



**2007-2008**  
*Neighbourhood and  
Community Champions:  
The Role of Elected Members*

**2006-2007**  
*Improving Rural Services  
Empowering Communities*

**2005-2006**  
*Getting Closer to Communities*

# **European Protected Species in South Somerset**

## **Strategic Ecological Assessment**

## **Potential Strategic Housing Sites**

**November 2009**



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## 1. Introduction

- 1.1 This report sets out the findings of a strategic ecological assessment of the strategic housing sites that will be considered in the South Somerset District Council Local Development Framework planning documents. The aim of the report is to inform the selection of site/locations to be allocated in the South Somerset District Council Core Strategy and resultant master planning exercises.
- 1.2 For further details of European Protected Species (EPS) in South Somerset reference should be made to the '*The Distribution of European Protected Species in South Somerset*' report (SCC/SERC, 2009). The report provides background information on the legislative and policy requirements for EPS in a planning context. It also provides information on the general distribution of EPS and mapping of significant populations around towns in the district.
- 1.3 This report consists of a strategic assessment only and does not do away with the requirement to produce detailed ecological impact assessments for each site on the part of the developer.

## 2. Potential Strategic Sites

### Yeovil – Strategic Sites

2.1 In terms of identifying specific sites, 6 potential major 'strategic' sites around Yeovil ranging from approx 1200 to 6300 homes have been identified in the Strategic Housing Land Availability Assessment (SHLAA), and used in the recent study carried out by Somerset County Council's transport policy team. Table 1 identifies the sites and the potential impacts on EPS. The identification of species considered are taken from Table 3 in the 'The Distribution of European Protected Species in South Somerset' report (SCC/SERC, 2009). These sites are shown on Map1.

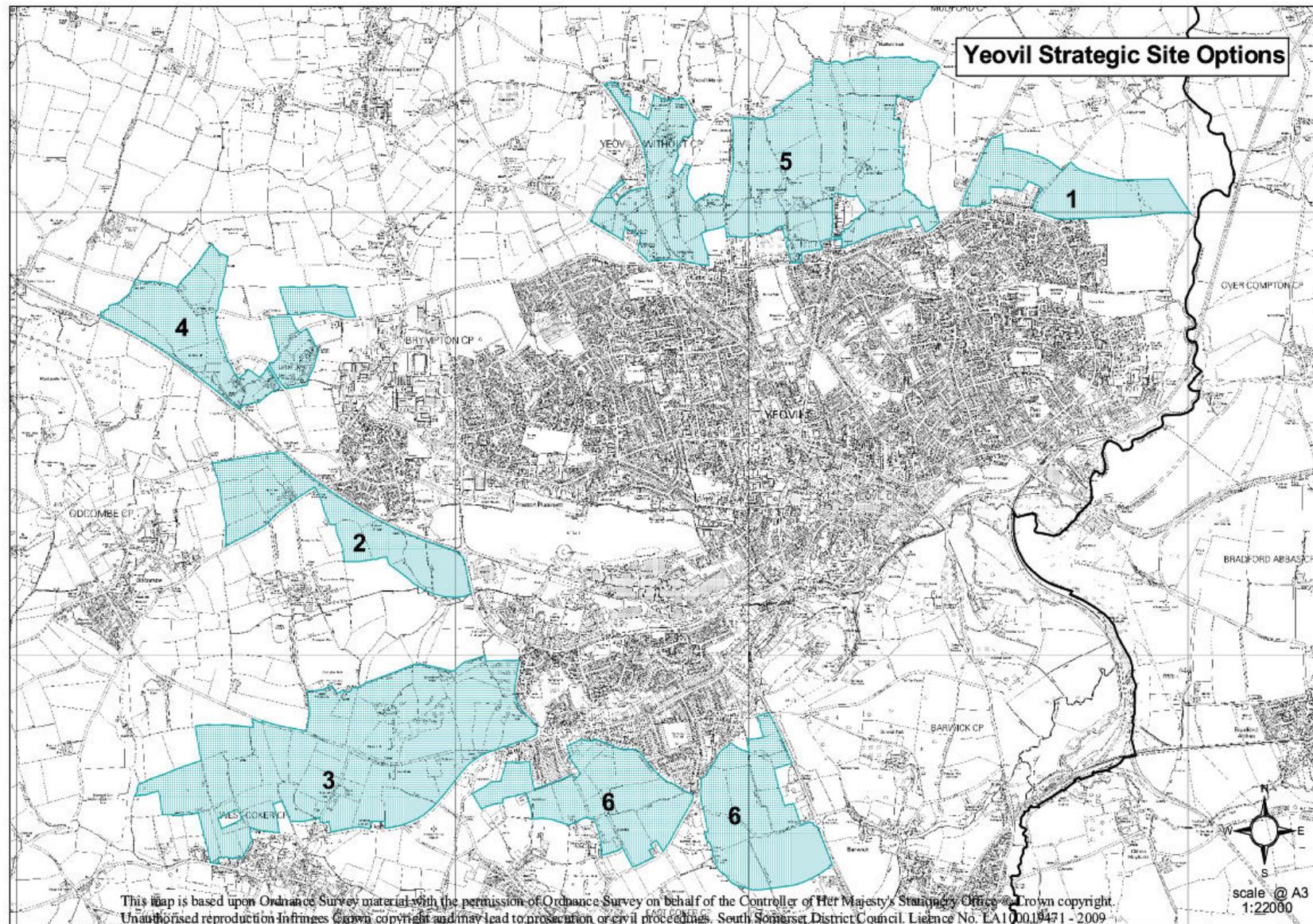
2.2 The sites for Yeovil are named for the purposes of this report as:

1. East Mudford Hill
2. Brympton Park
3. Perry's/ Camp Hill to West Coker
4. Lufton Hill
5. Yeovil North
6. Yeovil South

**Table 1: Yeovil Strategic Sites - European Protected Species Presence**

Common Name	Scientific Name	Sites					
		1	2	3	4	5	6
Otter	<i>Lutra lutra</i>	√					
Common Dormouse	<i>Muscardinus avellanarius</i>				√		
Greater Horseshoe Bat	<i>Rhinolophus ferrumequinum</i>				√		
Lesser Horseshoe Bat	<i>Rhinolophus hipposideros</i>		√	√	√		
Daubenton's Bat	<i>Myotis daubentonii</i>	√					
Serotine Bat	<i>Eptesicus serotinus</i>			√		√	√
Noctule Bat	<i>Nyctalus noctula</i>						
Pipistrelle Bats	<i>Pipistrellus spp.</i>		√		√		√
Brown Long-eared Bat	<i>Plecotus auritus</i>		√	√			

Map 1: Strategic Sites - Yeovil



### **Chard - Strategic Sites**

2.3 The emerging Chard Regeneration Framework and SHLAA have identified 4/5 potential major sites at Chard, along with several smaller sites, including the Chard Key Site of around 1300 homes in the adopted Local Plan. Table 2 identifies the sites and the potential impacts on EPS. The identification of species considered are taken from Table 3 in the 'The Distribution of European Protected Species in South Somerset' report (SCC/SERC, 2009). These sites are shown on Map 2.

2.4 The sites for Chard are named for the purposes of this report as:

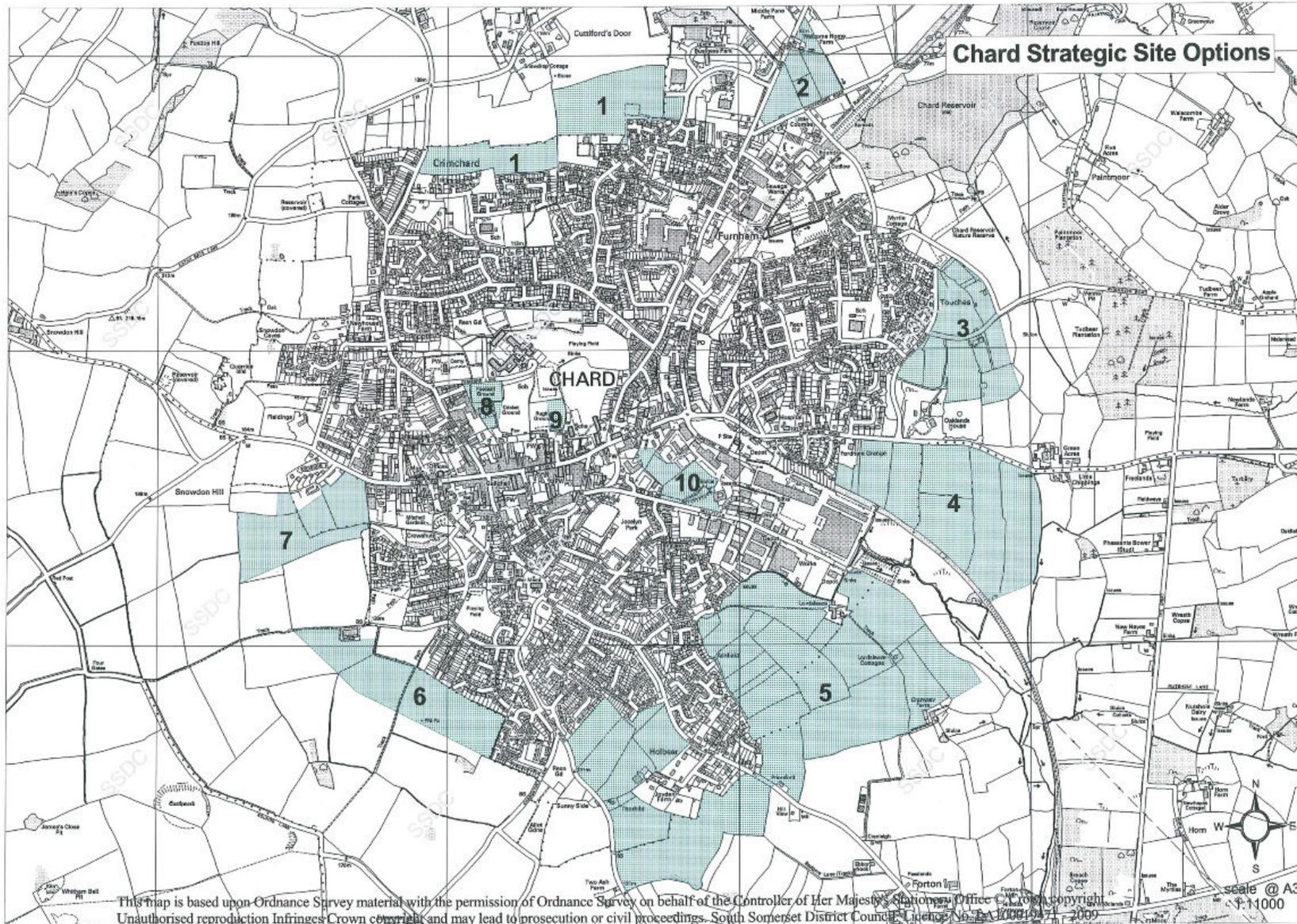
1. Crimchard/ Cuttiford
2. Chaffcombe Road
3. Avishayes Road
4. Fordham Grange
5. Tatworth Road to Lordleaze
6. South Chard
7. Shepherd's Lane
8. Football Ground
9. Rugby Ground
10. Millfield

**Table 2: Chard Strategic Sites – European Protected Species Presence**

Common Name	Scientific Name	Sites									
		1	2	3	4	5	6	7	8	9	10
Otter	<i>Lutra lutra</i>		√	√							
Common Dormouse	<i>Muscardinus avellanarius</i>				√	√					
Greater Horseshoe Bat	<i>Rhinolophus ferrumequinum</i>										
Lesser Horseshoe Bat	<i>Rhinolophus hipposideros</i>										
Natterer's Bat	<i>Myotis nattereri</i>										
Pipistrelle Bats	<i>Pipistrellus spp.</i>	√			√				√	√	√
Brown Long-eared Bat	<i>Plecotus auritus</i>				√	√					

2.5 Each site identified with a potential impact is assessed in the following section.

Map 2: Strategic Sites - Chard



## 3. Assessment

### **Methodology**

- 3.1 The assessment for European Protected Species is given in the tables in this chapter. An indication of the importance of the impact is given. A significant impact is one that is likely to have an effect on a population of EPS (either listed under Annex II or Annex IV of the Habitats Directive) for which Favourable Conservation Status has to be maintained or enhanced, i.e. the habitats to support that population, and its local distribution.
- 3.2 The likelihood of an impact is indicated in the table as follows:
- Certain/ Near Certain – probability estimated at 95% chance or higher
  - Probable – probability estimated above 50% but below 95%
  - Unlikely – probability estimated above 5% but below 50%
  - Extremely unlikely – probability estimated at less than 5%
- (IEEM, 2006)
- 3.3 Mitigation and/ or compensatory measures that are likely to be required in developing a site are also given. Consideration of these recommendations should be included in Masterplanning sites.
- 3.4 Mitigation is measures taken to avoid or reduce a negative impact. This may include locating the development away from the sensitive feature on the site or works on site that prevent impacts off site, such as to watercourses.
- 3.5 Compensation is measures taken to make up for the loss of, or permanent damage to, biological features through the provision of replacement. Any replacement will be similar to, or with appropriate management in perpetuity, have the ability to reproduce the ecological functions and conditions for that lost. Compensation could also have a 'habitat multiplier' applied to reflect uncertainty; e.g. wetland could be compensated on a 2 for 1 basis or more (Briggs *et al*, 2008).
- 3.6 Where data is lacking the 'precautionary principle' will apply as the assessment concerns EPS, i.e. where data is lacking it assumed that it is a significant population or where there is uncertainty impacts are treated as adverse until proven otherwise. (European Commission, 2007)
- 3.7 The following tables give the assessment for each of the proposed strategic sites for Yeovil. Those sites listed in Table 1 with no potential impacts are not assessed.

**Assessment of Proposed Strategic Sites - Yeovil****Table 3: Yeovil Strategic Site Assessment**

Proposed Site	Feature Affected	Impact	Importance/ Likelihood of Impact	Mitigation	Compensation	Comment
1. East Mudford Hill	Otter ( <i>Lutra lutra</i> )	Disturbance	Not significant/ Extremely unlikely	None required	N/A	Would recommend tree planting at extreme eastern end of site near watercourse to enhance riverine habitat for otters.
	Daubenton's Bat ( <i>Myotis daubentonii</i> )	Fragmentation of flight lines due to street lighting	Significant/ Probable	Street lighting should be low-pressure sodium and directional away from the watercourse.  Trees should be planted at eastern end of site.	N/A	Daubenton's bats are a riverine species, which favour vegetated riverbanks. They are averse to artificial lighting, which could potentially affect foraging/commuting behaviour.

<b>Table 3: Yeovil Strategic Site Assessment</b>						
<b>Proposed Site</b>	<b>Feature Affected</b>	<b>Impact</b>	<b>Importance/ Likelihood of Impact</b>	<b>Mitigation</b>	<b>Compensation</b>	<b>Comment</b>
2. Brympton Park	Lesser Horseshoe Bat ( <i>Rhinolophus hipposideros</i> )	<p>Indirect and direct loss of prey producing habitat</p> <p>Loss or fragmentation of flight lines due to street lighting</p> <p>Disturbance from street lighting</p>	Significant/ Probable	<p>The whole southern site boundary would require a 20 metre buffer of woodland planting.</p> <p>Street lighting should be low-pressure sodium and directional away from the southern boundaries of the site.</p>	N/A	<p>There is likely to be direct loss of prey producing habitat from development and indirect loss from street lighting, which would attract prey species out of the surrounding countryside and thereby reduce the amount of food available in supporting the existing population.</p> <p>There is likely to be fragmentation of flight lines due to street lighting at the eastern end of the colonies foraging range, denying access to likely feeding areas.</p> <p>Lesser horseshoe bats are averse to artificial lighting levels above 0.5 Lux.</p>
	Pipistrelle Bats ( <i>Pipistrellus</i> spp.)	Loss of feeding habitat	Not significant/ Unlikely	Sufficient greenspace should be provided in the Masterplan for the site.	N/A	The site is within the foraging range of the maternity colony at Lufton Manor College. However, it is unlikely that foraging by members of the colony occurs on this site due to the presence of the A3088 on its northern boundary.

<b>Table 3: Yeovil Strategic Site Assessment</b>						
<b>Proposed Site</b>	<b>Feature Affected</b>	<b>Impact</b>	<b>Importance/ Likelihood of Impact</b>	<b>Mitigation</b>	<b>Compensation</b>	<b>Comment</b>
	Brown Long-eared Bat ( <i>Plecotus auritus</i> )	<p>Indirect and direct loss of prey producing habitat</p> <p>Loss or fragmentation of flight lines due to street lighting</p> <p>Disturbance from street lighting</p>	Significant/ Probable	<p>The whole southern site boundary would require a 20 metre buffer of woodland planting.</p> <p>Street lighting should be low-pressure sodium and directional away from the southern boundaries of the site.</p>	N/A	<p>There is likely to be direct loss of prey producing habitat from development and indirect loss from street lighting, which would attract prey species out of the surrounding countryside and thereby reduce the amount of food available in supporting the existing population.</p> <p>There is likely to be fragmentation of flight lines due to street lighting at the eastern end of the colonies foraging range, denying access to likely feeding areas.</p> <p>Brown long-eared bats are averse to artificial lighting levels.</p>

<b>Table 3: Yeovil Strategic Site Assessment</b>						
<b>Proposed Site</b>	<b>Feature Affected</b>	<b>Impact</b>	<b>Importance/ Likelihood of Impact</b>	<b>Mitigation</b>	<b>Compensation</b>	<b>Comment</b>
3. Perry's/ Camp Hill to West Coker	Lesser Horseshoe Bat ( <i>Rhinolophus hipposideros</i> )	Indirect and direct loss of habitat  Disturbance from street lighting	Significant/ Probable	The whole northern site boundary would require a 20 metre buffer of woodland planting.  Street lighting should be low- pressure sodium and directional away from the southern boundaries of the site.	An area of woodland planting north of the site to compensate for direct habitat loss within the site boundary.  Alternatively the site boundary could be altered to avoid direct loss of habitat.	Around Leaze and to the east of Leaze there is likely to be direct loss of habitat from development and indirect from street lighting which would attract prey species out of the surrounding countryside and thereby reduce the amount available in supporting the existing population.  There is likely to be some behavioural changes due to street lighting at the southern end of the colonies foraging range, denying access to likely feeding areas.  Lesser horseshoe bats are averse to artificial lighting levels above 0.5 Lux.

<b>Table 3: Yeovil Strategic Site Assessment</b>						
<b>Proposed Site</b>	<b>Feature Affected</b>	<b>Impact</b>	<b>Importance/ Likelihood of Impact</b>	<b>Mitigation</b>	<b>Compensation</b>	<b>Comment</b>
	Serotine Bat ( <i>Eptesicus serotinus</i> )	Loss of feeding habitat	Significant/ Probable	Some mitigation could be provided through retention of woodland areas in connection with unimproved grassland but is unlikely to replace that lost.	Compensation could be provided in management of agricultural land to the south of the A30 and some woodland planting. However, this would not be available if Site 6 is developed.	<p>Serotine bats are likely to be feeding over pasture, especially adjoining woodland, in this area around Dry Copse, The Rookery and Perry's Hill. Loss of habitat would potentially threaten the maintenance of the current population.</p> <p>There is likely to be cumulative effects if Site 6 is also developed.</p>

<b>Table 3: Yeovil Strategic Site Assessment</b>						
<b>Proposed Site</b>	<b>Feature Affected</b>	<b>Impact</b>	<b>Importance/ Likelihood of Impact</b>	<b>Mitigation</b>	<b>Compensation</b>	<b>Comment</b>
	Brown Long-eared Bat ( <i>Plecotus auritus</i> )	<p>Indirect and direct loss of prey producing habitat</p> <p>Disturbance from street lighting</p> <p>Loss or fragmentation of flight lines between colonies</p>	Significant/ Near certain	Although mitigation would be possible as detailed for lesser horseshoe bats it would not be possible to maintain links between another brown long-eared colony located in the Bincombe Hill area	An area of woodland planting north of the site boundary to compensate for direct habitat loss within the site boundary. However, the severance caused by developing this site could not be compensated for.	<p>Around Leaze and to the east of Leaze there is likely to be direct loss of habitat from development and indirect from street lighting which would attract prey species out of the surrounding countryside and thereby reduce the amount available in supporting the existing population.</p> <p>There is likely to be some behavioural changes due to street lighting at the southern end of the colonies foraging range, denying access to likely feeding areas.</p> <p>Brown long-eared bats are averse to artificial lighting levels.</p> <p>Two neighbouring colonies would be severed by the proposed development and therefore genetic exchange would be reduced</p>

<b>Table 3: Yeovil Strategic Site Assessment</b>						
<b>Proposed Site</b>	<b>Feature Affected</b>	<b>Impact</b>	<b>Importance/ Likelihood of Impact</b>	<b>Mitigation</b>	<b>Compensation</b>	<b>Comment</b>
4. Lufton Hill	Common Dormouse ( <i>Muscardinus avellanarius</i> )	Loss and/or fragmentation of habitat  Disturbance from artificial lighting	Significant/ Near certain	<p>The Masterplan should retain and buffer hedgerows and copses in the Lufton area of the site and along the A3088. This could mean that the Lufton land parcels be omitted from the site area altogether.</p> <p>Fragmentation of hedge lines should also be avoided, which could mean that road access to the site is from the Thorne Cross to Balls Hill road. Estate roads should also not sever hedge lines in the Lufton area.</p> <p>Street lighting should be low-pressure sodium and directional away from the southern boundaries of the site.</p>	N/A	<p>Dormice are likely to be present in hedgerows and copses from Lufton Manor College to Lufton House and surroundings. They are likely to be affected by development on the Lufton key site. Therefore there would be cumulative impacts. Common dormice are an aboreal species and will not come to ground. Therefore, cutting hedgerow lines will fragment the population; reduce the interchange of individuals and genetic variability in the colony, which could result in extinction of component parts.</p> <p>Common dormouse is a nocturnal species and behaviour would be affected by artificial lighting, and may reduce the amount of active time hence the time spent foraging.</p> <p>Translocation is not favoured</p>

Table 3: Yeovil Strategic Site Assessment						
Proposed Site	Feature Affected	Impact	Importance/ Likelihood of Impact	Mitigation	Compensation	Comment
	Greater and Lesser Horseshoe Bats ( <i>Rhinolophus</i> spp.)	<p>Disturbance to roost</p> <p>Loss of and/or fragmentation of habitat</p> <p>Indirect and direct loss of prey producing habitat</p> <p>Disturbance from street lighting</p>	<p>Significant/ Certain</p> <p>(This is based on the assumption that the Lufton Manor College roost site is being used by these species – a survey in December 2004 (Marlow, 2004) identified the suitability of the site for these species but no individuals were recorded. However, the survey was carried out in the winter when horseshoe bats would be using hibernation roosts and therefore are unlikely to be present.)</p>	<p>Mitigation may not be possible as the site occupies large areas of prey supporting habitat as well as impacting on flight lines.</p>	<p>Not possible as the roost site will be isolated by the development</p>	<p>Increase light levels at the roost site will affect behaviour and is likely to delay emergence and hence reduce time spent foraging. Lesser horseshoe bats are averse to artificial lighting levels above 0.5 Lux. Horseshoe bats require vegetated and unfragmented flight lines out from the roost site as elsewhere to access feeding areas.</p> <p>There is likely to be significant direct loss of prey producing habitat from development and indirect loss from street lighting, which would attract prey species out of the surrounding countryside and thereby reduce the amount of food available in supporting the existing population.</p> <p>There is likely to be fragmentation of flight lines through Lufton colonies foraging range, denying access to likely feeding areas.</p> <p>There is a need for surveys of this roost prior to allocating the site.</p>

<b>Table 3: Yeovil Strategic Site Assessment</b>						
<b>Proposed Site</b>	<b>Feature Affected</b>	<b>Impact</b>	<b>Importance/ Likelihood of Impact</b>	<b>Mitigation</b>	<b>Compensation</b>	<b>Comment</b>
	Pipistrelle Bats ( <i>Pipistrellus</i> spp.)	Loss of feeding habitat  Disturbance to roost	Significant/ Certain	<p>The Masterplan should retain and buffer hedgerows and copses in the Lufton area of the site and along the A3088. This could mean that the Lufton land parcels be omitted from the site area altogether.</p> <p>Street lighting should be low-pressure sodium and directional away from hedgerows and copses.</p> <p>Sufficient connected semi natural greenspace should be provided in the Masterplan for the site.</p>	N/A	<p>A large pipistrelle roost was identified at Lufton Manor College in a survey carried out in December 2004 (Marlow, 2004).</p> <p>An increased light level at the roost site is likely to affect behaviour by delaying emergence and hence reduce time spent foraging.</p> <p>Pipistrelle bats require darkened flight routes but will feed around street lights. They are also known to cross gaps in flight lines up to 150 to 200 metres.</p>

<b>Table 3: Yeovil Strategic Site Assessment</b>						
<b>Proposed Site</b>	<b>Feature Affected</b>	<b>Impact</b>	<b>Importance/ Likelihood of Impact</b>	<b>Mitigation</b>	<b>Compensation</b>	<b>Comment</b>
5. Yeovil North	Serotine Bat ( <i>Eptesicus serotinus</i> )	Loss of feeding habitat	Not significant/ Near certain	Some mitigation could be provided through retention of woodland areas in connection with adjacent unimproved grassland but is unlikely to replace that lost.  Sufficient connected semi natural greenspace should be provided in the Masterplan for the site.	N/A	There are small roosts immediately to the north of the site at Sock Hill and Yeovil Marsh.  Serotine bats are likely to be feeding over pasture, especially adjoining woodland, in the Marsh Hill area. Loss of habitat would potentially threaten the maintenance of the current population.
6. Yeovil South	Serotine Bat ( <i>Eptesicus serotinus</i> )	Loss of feeding habitat	Not significant/ Probable	The Masterplan design should allow for semi natural greenspace corridors to run to North Coker and along the northern boundary of the site consisting of tree planting with unimproved grassland	N/A	There is a serotine roost in the Helena Road area on the western end of the proposed development site. Serotine bats from this site are likely to be feeding over pasture towards North Coker, to the west north of the A30 and around Constitution Hill to the east.

<b>Table 3: Yeovil Strategic Site Assessment</b>						
<b>Proposed Site</b>	<b>Feature Affected</b>	<b>Impact</b>	<b>Importance/ Likelihood of Impact</b>	<b>Mitigation</b>	<b>Compensation</b>	<b>Comment</b>
	Pipistrelle Bats ( <i>Pipistrellus</i> spp.)	Loss of feeding habitat	Not significant/ Probable	The Masterplan design should allow for semi natural greenspace west of the A37	N/A	There are two large maternity roosts in the Southwood area which may have members foraging to the west of the A37. However, this area seems to be of arable fields and therefore of limited prey potential.

**Assessment of Proposed Strategic Sites - Chard**

<b>Table 4: Chard Strategic Site Assessment</b>						
<b>Proposed Site</b>	<b>Feature Affected</b>	<b>Impact</b>	<b>Importance/ Likelihood of Impact</b>	<b>Mitigation</b>	<b>Compensation</b>	<b>Comment</b>
1. Crimchard/ Churchinford	Pipistrelle Bats ( <i>Pipistrellus</i> spp.)	Loss of feeding habitat  Fragmentation of flight lines	Not significant/ Near certain  Significant/ Near certain	The hedge line running north to Cuttiford's Door should be maintained in the Masterplan design.	N/A	There is a significant colony of pipistrelle bats in the Glanvill Road area, of which members are likely to be foraging north of the town. The fields identified are arable and of little value to the bats. However, there is a strong hedge line running north to Cuttiford's Door which is likely to be used as a flight line. Pipistrelle bats require darkened flight routes but will feed around street lights. They are also known to cross gaps in flight lines up to 150 to 200 metres.
2. Chaffcombe Road	Otter ( <i>Lutra lutra</i> )	Disturbance	Not significant/ Unlikely	Accessible natural greenspace should be provided within the development to help offset increased access to Chard Reservoir.	N/A	The site provides little suitable habitat for otters to rest or for the provision of holts.

<b>Table 4: Chard Strategic Site Assessment</b>						
<b>Proposed Site</b>	<b>Feature Affected</b>	<b>Impact</b>	<b>Importance/ Likelihood of Impact</b>	<b>Mitigation</b>	<b>Compensation</b>	<b>Comment</b>
3. Avishayes Road	Otter ( <i>Lutra lutra</i> )	Disturbance	Not significant/ Unlikely	Accessible natural greenspace should be provided within the development to help offset increased access to Chard Reservoir. The wooded area at the north of the site should be retained within the Masterplan	N/A	The site provides little suitable habitat for otters to rest or for the provision of holts.

<b>Table 4: Chard Strategic Site Assessment</b>						
<b>Proposed Site</b>	<b>Feature Affected</b>	<b>Impact</b>	<b>Importance/ Likelihood of Impact</b>	<b>Mitigation</b>	<b>Compensation</b>	<b>Comment</b>
4. Fordham Grange	Common Dormouse ( <i>Muscardinus avellanarius</i> )	Loss and/or fragmentation of habitat  Disturbance from artificial lighting	Significant/ Near certain	<p>It is considered that as dormice are likely to require all hedgerows within the site and development would entail loss and fragmentation of these hedgerows that mitigation would not be possible on site.</p> <p>If translocation is permissible under licence by Natural England the hedgerow along the southern boundary of the site needs to be retained and street lighting should be low-pressure sodium and directional away from the southern boundary of the site.</p>	If translocation is permitted woodland, hedgerows and scrub would need to be planted offsite and be functionally ready to receive displaced dormice at the time of development.	<p>Dormice are likely to be present in hedgerows across the site and would be required to maintain the current population. Common dormice are an aboreal species and will not come to ground. Therefore, cutting hedgerow lines will fragment the population; reduce the interchange of individuals and genetic variability in the colony, which could result in extinction of component parts.</p> <p>Common dormouse is a nocturnal species and behaviour would be affected by artificial lighting, and may reduce the amount of active time hence the time spent foraging.</p> <p>There are likely to be cumulative impacts if Site 5 were also to be developed.</p> <p>Translocation is not favoured by Natural England as mitigation (Bright <i>et al</i>, 2006)</p>

<b>Table 4: Chard Strategic Site Assessment</b>						
<b>Proposed Site</b>	<b>Feature Affected</b>	<b>Impact</b>	<b>Importance/ Likelihood of Impact</b>	<b>Mitigation</b>	<b>Compensation</b>	<b>Comment</b>
	Pipistrelle Bats ( <i>Pipistrellus</i> spp.)	Loss of feeding habitat  Fragmentation of flight lines	Significant/ Near certain	It is probably not possible to fully mitigate fully for the loss of foraging habitat and compensatory habitat creation would be needed. The fields nearest the urban edge should be left undeveloped and significant natural greenspace included in the Masterplan design	Not possible as this would be located further from the roost site and therefore out of range of the roost site, or at least requiring the expenditure of energy by bats and reducing the amount of time available to forage and therefore effecting the viability of the roost.	There is a maternity colony in the Nursery Gardens area of Chard. The main foraging area for this colony is likely to be that of the potential site allocation. However, the population of the colony is unrecorded. Even so the 'precautionary principle' applies.

<b>Table 4: Chard Strategic Site Assessment</b>						
<b>Proposed Site</b>	<b>Feature Affected</b>	<b>Impact</b>	<b>Importance/ Likelihood of Impact</b>	<b>Mitigation</b>	<b>Compensation</b>	<b>Comment</b>
	Brown Long-eared Bat ( <i>Plecotus auritus</i> )	<p>Indirect and direct loss of prey producing habitat</p> <p>Disturbance from street lighting</p> <p>Loss or fragmentation of flight lines</p>	Significant/ Near certain	It is probably not possible to fully mitigate fully for the loss of foraging habitat and compensatory habitat creation would be needed	An area of woodland planting south of the site around the area north of Cranway Farm to the cycle route/ old railway compensate for direct habitat loss within the site boundary.	<p>There is likely to be direct loss of habitat from development and indirect from street lighting which would attract prey species out of the surrounding countryside and thereby reduce the amount available in supporting the existing population in the southern area of the site.</p> <p>There is likely to be some behavioural changes due to street lighting at the northern end of the colonies foraging range, denying access to likely feeding areas. Brown long-eared bats are averse to artificial lighting levels.</p> <p>There would be significant cumulative impacts if Site 5 were also to be developed</p>

<b>Table 4: Chard Strategic Site Assessment</b>						
<b>Proposed Site</b>	<b>Feature Affected</b>	<b>Impact</b>	<b>Importance/ Likelihood of Impact</b>	<b>Mitigation</b>	<b>Compensation</b>	<b>Comment</b>
5. Tatworth Road to Lordleaze	Common Dormouse ( <i>Muscardinus avellanarius</i> )	Loss and/or fragmentation of habitat  Disturbance from artificial lighting	Not significant/ Near certain	The Masterplan should retain and buffer hedgerows and copses along the northern boundary of the site.  Street lighting should be low-pressure sodium and directional away from the northern boundary of the site.	N/A	Dormice are likely to be present in hedgerows across the site and would be required to maintain the current population.  Common dormice are an arboreal species and will not come to ground. Therefore, cutting hedgerow lines will fragment the population; reduce the interchange of individuals and genetic variability in the colony, which could result in extinction of component parts.  Common dormouse is a nocturnal species and behaviour would be affected by artificial lighting, and may reduce the amount of active time hence the time spent foraging.  However, there are likely to be cumulative impacts if Site 4 were also to be developed.

<b>Table 4: Chard Strategic Site Assessment</b>						
<b>Proposed Site</b>	<b>Feature Affected</b>	<b>Impact</b>	<b>Importance/ Likelihood of Impact</b>	<b>Mitigation</b>	<b>Compensation</b>	<b>Comment</b>
	Brown Long-eared Bat ( <i>Plecotus auritus</i> )	<p>Indirect and direct loss of prey producing habitat</p> <p>Disturbance from street lighting</p> <p>Loss or fragmentation of flight lines</p> <p>Disturbance to roost site</p>	Significant/ Near certain	<p>As the development would isolate a maternity roost from its foraging area mitigation should exclude the fields north of the Lordleaze Hotel to Cranway Farm track</p> <p>The northern boundary or southern edge of the track of the allocation as amended above should also be planted with a woodland buffer.</p> <p>Street lighting should be low-pressure sodium and directional away from the woodland buffer along the northern boundary of the site.</p>	N/A	<p>There is likely to be direct loss of habitat from development and indirect from street lighting which would attract prey species out of the surrounding countryside and thereby reduce the amount available in supporting the existing population in the southern area of the site.</p> <p>There is likely to be some behavioural changes due to street lighting at the northern end of the colonies foraging range, denying access to likely feeding areas. Brown long-eared bats are averse to artificial lighting levels.</p> <p>There would be significant cumulative impacts if Site 4 were also to be developed</p>

<b>Table 4: Chard Strategic Site Assessment</b>						
<b>Proposed Site</b>	<b>Feature Affected</b>	<b>Impact</b>	<b>Importance/ Likelihood of Impact</b>	<b>Mitigation</b>	<b>Compensation</b>	<b>Comment</b>
8. Football Ground 9. Rugby Ground	Pipistrelle Bats ( <i>Pipistrellus</i> spp.)	Loss of feeding habitat Fragmentation of flight lines	Not significant/ Near certain	Street lighting should be low-pressure sodium and directional away from the site boundaries.	N/A	<p>There is a significant colony of pipistrelle bats in the Glanvill Road area, of which members are likely to be foraging in fields in the Holyrood area making use of mature hedgerows as flight lines. However, the fields identified are used for amenity sports grounds and of little value to the bats.</p> <p>Pipistrelle bats require darkened flight routes but will feed around street lights. They are also known to cross gaps in flight lines up to 150 to 200 metres.</p>

<b>Table 4: Chard Strategic Site Assessment</b>						
<b>Proposed Site</b>	<b>Feature Affected</b>	<b>Impact</b>	<b>Importance/ Likelihood of Impact</b>	<b>Mitigation</b>	<b>Compensation</b>	<b>Comment</b>
10. Millfield	Pipistrelle Bats ( <i>Pipistrellus</i> spp.)	Loss of feeding habitat  Fragmentation of flight lines	Significant/ Near certain	Not possible as development would take all of area utilised by bats. Natural greenspace in the Masterplan for the site is unlikely to compensate for habitat lost and off site compensatory habitat planting would be needed.	Not possible unless Site 4 remains undeveloped	There is a significant colony of pipistrelle bats in the Nursery Road area, of which members are likely to be foraging in fields in the Millfield area making use of mature hedgerows as flight lines. The fields allocated for the proposed development are likely to support prey species. Although members of this colony are likely to foraging to the east they are also likely to be making use of these fields and hedgerows, at least in some stage of the year. Loss of this area therefore may have an effect on maintenance of the population.  There is likely to be cumulative impacts if Site 4 were also to be developed.

## 4. Recommendations

### **Introduction**

- 4.1 This chapter provides a summary of the outcomes of the ecological assessment tables from Chapter 3 and provides recommendations on which of the potential strategic sites would have effects on the viability of populations of European Protected Species and thereby allow planners to avoid impacts in the first instance. A ranking of sites for each settlement is given in terms of least and most impacts on EPS.
- 4.2 Outline details for mitigation and compensation is also summarised in order that developers can consider building these in at an early stage of design in Masterplanning sites.

### **Yeovil Proposed Strategic Sites**

- 4.3 The following Table sets out the recommendations for the potential strategic sites for Yeovil to avoid impacts on populations of European Protected Species providing a synthesis of the mitigation and/or compensatory measures needed for each feature. This then should guide the Masterplan design of the site. For further detail of the mitigation and compensation needed refer back to Table 2 in Chapter 3. Recommendations are given for the guidance of progress into Local Development Framework.

<b>Table 4: Proposed Strategic Sites - Yeovil.</b>				
<b>Proposed Site</b>	<b>Features Affected</b>	<b>Mitigation</b>	<b>Compensation</b>	<b>Recommendation</b>
1. East Mudford Hill	Otter Daubenton's Bat	Directional street lighting  Tree planting on E. boundary	None	Preferred
2. Brympton Park	Lesser Horseshoe Bat  Pipistrelle Bat  Brown Long-eared Bat	Buffer of 20 metre of woodland planting on S. boundary  Directional street lighting	None	Possible with mitigation as stated. Planting should be functional before development on site starts.
3. Perry's/ Camp Hill to West	Serotine Bat Brown	Buffer of 20 metre of woodland	No – due to relative locations of	Possible but fields north of the Odcombe Road

**Table 4: Proposed Strategic Sites - Yeovil.**

<b>Proposed Site</b>	<b>Features Affected</b>	<b>Mitigation</b>	<b>Compensation</b>	<b>Recommendation</b>
Coker	Long-eared Bat	planting on N. boundary  Directional street lighting  Retention of woodland areas in connection with pasture	populations of brown long-eared bats. Therefore, site boundary should be amended.	should be omitted from the site allocation.
4. Lufton Hill	Common Dormouse  Greater Horseshoe Bat  Lesser Horseshoe Bat  Pipistrelle Bats	Depending on presence of horseshoe bats:  Retention and buffering of hedgerows and copses  Avoidance of severance of hedgerows  Directional street lighting	Not applicable	Do not progress until further investigation has been made into the status of the Lufton Manor Cottage roost for horseshoe bats. If present it is recommended that this site be omitted from further consideration.
5. Yeovil North	Serotine Bat	Retention of woodland areas and adjacent pasture  Sufficient connected natural greenspace in Masterplan	Not applicable	Preferred provided habitat retention and natural greenspace included in Masterplan

**Table 4: Proposed Strategic Sites - Yeovil.**

<b>Proposed Site</b>	<b>Features Affected</b>	<b>Mitigation</b>	<b>Compensation</b>	<b>Recommendation</b>
6. Yeovil South	Serotine Bat Pipistrelle Bats	Semi natural greenspace corridor to North Coker  Tree planting with unimproved grassland on N. boundary	Not applicable	Preferred provided natural greenspace included as stated in mitigation in Masterplan

4.4 The following ranks sites in terms of sustainability with regard to European Protected Species with the most preferred at the top of the list:

- 1. East Mudford Hill
- 6. Yeovil South
- 5. Yeovil North
- 3. Perry's/ Camp Hill to West Coker (south of Odcombe Road)
- 2. Brympton Park
- 3. Perry's/ Camp Hill to West Coker (north of Odcombe Road)
- 4. Lufton Hill

### **Chard Proposed Strategic Sites**

4.5 Table 5 sets out the recommendations for the proposed strategic sites for Chard to avoid impacts on populations of European Protected Species providing a synthesis of the mitigation and/or compensatory measures needed for each feature. This then should guide the Masterplan design of the site. For further detail of the mitigation and compensation needed refer back to Table 3 in Chapter 3. Recommendations are given for the guidance of progress into Local Development Framework.

<b>Table 5: Proposed Strategic Sites – Chard.</b>				
<b>Proposed Site</b>	<b>Features Affected</b>	<b>Mitigation</b>	<b>Compensation</b>	<b>Recommendation</b>
1. Crimchard/ Churchinford	Pipistrelle Bats	Retention of hedgerow N. to Cuttisford's Door	Not applicable	Preferred
2. Chaffcombe Road	Otter	Provision of sufficient natural greenspace in Masterplan	Not applicable	Preferred
3. Avishayes Road	Otter	Provision of sufficient natural greenspace in Masterplan	Not applicable	Preferred
4. Fordham Grange	Common Dormouse  Pipistrelle Bats  Brown Long-eared Bats	Not possible	Translocation	It is recommended that this site be not brought forward due to uncertainty of Natural England permitting licensing for translocation of Dormouse. There are also significant impacts on local bat populations.

**Table 5: Proposed Strategic Sites – Chard.**

<b>Proposed Site</b>	<b>Features Affected</b>	<b>Mitigation</b>	<b>Compensation</b>	<b>Recommendation</b>
5. Tatworth Road to Lordleaze	Common Dormouse  Brown Long-eared Bats	Omit fields to north of track from Lorleaze Hotel to Cranway Farm  Buffer hedgerows and copses on N. boundary  Directional street lighting	Not applicable	Possible if fields omitted from site area at north and inclusion of mitigation as described
6. South Chard	None significantly affected	Not applicable	Not applicable	Preferred
7. Shepherd's Lane	None significantly affected	Not applicable	Not applicable	Preferred
8. Football Ground	Pipistrelle Bats	Directional street lighting	Not applicable	Preferred
9. Rugby Ground	Pipistrelle Bats	Directional street lighting	Not applicable	Preferred
10. Millfield	Pipistrelle Bats	Not possible	Not possible	Do not progress until further investigation has been made into the status of the site in supporting local pipistrelle bat colonies is ascertained.

4.6 The following ranks sites in Chard in terms of sustainability with regard to European Protected Species with the most preferred at the top of the list:

- 6. South Chard
- 7. Shepherd's Lane
- 9. Rugby Ground
- 8. Football Ground
- 1. Crimchard/ Churchinford
- 5. Tatworth Road to Lordleaze (less
- 2. Chaffcombe Road
- 3. Avishayes Road
- 10. Millfield
- 4. Fordham Grange

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