

How Bank Farm, Egremont Proposed housing development

Preliminary Ecological Appraisal





A report by Rigby Jerram For Gleason Homes 31 July 2019 Rigby Jerram Ecological Consultants 4 Bankfield

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1. Introduction

This is a preliminary ecological appraisal of proposals for a housing development of 128 homes on land at How Bank Farm, Egremont, Cumbria. The key objectives of this preliminary appraisal are to identify:

- the likely ecological constraints associated with the project;
- any mitigation measures which may be required;
- any additional surveys which might be required to inform an Ecological Impact Assessment;
 and
- any opportunities offered by the project to deliver ecological enhancements.

2. Methodology

2.1. Desk study

A desk study was carried out to identify any international, national or local nature conservation designations within or near to the Site and to obtain and evaluate any relevant existing ecological information. The study area for the desk study extended to 2km from the approximate centre of the Site (Grid Reference NY 000 110).

2.2. Phase 1 ecological habitats survey

Vegetation within the site was surveyed and mapped in accordance with the JNCC Phase 1 Habitat Survey Classification at a scale of 1:2,500. Vegetation boundaries were checked using Google Earth aerial photos. Written descriptions of the vegetation types is given, including the principal component species of the vegetation, together with an assessment of their abundance using the DAFOR (Dominant Abundant Frequent Occasional Rare) scale.

2.3. Bat Roost Potential

Table 1: Bat Roost Potential in Trees

Roost Potential	Criteria
High	Trees with many cracks and holes or other potential roost features, with some of them high up
Medium	Trees with a few potential roost features
Low	Trees with no suitable potential roost features
Roost features:	 Woodpecker holes Rot holes where branches have been removed Loose bark, trunk and branch splits, snags and cracks Dense epicormic growth Dense ivy and other dense climbers such as honeysuckle Hollow sections of trunk, branches and roots Cavities beneath old root buttresses and coppice stools Bat or bird boxes



The bat roost potential of trees within the site were assessed for bat roost potential using the criteria detailed in Table 1.

2.4. Hedgerows

Hedgerows within the extension area have been assessed using the Hedgerow Evaluation and Grading System (HEGS, Clements and Tofts 1992). Table 2 shows the grading system, Appendix 2 shows a record and evaluation sheet.

Table 2 Hedgerow Evaluation and Grading System

Grade	Ecological Value
Grade 1	High to very high value
Grade 2	Moderately high to high value
Grade 3	Moderate value
Grade 4	Low value

2.5. Assessment

Assessment of ecological value and the significance of impacts follows the guidance given in the Chartered Institute of Ecology and Environmental Management (CIEEM) Guidelines for Preliminary Ecological Appraisal, 2nd edition, 2017.

3. Baseline Conditions

3.1. Desk study

Designated sites

Figure 1 shows the designated sites present within 2km of the application boundary. Florence Mine SSSI lies 1.48km east of the site and is designated for its geological features. Clints Quarry SSSI lies 1.16km north of the proposed development and is designated for its calcareous and neutral grassland and geological features. Additionally the River Ehen (Ennerdale Water to Keekle Confluence) Site of Special Scientific Interest (SSSI) and River Ehen Special Area of Conservation (SAC) lies 2.1km north-east of the proposed development. The River Ehen SAC and SSSI are both designated for the river's population of freshwater pearl mussel *Margaritifera margaritifera*.

There are four Cumbria Wildlife Sites (CWS) within two kilometres of the proposed development. The reasons for their designation are given in Table 3.

Table 3: Cumbria Wildlife Sites

Site Name	Description	Distance from Site
River Ehen Ponds	A series of ponds with tall fen vegetation.	1.46km
Longlands Lake	A flooded mine of importance for breeding birds.	1.72km
Fish Hatcheries	Ponds with great crested newts, aquatic invertebrates and aquatic and emergent plants.	1.43km



Table 3: Cumbria Wildlife Sites

Site Name		Distance from Site
	A pond of importance for great crested newt and other amphibians and aquatic and marginal vegetation.	1.94km

Rare and protected species

Records from the Cumbria Biodiversity Records Centre are shown in Map 2 and Table 5. Great crested newt are recorded from ponds in Clints Quarry, the River Ehen Ponds, Fish Hatcheries and Oxenriggs Pond CWSs. All four sites are over one kilometre from the proposed development. Common lizard and slow-worm are recorded from Clints Quarry.

A number of bat species are recorded from the general Egremont area. Otter are present along the River Ehen. Red squirrel are widely recorded from the general area, including from within Egremont and a number of records are from the last five years suggesting that red squirrel are still extant in the area despite the presence of grey squirrel. The only badger record is from the eastern edge of Egremont over 1.3km east of the proposals. There are a large number of records for hedgehog from within Egremont, but these are mainly from along the main roads and around Brookwell Primary School.

The majority of bird records are tetrad (4km squares) records, those which are more specific are mainly from Longlands Lake, Clints Quarry and Fish Hatcheries, none are from the immediate vicinity of the proposals.

Legislation

Great crested newt

The great crested newt *Triturus cristatus* is protected under the Wildlife and Countryside Act 1981 (as amended), and under The Habitats Regulations, 1994 (as amended). It is illegal to deliberately capture, injure or kill a great crested newt, to intentionally or recklessly disturb great crested newts, or to deliberately take or destroy the eggs of great crested newts. It is also illegal to damage, destroy or intentionally or recklessly obstruct access to a breeding or resting place used by a great crested newt. All life stages of great crested newts are afforded the same level of protection.

Reptiles

Common lizard *Zootoca vivipara* is protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) against deliberate and/or intentional killing, injuring and trade.

Badgers

Badgers *Meles meles* and their setts are protected under the Protection of Badgers Act (1992). Licenses are required from Natural England to exclude badgers from a sett and to 'close' it if there will be a direct impact from development. Further to this, disturbance licences are likely to be required if the following activities occur closer to a badger sett than the distances specified below:

• Digging or scrub clearance within 10 m of an active sett;



- Use of light machinery (wheeled vehicles etc.) within 20 m of an active sett;
- Basic activities and heavy machines (such as JCBs) within 30 m of a sett;

Under the terms of the act a badger sett is defined as "any structure or place which displays signs indicating current use by a badger". Disturbance under licence can normally only be undertaken between July and November inclusive (outside of the breeding season).

Otter

The otter *Lutra lutra* is afforded legal protection both in Europe and the UK through the Habitats Regulations (1994, as amended) and the Wildlife & Countryside Act (1981, as amended). It is therefore, illegal to intentionally, deliberately or recklessly kill, injure, disturb or take an otter, or to deliberately damage, destroy or obstruct access to a place used for shelter or protection by an otter. Furthermore, under the Habitat Regulations the offence to deliberately disturb otters includes disturbance in such a way that would affect the ability of any significant group of otters to survive, breed or nurture their young, or the local distribution or abundance of otters. The otter is listed as a priority species in the UK BAP.

Bats

It is illegal to deliberately capture, injure or kill a bat and to intentionally or recklessly disturb bats. It is also illegal to damage, destroy or intentionally or recklessly obstruct access to a breeding or resting place used by a bat. The legislation is contained with the Wildlife and Countryside Act 1981 (as amended) and The Habitats Regulations, 1994, (as amended).

Red squirrel

Red squirrels *Sciurus vulgaris* and their resting places are fully protected in Britain under the Wildlife and Countryside Act 1981 (as amended). It is an offence to deliberately, capture, injure or kill them or to damage, destroy or obstruct their breeding or resting places. Finally it is an offence to disturb them in their breeding or resting places.

Birds

During the breeding season all wild birds, their nests, eggs and young are protected from harm under the Wildlife and Countryside Act (1981 as amended). Therefore the development proposals and clearance of any breeding habitat would need to take account of this legal requirement. Hen harrier is listed on Schedule 1 of the Wildlife and Countryside Act (1981 as amended) and is afforded greater protection of its nest sites.

3.2. Site survey

The site was surveyed on 18th July 2019. Map 3 shows the ecological habitats present, whilst site notes are presented in Appendix 1. The site is a group of three fields of improved grassland on the western and southern side of the low ridge known as How Bank. The valley of Whangs Beck runs along the western and southern boundary. The larger southern field is cut for silage (site note 1) whilst the two northern fields are permanent pasture (site notes 3 and 6). An area of moderately herb-rich marshy grassland extends across the hedgerow separating the two southernmost fields on the western side of the site (site notes 2 and 4). Between the two northernmost fields is what appears to be the line of a track which has been occupied by a series of sheds and perhaps small



allotments which have recently been demolished such that the area is now a mix of bare ground, rubble and ephemeral grassland (site note **5**). This strip of ground formerly had hedgerows on both sides, but the southern one has been largely removed in the process of removing the sheds and only a few bushes now remain. The northern hedgerow is intact. A second hedgerow separates the two southernmost fields. Both hedgerows are composed of hawthorn, common gorse and elder and are on kests (hedgebanks). Hedgerows also extend around all sides of the northern field. Table 4 shows the grading of the two hedgerows within the site. There are no trees within the site.

Table 4 Hedgerow Grading

Hedge number	Height (m)	Width (m)	Average cross-section	No. mature trees	No. young trees	Length (m)	Mature standards/100m	Young standards/100m	Structural Score	Percentage gaps	No. end connections	Connectivity Score	No. tree & shrub spp	No. native spp dominant	Total no. of tree & shrub spp	Diversity Score	Hedgebank/Lynchet	Ditch	Grass verge >2m	Associated Features Score	Groundflora & climbers	Notable species	GRADE	
H1	2	3	1	0	0	145	0	0	6	3	3	6	3	2	1	3	3	0	0	3			+4	
H2	3	2	2	0	0	59	0	0	7	4	2	6	3	2	1	3	3	0	0	3			+3	

4. Ecological Constraints

There are no significant ecological constraints to the development of the site.

The River Ehen SAC and SSSI lies upstream of the proposed development and is more than two kilometres from the site. The River Ehen as it runs through Egremont and into which Whangs Beck flows is not designated as SSSI. Other SSSIs and Cumbria Wildlife Sites are too distant from the site to be potentially impacted by the proposals.

The proposed layout for the housing scheme retains the western part of Hedgerow H1 and all of Hedgerow H2 and the remaining bushes along the former hedgerow parallel to H2 but there will be the loss of approximately 50 – 60m of Hedgerow H1. It is assumed that hedgerows on the site boundary will be retained. This would result in a minor adverse ecological impact at the local scale due to potential disruption of bat flightlines along this hedgerow.

5. Likely Mitigation Measures

To mitigate any adverse impacts on bat flightlines it is suggested that a hedgerow is planted along those sections of the northern site boundary which do not currently have hedgerows. In addition the hedgerow along the northern end of the southern field is very gappy and these gaps should be planted up with native shrub species.

6. Further Survey Requirements

No further surveys are required.



7. Opportunities for Biodiversity Enhancement

Biodiversity would be enhanced by the planting of a hedgerow along the northern site boundary.

8. Photographs



Photo 1 Southern field looking north-east



Photo 2 Marshy grassland in southern field (site note 2)



31 July 2019



Photo 3 Hedgerow H1 from west



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Photo 4 Marshy grassland in middle field (site note 4)



Photo 5 Looking north-west across the middle field



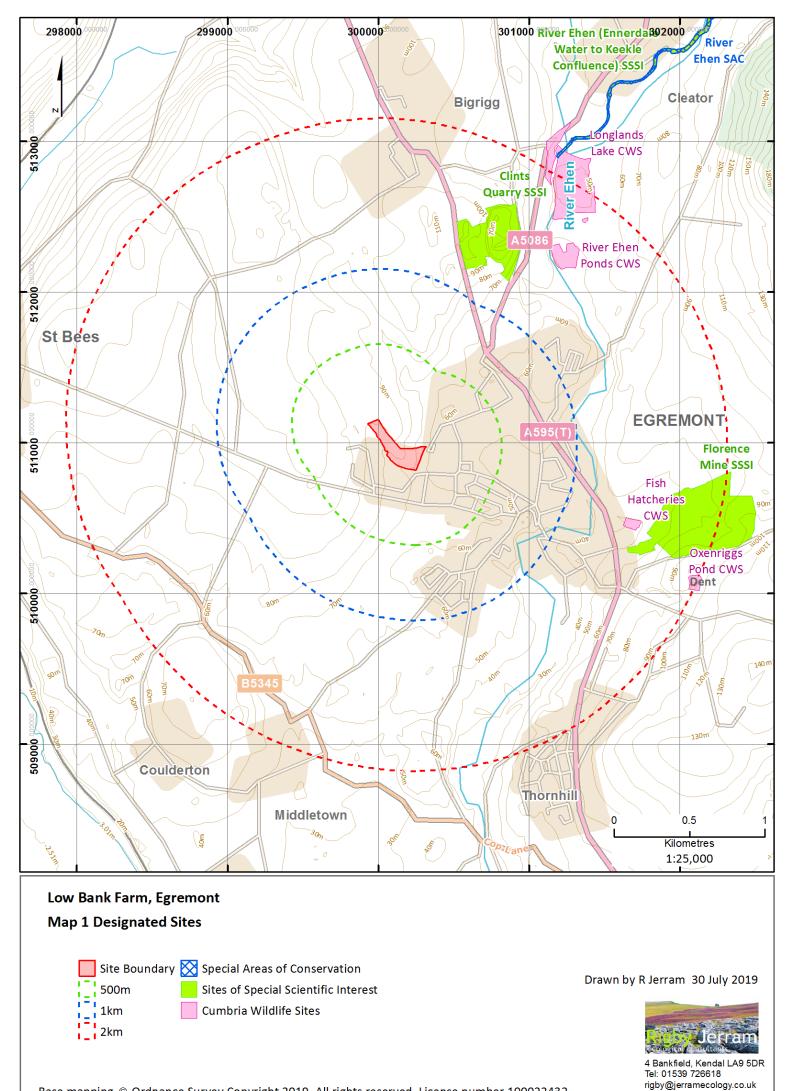
Photo 6 Former track (site note 5)



Photo 7 Looking north-west across northern field

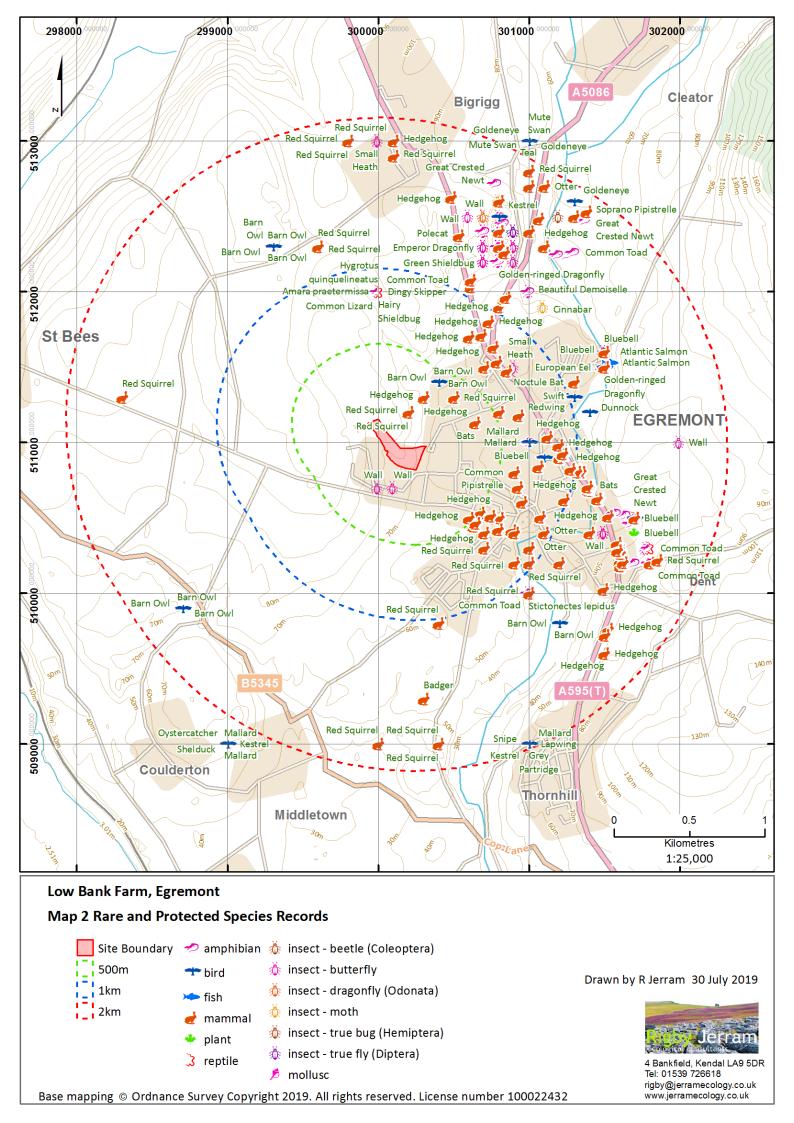


Photo 8 Looking south-east across northern field

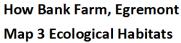


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Marshy Grassland
Example Ephemeral Grassland

— Hedgerow

Survey by R Jerram 18 July 2019



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Table 5: Summary of Rare and Protected Species Records

Common Name	Scientific Name	No. Records	Years Recorded	Minimum Distance (km)		Birds Directive		Wildlife and Countryside Act 1981	IUCN Red List post 2001	Birds of Conservation Concern 4		Conservation Regulations 2011	Cumbria LBAP	Other rarity
Amphibians					•		1	_	1			T		
Common Toad	Bufo bufo	25	1987 - 2011	1.44			Yes	Sch5 sect 9.5a			Yes		Yes	
Great Crested Newt	Triturus cristatus	13	1990 - 2011	1.53	Annexes 2 & 4		Yes	Sch5 sect 9.4b, Sch5 sect 9.5a, Sch5 sect 9.4c			Yes	Schedule 2	Yes	
Reptiles										•				
Common Lizard	Zootoca vivipara	3	1988 - 1992	1.52			Yes	Sch5 sect 9.1 (kill/injuring), Sch5 sect 9.5a			Yes		Yes	
Mammals														
Bats	Chiroptera	2	1987 - 1996	0.36	Annexes 2 & 4		Yes	Sch5 sect 9.4b, Sch5 sect 9.5a, Sch5 sect 9.4c			Yes	Schedule 2	Yes	
Hedgehog	Erinaceus europaeus	64	1995 - 2016	0.42			Yes				Yes		Yes	
Otter	Lutra lutra	10	2002 - 2018	1.25	Annexes 2 & 4		Yes	Sch5 sect 9.4b, Sch5 sect 9.5a, Sch5 sect 9.4c			Yes	Schedule 2	Yes	
Badger	Meles meles	2	1992 - 1997	1.62										
Polecat	Mustela putorius	1	2012	1.41	Annex 5		Yes				Yes	Schedule 4	Yes	
Unidentified Bat	Myotis	1	2011	1.26	Annexes 2 & 4		Yes	Sch5 sect 9.4b, Sch5 sect 9.5a, Sch5 sect 9.4c			Yes	Schedule 2	Yes	
Daubenton's Bat	Myotis daubentonii	3	1996 - 2017	1.62	Annex 4			Sch5 sect 9.4b, Sch5 sect 9.5a, Sch5 sect 9.4c				Schedule 2	Yes	
Noctule Bat	Nyctalus noctula	2	2001 - 2011	1.26	Annex 4		Yes	Sch5 sect 9.4b, Sch5 sect 9.5a, Sch5 sect 9.4c			Yes	Schedule 2	Yes	
Pipistrelle Bat species	Pipistrellus	3	1990 - 2007	1.04	Annex 4		Yes	Sch5 sect 9.4b, Sch5 sect 9.5a, Sch5 sect 9.4c			Yes	Schedule 2	Yes	
Common Pipistrelle	Pipistrellus pipistrellus	3	2011 - 2014	0.90	Annex 4			Sch5 sect 9.4b, Sch5 sect 9.5a, Sch5 sect 9.4c				Schedule 2	Yes	
Soprano Pipistrelle	Pipistrellus pygmaeus	5	2010 - 2017	1.26	Annex 4		Yes	Sch5 sect 9.4b, Sch5 sect 9.5a, Sch5 sect 9.4c			Yes	Schedule 2	Yes	
Brown Long-eared Bat	Plecotus auritus	1	2008	0.94	Annex 4		Yes	Sch5 sect 9.4b, Sch5 sect 9.5a, Sch5 sect 9.4c			Yes	Schedule 2	Yes	



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Common Name	Scientific Name	No. Records		Minimum Distance (km)		Birds Directive	Biodiversity Action Plan species (2007)	Wildlife and Countryside Act 1981	IUCN Red List post 2001	Birds of Conservation Concern 4	Biodiversity Lists - England	Conservation Regulations 2011	Cumbria LBAP	Other rarity
Red Squirrel	Sciurus vulgaris	50	1990 - 2015	0.28			Yes	Sch5 sect 9.1 (kill/injuring & taking), Sch5 sect 9.2, Sch5			Yes		Yes	
								sect 9.4a, Sch5 sect 9.4b, Sch5 sect 9.5a, Sch5 sect 9.4c						
Fish														
European Eel	Anguilla anguilla	2	2009	1.58			Yes		Critically endangered		Yes		Yes	
Atlantic Salmon	Salmo salar	2	1998 - 2002	1.57	Annexes 2 & 5		Yes				Yes	Schedule 4	Yes	
Plants	•					•								
Heath Cudweed	Gnaphalium sylvaticum	2	1990 - 1998	1.77										
Bluebell	Hyacinthoides non-scripta	7	1990 - 2009	0.95				Sch 8						
Limestone Woundwort	Stachys alpina	1	2009	1.61				Sch 8						NR- excludes
Beetles								•	•	•	•	•		
Amara praetermissa	Amara praetermissa	1	1985	1.52										Notable-B
Hygrotus quinquelineatus	Hygrotus quinquelineatus	1	1991	1.52										Notable-B NS- excludes
Orthochaetes setiger	Orthochaetes setiger	1	1982	1.48										Notable-B
Black-headed Cardinal Beetle		1	1990	1.77										Notable-B
Stictonectes lepidus	Stictonectes lepidus	1	1986	1.55										
Tropiphorus terricola	Tropiphorus terricola	1	1982	1.70										Notable-B
Butterflies		II.					I .	•	•	•	•	•		
Small Heath	Coenonympha pamphilus	32	1983 - 2016	1.03			Yes				Yes		Yes	
Dingy Skipper	Erynnis tages	41	1983 - 2016	1.44			Yes				Yes		Yes	
Dingy Skipper	Erynnis tages tages	37	2016 - 2017	1.48			Yes				Yes		Yes	
Grayling	Hipparchia semele	6	1987 - 1998	1.52			Yes				Yes		Yes	
Wall	Lasiommata megera	44	1988 - 2016	0.30			Yes				Yes		Yes	
Large Tortoiseshell	Nymphalis polychloros	1	2016	1.88				Sch5 sect 9.5a						
Comma	Polygonia c-album	1	2017	1.45										Status_Nr
Dragonflies						,					,			
Emperor Dragonfly	Anax imperator	1	2017	1.48										Status_Nr
Beautiful Demoiselle	Calopteryx virgo	1	1992	2.05										Status_Nr
Golden-ringed Dragonfly	Cordulegaster boltonii	4	1990 - 2009	1.44							ĺ	1		Status_Nr



Table 5: Summary of Rare and Protected Species Records

Common Name	Scientific Name	No. Records		Minimum	Habitats	Birds	Biodiversity	Wildlife and	IUCN Red	Birds of	Biodiversity	Conservation	Cumbria	Other
			Recorded	Distance (km)	Directive	Directive	Action Plan species (2007)	Countryside Act 1981	List post 2001	Conservation Concern 4	Lists - England	Regulations 2011	LBAP	rarity
Moths								•						
Latticed Heath	Chiasmia clathrata	1	2002	1.70			Yes				Yes		Yes	
Scarce Grass-veneer	Crambus pratella	3	1990 - 2009	1.61										Notable-B
White Ermine	Spilosoma lubricipeda	2	1990 - 1995	1.61			Yes				Yes		Yes	
Cinnabar	Tyria jacobaeae	8	1990 - 2015	1.42			Yes				Yes		Yes	
True bugs														
Dictyla convergens	Dictyla convergens	1	2007	1.92										Status_Nr
Hairy Shieldbug	Dolycoris baccarum	6	1984 - 2017	1.48										Status_Nr
Green Shieldbug	Palomena prasina	2	2014 - 2017	1.39										Status_Nr
Scolopostethus grandis	Scolopostethus grandis	1	1990	1.70										Status_Nr
True flies								•						
Herina lugubris	Herina lugubris	2	1987 - 1991	1.53										Status_Nr
Urophora cuspidata	Urophora cuspidata	1	1987	1.66										Notable
Birds								•						
Lesser Redpoll	Acanthis cabaret	4	2009	0.95			Yes			Red List	Yes		Yes	
Common Sandpiper	Actitis hypoleucos	4	1997 - 2009	2.17						Amber List				
Skylark	Alauda arvensis	10	1997 - 2011	2.17		Annex 2.2				Red List	Yes		Yes	
Kingfisher	Alcedo atthis	2	2000 - 2009	2.17		Annex 1		Sch1 part 1		Amber List				
Shoveler	Anas clypeata	1	1998	2.17		Annex 2.1				Amber List				
Teal	Anas crecca	1	2010	2.17		Annex 2.1				Amber List				
Mallard	Anas platyrhynchos	21	1990 - 2012	0.95		Annex 2.1				Amber List				
Gadwall	Anas strepera	1	2012	2.17		Annex 2.1				Amber List				
Greylag Goose	Anser anser	1	2009	2.17		Annex 2.1		Sch1 part 2		Amber List				
Meadow Pipit	Anthus pratensis	7	1997 - 2010	2.26						Amber List				
Tree Pipit	Anthus trivialis	1	2009	2.17			Yes			Red List	Yes		Yes	
Swift	Apus apus	13	1997 - 2010	0.95						Amber List				
Turnstone	Arenaria interpres	2	2007 - 2008	2.30						Amber List				
Little Owl	Athene noctua	1	2011	2.30										
Pochard	Aythya ferina	8	1999 - 2012	2.06		Annex 2.1				Red List				
Bittern	Botaurus stellaris	1	1988	7.82		Annex 1	Yes	Sch1 part 1		Amber List	Yes		Yes	
Goldeneye	Bucephala clangula	6	2007 - 2010	2.06		Annex 2.2		Sch1 part 2		Amber List				
Ringed Plover	Charadrius hiaticula	1	2008	2.30						Red List				



Table 5: Summary of Rare and Protected Species Records

Common Name	Scientific Name	No. Records		Minimum		Birds	-	Wildlife and	IUCN Red	Birds of	Biodiversity			Other
			Recorded	Distance (km)	Directive	Directive	Action Plan species (2007)	Countryside Act 1981	List post 2001	Conservation Concern 4	Lists - England	Regulations 2011	LBAP	rarity
Black-headed Gull	Chroicocephalus ridibundus	18	2007 - 2012	0.95		Annex 2.2				Amber List				
Dipper	Cinclus cinclus	21	1997 - 2012	0.95						Amber List				
Stock Dove	Columba oenas	2	1998 - 2009	0.95		Annex 2.2				Amber List				
Cuckoo	Cuculus canorus	1	1998	2.17			Yes			Red List	Yes		Yes	
Whooper Swan	Cygnus cygnus	2	2010 - 2011	2.06		Annex 1		Sch1 part 1		Amber List				
Mute Swan	Cygnus olor	13	1998 - 2012	2.17		Annex 2.2				Amber List				
House Martin	Delichon urbicum	5	1997 - 2011	0.95						Amber List				
Yellowhammer	Emberiza citrinella	10	1997 - 2011	2.17			Yes			Red List	Yes		Yes	
Reed Bunting	Emberiza schoeniclus	9	1998 - 2012	2.17			Yes			Amber List	Yes		Yes	
Peregrine	Falco peregrinus	8	1990 - 2012	0.95		Annex 1		Sch1 part 1						
Kestrel	Falco tinnunculus	17	1995 - 2010	0.95						Amber List				
Pied Flycatcher	Ficedula hypoleuca	1	1998	2.17						Red List				
Brambling	Fringilla montifringill	5	2008 - 2011	0.95				Sch1 part 1						
Snipe	Gallinago gallinago	5	2008 - 2010	0.95		Annex 2.1				Amber List				
Oystercatcher	Haematopus ostralegus	3	1998 - 2008	2.17		Annex 2.2				Amber List				
Herring Gull	Larus argentatus	31	1997 - 2012	0.95		Annex 2.2				Red List				
Common Gull	Larus canus	5	2010 - 2011	0.95		Annex 2.2				Amber List				
Lesser Black-backed Gull	Larus fuscus	1	2008	2.30		Annex 2.2				Amber List				
Great Black-backed Gull	Larus marinus	2	2008	2.30		Annex 2.2				Amber List				
Linnet	Linaria cannabina	9	1997 - 2011	1.58						Red List			Yes	
Grey Wagtail	Motacilla cinerea	12	1995 - 2009	0.95						Red List				
Spotted Flycatcher	Muscicapa striata	1	1998	2.17			Yes			Red List	Yes		Yes	
Curlew	Numenius arquata	7	1997 - 2009	0.95		Annex 2.2	Yes		Near threatened	Red List	Yes		Yes	
Whimbrel	Numenius phaeopus	1	2009	0.95		Annex 2.2		Sch1 part 1		Red List				
Osprey	Pandion haliaetus	1	2011	7.82		Annex 1		Sch1 part 1		Amber List				
House Sparrow	Passer domesticus	42	1997 - 2011	0.95			Yes			Red List	Yes		Yes	
Tree Sparrow	Passer montanus	6	2008 - 2011	2.26			Yes			Red List	Yes		Yes	
Grey Partridge	Perdix perdix	3	1990 - 2010	1.77		Annex 2.1	Yes			Red List	Yes		Yes	



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Common Name	Scientific Name	No. Records	Years	Minimum	Habitats	Birds	Biodiversity	Wildlife and	IUCN Red	Birds of	Biodiversity	Conservation	Cumbria	Other
			Recorded	Distance	Directive	Directive	Action Plan	Countryside	List post	Conservation	Lists -	Regulations	LBAP	rarity
				(km)			species (2007)	Act 1981	2001	Concern 4	England	2011		
Wood Warbler	Phylloscopus sibilatrix	1	1998	2.17			Yes			Red List	Yes		Yes	
Willow Warbler	Phylloscopus trochilus	21	1995 - 2011	0.95						Amber List				
Dunnock	Prunella modularis	44	1990 - 2011	0.95						Amber List			Yes	
Bullfinch	Pyrrhula pyrrhula	14	1995 - 2011	0.95						Amber List			Yes	
Woodcock	Scolopax rusticola	1	2010	1.33		Annex 2.1				Red List				
Siskin	Spinus spinus	2	2009	0.95										
Tawny Owl	Strix aluco	2	1995 - 1997	0.95						Amber List				
Starling	Sturnus vulgaris	38	1997 - 2011	0.95		Annex 2.2				Red List			Yes	
Shelduck	Tadorna tadorna	1	2008	2.30						Amber List				
Redshank	Tringa totanus	1	1999	2.17		Annex 2.2				Amber List				
Redwing	Turdus iliacus	7	1990 - 2009	0.95		Annex 2.2		Sch1 part 1		Red List				
Song Thrush	Turdus philomelos	33	1995 - 2012	0.95		Annex 2.2				Red List			Yes	
Fieldfare	Turdus pilaris	12	1990 - 2012	0.95		Annex 2.2		Sch1 part 1		Red List				
Mistle Thrush	Turdus viscivorus	7	1990 - 2009	0.95		Annex 2.2				Red List				
Barn Owl	Tyto alba	22	1990 - 2010	0.57				Sch1 part 1					Yes	
Lapwing	Vanellus vanellus	4	1998 - 2011	2.17		Annex 2.2	Yes			Red List	Yes		Yes	



9. Appendix 1 Site Notes

- 1. Improved grassland cut for silage and subsequently horse grazed. The sward consists of perennial rye-grass Lolium perenne, Yorkshire fog Holcus lanatus, common bent Agrostis capillaris, red fescue Festuca rubra, crested dog's-tail Cynosurus cristatus and frequent creeping buttercup Ranunculus repens, white clover Trifolium repens and sweet vernal-grass Anthoxanthum odoratum. There are localised areas of semi-improved grassland where the soil is thin with abundant sheep's fescue Festuca ovina, common bent Agrostis capillaris, sweet vernal-grass Anthoxanthum odoratum and yarrow Achillea millefolium.
- 2. Marshy grassland on shallow slope dominated by soft rush Juncus effusus with frequent to abundant creeping buttercup Ranunculus repens and white clover Trifolium repens plus occasional to frequent ragwort Senecio jacobaea, selfheal Prunella vulgaris, Yorkshire fog Holcus lanatus, sweet vernal-grass Anthoxanthum odoratum, Timothy Phleum pratense, marsh bedstraw Galium palustre, articulated rush Juncus articulatus, hogweed Heracleum sphondylium, greater bird's-foot trefoil Lotus pedunculatus, wild angelica Angelica sylvestris, tufted hair-grass Deschampsia cespitosa, common sedge Carex nigra, common sorrel Rumex acetosa, marsh willowherb Epilobium palustre and occasional grey willow, ash and alder saplings.
- 3. Closely grazed improved grassland with abundant perennial rye-grass *Lolium perenne*, crested dog's-tail *Cynosurus cristatus*, Yorkshire fog *Holcus lanatus* and common bent *Agrostis capillaris* plus frequent sweet vernal-grass *Anthoxanthum odoratum*, creeping buttercup *Ranunculus repens*, white clover *Trifolium repens*, selfheal *Prunella vulgaris*, yarrow *Achillea millefolium* and ragwort *Senecio jacobaea*.
- 4. Marshy grassland similar to 2 but grassier and more heavily grazed.
- 5. Remnant of old track previously occupied by sheds but with the latter recently cleared to leave rubble and bare ground with patchy cover of pineapple mayweed *Matricaria discoidea*, common bent *Agrostis capillaris*, Yorkshire fog *Holcus lanatus*, creeping buttercup *Ranunculus repens*, greater plantain *Plantago major*, nettle *Urtica dioica*, soft rush *Juncus effusus*, bramble *Rubus fruticosus* and broadleaved willowherb *Epilobium montanum*. The hedgerow along the southern side has been partially removed leaving a short section at the western end and a couple of bushes at the eastern end. The hedgerow along the northern side is intact and composed of hawthorn with occasional common gorse and elder.
- 6. Improved grassland grazed by horses as 3.



10. Appendix 2 HEGS Record Card

HE	EDGE RECORD AND	EVALUA	TION SI	HEET	HEI	DGE NO. :	and the second second
1	Recently laid or coppiced	YES NO	(if yes, s	core 7 and ignore	criteria 2 to 4 bel	ow)	
	S	CORE ->	1	2	3	4	
2	Height (exclude bank)		0-1m	1-2m	2-4m	4m+	
3	Width		0-1m	1-2m	2-3m	3m+	array .
4	Average Cross-Section			**	3	Na Pu	
4	riverage cross-occion		342			WARE	
5	STANDARD TREES Species present:						
				No. of m	ature trees/po	ollards:	
				1.0. 01	No. of young		
6	Length: m						
7	Mature Standards/100m	nil	≤1	1 ≤3	3 €5	>5	
8	Young Standards/100m	nil	≤ 1	1 ≤ 3	3 € 5	>5	
					STRUCTU	JRAL SCO	RE
9	Percentage Gaps	Γ	30%+	30-10%	10-0%	no gaps	
	No. of End Connections	nil	1	2	3	4+	
					CONNECTI	VITY SCO	RE
	HEDGE CANOPY SPEC Species present:		Comb	oined total of tr	ree and shrub	species:	
12	Native Species Dominant Exotic spp dominant - score nil	nil		1-2 spp		mixed	
	Total No. of Tree & Shru		1-4	5-7	8-9	10+	
		(.1	DIVE	RSITY SCO	RE
14	Hedgebank/Lynchet	nil		0-½m	½-1m	1m+	
15	Ditch	nil			業	113	
				777	77/4/77		<u> </u>
16	Grass Verge (2m+ wide)	nil		on 1 side	YATED EE AT	on 2 sides	
17	NOTES			ASSUC	CIATED FEAT	UKES SCC	IRE
	Ground flora & Climbers:						
							GRADI
1	9 Negatile C	Pop nig		Pyr cor		> Yes	(NS)
1	8 Notable Species present	Sor tor	Til pla	other		No	
							WALLE
	new hedge	old laid	11	unmanaged	cut/tri	mmed i boundary	
	track/roadside	fence/wa	11	parish bounda	ny garder	i boundary	
	Site:			Date:	Surve	eyor:	

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