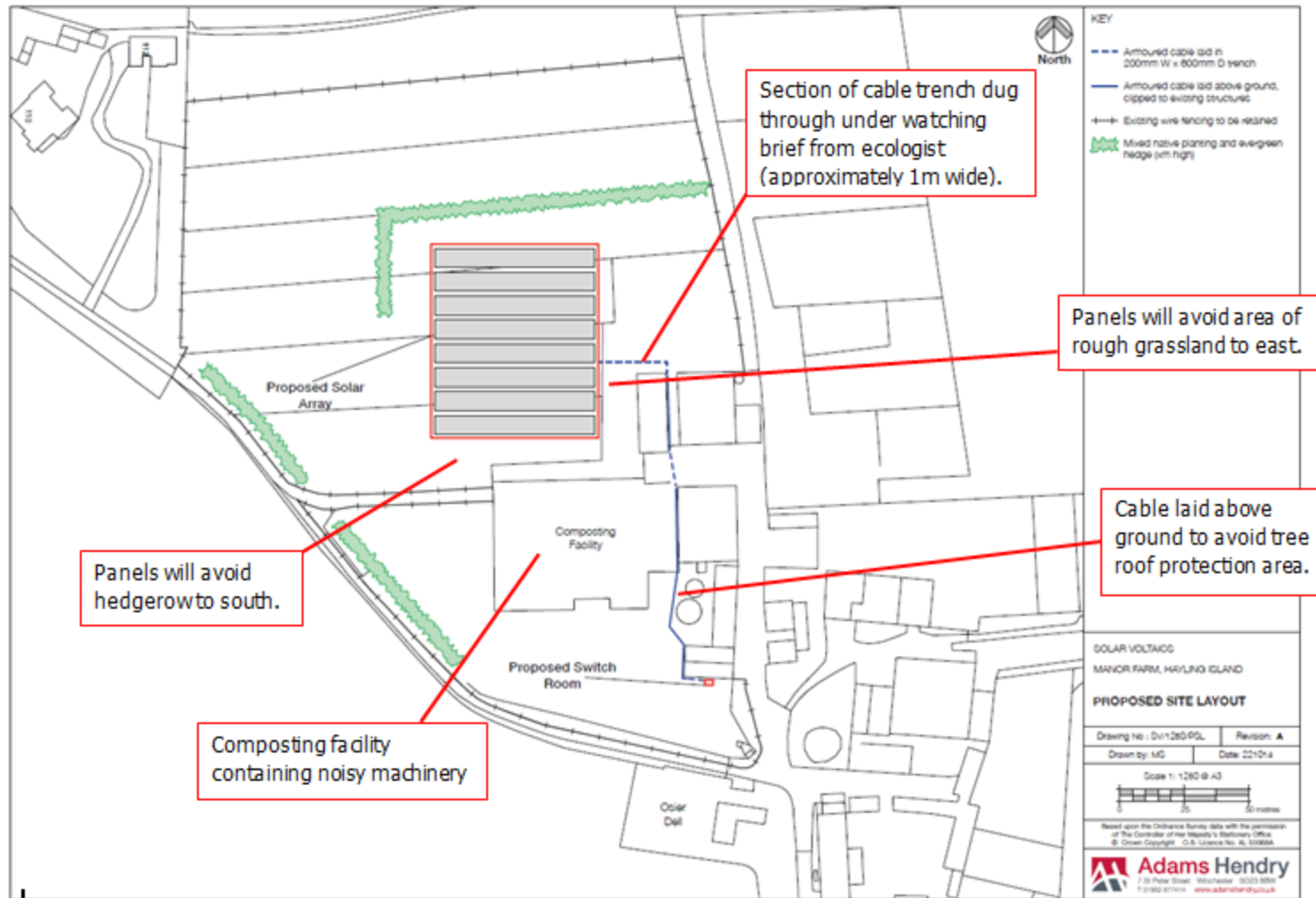
Appendix B: Non-statutory designated sites and Solent geese and wader sites



Map Label	Status	SINC Ref	SINC Name	Central Grid Ref.	SINC Criteria	Species supported that meet Section 6 of SINC Selection Criteria	Area (ha)
1	SINC	HV0060	Landfill Meadow	SU71300050	4A/6A	<i>Linum bienne</i> (Pale Flax) [CS]	0.69
2	SINC	HV0061	Hayling Billy G	SU71300060	6B	<i>Branta bernicla bernicla</i> (Dark-Bellied Brent Goose) [UKBAP]	10.21
3	SINC	HV0062	Hayling Billy F	SU71500090	6B	<i>Branta bernicla bernicla</i> (Dark-Bellied Brent Goose) [UKBAP]	7.92
4	SINC	HV0063	Hayling Billy E	SU71500120	6B	<i>Branta bernicla bernicla</i> (Dark-Bellied Brent Goose) [UKBAP]	3.36
5	SINC	HV0064	Hayling Billy D	SU71500130	6B	<i>Branta bernicla bernicla</i> (Dark-Bellied Brent Goose) [UKBAP]	7.82
6	SINC	HV0065	Hayling Billy C	SU71500160	6B	<i>Branta bernicla bernicla</i> (Dark-Bellied Brent Goose) [UKBAP]	6.94
7	SINC	HV0066	Long Marsh	SU71500180	4A/6A	<i>Carex divisa</i> (Divided Sedge) [NR] <i>Salicornia europaea</i> agg. (Common Glasswort) [CR] <i>Senpoidium maritimum</i> (Sea Wormwood) [CS] <i>Tripleurospermum maritimum</i> (Sea Mayweed)	0.86
8	SINC	HV0067	Pill Box Field	SU71600190	2B		2.59
9	SINC	HV0068	Plot 6114 South of Knott's Marsh	SU71600220	2A		2.39
10	SINC	HV0072	Hayling Billy Line	SU71690325	6A	<i>Carex divisa</i> (Divided Sedge) [NR]	2.68
11	SINC	HV0073	South of Daw Lane H	SU71700060	6B	<i>Branta bernicla bernicla</i> (Dark-Bellied Brent Goose) [UKBAP]	10.18
12	SINC	HV0078	South of Daw Lane C	SU71900130	6B	<i>Branta bernicla bernicla</i> (Dark-Bellied Brent Goose) [UKBAP]	4.85
13	SINC	HV0079	South of Daw Lane A	SU71900150	6B	<i>Branta bernicla bernicla</i> (Dark-Bellied Brent Goose) [UKBAP]	11.24

Map Label	Status	SINC Ref	SINC Name	Central Grid Ref.	SINC Criteria	Species supported that meet Section 6 of SINC Selection Criteria	Area (ha)
14	SINC	HV0085	South of Daw Lane D	SU72100130	6B	<i>Branta bernicla bernicla</i> (Dark-Bellied Brent Goose) [UKBAP]	6.18
15	SINC	HV0087	Vemer Common West	SU72350145	6B	<i>Branta bernicla bernicla</i> (Dark-Bellied Brent Goose) [UKBAP]	9.91
16	SINC	HV0088	West of North Hayling V	SU72400190	6B	<i>Branta bernicla bernicla</i> (Dark-Bellied Brent Goose) [UKBAP]	4.25
17	SINC	HV0091	Hayling Secondary School Playing Field	SU72500020	6B	<i>Branta bernicla bernicla</i> (Dark-Bellied Brent Goose) [UKBAP]	7.04
18	SINC	HV0093	Pound Marsh B	SU72590089	6B	<i>Branta bernicla bernicla</i> (Dark-Bellied Brent Goose) [UKBAP]	5.96
19	SINC	HV0095	Mill Rythe Lane Saltmarsh	SU72700100	4A/6B	<i>Branta bernicla bernicla</i> (Dark-Bellied Brent Goose) [UKBAP]	0.76
20	SINC	HV0096	Fields & Saltmarsh South of Copse Lane	SU72730188	4A/6B	<i>Branta bernicla bernicla</i> (Dark-Bellied Brent Goose) [UKBAP]	7.19
21	SINC	HV0099	Toumerbury Farm A	SU72900030	6B	<i>Branta bernicla bernicla</i> (Dark-Bellied Brent Goose) [UKBAP]	29.62

Appendix C: Annotated proposals



Appendix D: Protected species legislation

Bats

All UK bat species are listed in Schedule 5 of the *Wildlife and Countryside Act 1981* (as amended) and Schedule 2 of the *Conservation of Habitats and Species Regulations 2010*. They are afforded full protection under Section 9(4) of the Act and Regulation 41 of the Regulations. These make it an offence, *inter alia*, to:

- deliberately capture, injure or kill any such animal;
- deliberately disturb any such animal, including in particular any disturbance which is likely:
 - to impair its ability to survive, breed, or rear or nurture their young;
 - to impair its ability to hibernate or migrate;
 - to affect significantly the local distribution or abundance of that species;or
- damage or destroy a breeding site or resting place of any such animal; or
- intentionally or recklessly disturb any of these animals while it is occupying a structure or place that it uses for shelter or protection; or
- intentionally or recklessly obstruct access to any place that any of these animals uses for shelter or protection.

In addition, five British bat species are listed on Annex II of the Habitats Directive. These are:

- Greater horseshoe bat (*Rhinolophus ferrumequinum*);
- Lesser horseshoe bat (*Rhinolophus hipposideros*);
- Bechstein's bat (*Myotis bechsteinii*);
- Barbastelle (*Barbastella barbastellus*); and
- Greater mouse-eared bat (*Myotis myotis*).

In certain circumstances where these species are found the Directive requires the designation of Special Areas of Conservation (SACs) by EC member states to ensure that their populations are maintained at a favorable conservation status. Outside SACs, the level of legal protection that these species receive is the same as for other bat species.

Dormouse (*Muscardinus vellanarius*), European otter (*Lutra lutra*) and Great Crested Newt (*Triturus cristatus*)

These species are listed in Schedule 5 of the *Wildlife and Countryside Act 1981* (as amended) and Schedule 2 of the *Conservation of Habitats and Species Regulations 2010*. They are afforded full protection under Section 9(4) of the Act and Regulation 41 of the Regulations. These make it an offence, *inter alia*, to:

- deliberately capture, injure or kill any such animal;
- deliberately disturb any such animal, including in particular any disturbance which is likely:

- to impair its ability to survive, breed, or rear or nurture their young;
- to impair its ability to hibernate or migrate.
- to affect significantly the local distribution or abundance of that species; or
- damage or destroy a breeding site or resting place of any such animal; or
- intentionally or recklessly disturb any of these animals while it is occupying a structure or place that it uses for shelter or protection; or
- intentionally or recklessly obstruct access to any place that any of these animals uses for shelter or protection.

Nationally Protected Species

Badger (*Meles meles*)

The *Protection of Badgers Act 1992* consolidates previous legislation (including the *Badgers Acts 1973 and 1991* *Badgers (Further Protection) Act 1991*). It makes it a serious offence to:

- kill, injure or take a badger;
- attempt to kill, injure or take a badger; or
- to damage or interfere with a sett.

The 1992 Act defines a badger sett as “*any structure or place which displays signs indicating current use by a badger*”.

Breeding Birds

With certain exceptions¹, all wild birds, their nests and eggs are protected by section 1 of the *Wildlife and Countryside Act 1981* (as amended). Therefore, it is an offence, *inter alia*, to:

- intentionally kill, injure or take any wild bird;
- intentionally take, damage or destroy the nest of any wild bird while it is in use or being built; or
- intentionally take or destroy the egg of any wild bird.

These offences do not apply to hunting of birds listed in Schedule 2 subject to various controls.

Bird species listed on Schedule 1 of the Act receive further protection, thus for these species it is also an offence to:

- intentionally or recklessly disturb any bird while it is nest building, or is at a nest containing eggs or young; or
- intentionally or recklessly disturb the dependent young of any such bird.

¹ Some species, such as game birds, are exempt in certain circumstances

Reptiles

The four widespread² species of reptile that are native to Britain, namely common or viviparous lizard (*Zootoca vivipara*), slow worm (*Anguis fragilis*), adder (*Vipera berus*) and grass snake (*Natrix natrix helvetica*), are listed in Schedule 5 of the *Wildlife and Countryside Act 1981* (as amended) and are afforded limited protection under Section 9 of this Act. This makes it an offence, *inter alia*, to:

- intentionally kill or injure any of these species.

² The other native species of British reptile (sand lizard and smooth snake) receive a higher level of protection under the *Habitats Regulations 1994* and (in England and Wales only) the *Wildlife and Countryside Act 1981* (as amended). However, the distribution of these species are restricted to only a very few sites. All marine turtles (*Cheloniidae* and *Dermochelyidae*) are also protected.