

TABLE 1: NORTHERN ENGLAND REGIONAL CONSERVATION STRATEGY PRIORITY BUTTERFLIES

Common Name	Scientific Name	Ecological classification	1 km squares occupied in Northern England (2005-2014)	Regional occupancy (% occupied 1km squares 2005-14)	Regional distribution trend (1990-2014) (* P<0.05; ** p<0.01; *** p<0.001)	Regional population trend (1990-2016) (* P<0.05; ** p<0.01; *** p<0.001)	GB Red List	W & C Act Schedule 5	UK BAP	England NERC s41	EU Red List	EU Habitats Directive Annex	Cons. Habitats & Species Regs.	BC UK Threat Priority 1997	BC UK Threat Priority 2005	BC UK Threat Priority 2016	BC UK Conservation Priority 2016	North West England RAP 2000	North East England RAP 2000	Northern England RCS Threat Priority 2016-25	Northern England RCS Conservation Priority 2016-25
Pearl-bordered Fritillary	<i>Boloria euphrosyne</i>	HS	72	0.19	-93***	-94***	EN	P	X	X				H	H	H	A	H	H	H	A
High Brown Fritillary	<i>Argynnis adippe</i>	HS	92	0.24	-59*	-89***	CR	F	X	X				H	H	H	A	H		H	A
Marsh Fritillary	<i>Euphydryas aurinia</i>	HS	17	0.04			VU	F	X	X	VU	2		H	H	H	A	H		H	A
Duke of Burgundy	<i>Hamearis lucina</i>	HS	31	0.08	-96***	-6	EN	P	X	X				M	H	H	A	H	H	H	A
Dingy Skipper	<i>Erynnis tages</i>	HS	709	1.87	-43**	3	VU		X	X				L	H	H	B	M	M	H	B
Large Heath	<i>Coenonympha tullia</i>	HS	165	0.43	-95***		VU	P	X	X	VU			M	H	H	B	H	M	H	B
Mountain Ringlet	<i>Erebia epiphron</i>	HS	67	0.18			NT	P	X	X				M	H	H	C	H		H	B
Scotch Argus	<i>Erebia aethiops</i>	WCS	31	0.08							NT			L	L	L		M		H	B
Grayling	<i>Hipparchia semele</i>	HS	268	0.71	-70***	-57*	VU		X	X				L	H	H	B	M	H	H	B
Small Pearl-bordered Fritillary	<i>Boloria selene</i>	HS	432	1.14	-65***	-52*	NT		X	X				M	H	H	B	M	H	H	B
Small Blue	<i>Cupido minimus</i>	HS	23	0.06			NT	P	X	X				M	H	M	C	H		H	B
Northern Brown Argus	<i>Aricia artaxerxes</i>	HS	191	0.50	-92***	-70***	VU	P	X	X				H	H	H	B	H	H	H	B
Wall	<i>Lasiommata megera</i>	WCS	3266	8.60	-54***	-88***			X	X				L	L	H	R			M	C
Silver-washed Fritillary	<i>Argynnis paphia</i>	HS	55	0.14										L	L	L		M		M	C
Dark Green Fritillary	<i>Argynnis aglaja</i>	HS	909	2.39	61*	804***								L	M	M		U	M	M	C
Brown Hairstreak	<i>Thecla betulae</i>	HS					VU	P	X	X				M	H	M	C			M	C
Green Hairstreak	<i>Callophrys rubi</i>	HS	1054	2.77	-52***	-51*								L	M	M		U	M	M	C
White-letter Hairstreak	<i>Satyrrium w-album</i>	WCS	1077	2.83	-17		EN	P	X	X				M	H	H	C	M	M	M	C
Grizzled Skipper	<i>Pyrgus malvae</i>	HS	2	0.01			VU		X	X				M	H	H	B	ER	H	L	
Wood White	<i>Leptidea sinapis</i>	HS	2	0.01			EN	P	X	X				M	M	H	A	ER		L	
Ringlet	<i>Aphantopus hyperantus</i>	WCS	4784	12.59	280***	12506***								L	L	L		U		L	
Marbled White	<i>Melanargis galathea</i>	WCS	304	0.80	-39									L	L	L			U	L	
Purple Hairstreak	<i>Favonius quercus</i>	WCS	706	1.86	35									L	L	H	R	U	M	L	
Silver-studded Blue	<i>Plebejus argus</i>	HS	6	0.02			VU	P	X	X				M	H	H	B	ER		L	
Brown Argus	<i>Aricia agestis</i>	WCS	457	1.20										L	L	L			U	L	

Ecological classification: HS = Habitat Specialist; WCS = Wider Countryside Species.
Distribution and population trends: Red = meets criteria for High Priority status; Yellow = meets criteria for Medium Priority status. Note for some species timeline for calculating population trend is shorter than maximum 1990-2016.
GB Red List status: CR = Critically Endangered; EN = Endangered; VU = Vulnerable; NT = Near Threatened.
Wildlife and Countryside Act (1981) status: F = full protection; P = partial protection (sale only).
UK BAP and national legislative conservation status: X = listed; E? = probably extinct.
BC UK Threat Priority: H = High Priority; M = Medium Priority; L = Low Priority; R = Research.
BC UK Conservation Priority: A = Action urgent across UK range; B = Action necessary in parts of UK range; C = Action necessary in parts of UK range but less urgent.
Regional Action Plan (RAP) Priority: H = High Priority; M = Medium Priority; ER = Extinct Species Restored to Region; U = Uncertain Status.
Regional Conservation Strategy (RCS) Threat Priority: H = High Priority; M = Medium Priority; L = Low Priority.
Regional Conservation Strategy (RCS) Conservation Priority: A = Action urgent across all occupied landscapes/sites; B = Action necessary in some occupied landscapes/sites; C = Action less urgent regionally but may be necessary in some landscapes/sites.

Grayling Brownfield sites in NE England under increasing development threat.
 Small Pearl-bordered Fritillary N England holds significant proportion of England resource.
 Wall Rapidly declining populations in NW England.
 Grizzled Skipper Not present in region.
 Wood White Not present in region.
 Ringlet Recent colonist in NW England; widespread in NE England.
 Marbled White Recent range expansion in NE England.
 Brown Hairstreak Probably introduced.
 Purple Hairstreak Previously under-recorded; range expanding.
 Silver-studded Blue Introduced.
 Brown Argus Range expanding.

TABLE 2: NORTHERN ENGLAND REGIONAL CONSERVATION STRATEGY PRIORITY MOTHS

Common Name	Scientific Name	ABH No.	B & F No.	W & C Act Schedule 5	UK BAP	England NERC s41	EU Habitats Directive Annex	Cons. Habitats & Species Regs.	BC Threat Priority 2016	BC Conservation Priority 2016	North West England RAP 2000	North East England RAP 2000	Cumbria 2016	Lancashire 2016	Cheshire 2016	Northumberland 2016	County Durham 2016	Yorkshire 2016	Northern England RCS Threat Priority 2016-25	Northern England RCS Conservation Priority 2016-25	Comment
	<i>Lampronia pubicornis</i>	9.007	139		X	X							NRR	NRR		NRR	NRR	NRR	H	A	Probably last seen in England in 1979
	<i>Acrolepiopsis betulella</i>	19.012	474													P	P	NRR	H	A	Found in Co. Durham in 2012
	<i>Agonopterix atomella</i>	32.012	703		X	X			H	A			RR	NRR	NRR	P	NRR	NRR	H	A	Recently found in Northumberland, with a 1990s record in Cumbria
Goat Moth	<i>Cossus cossus</i>	50.001	162		X	X			H	C	M		R	P		R	RR	P?	H	A	Probably only recently in Lancs
Welsh Clearwing	<i>Synanthedon scoliaeformis</i>	52.005	376						H	B			P						H	A	Recently discovered
Forester	<i>Adscita statices</i>	54.002	163		X	X			H	B			P	P	E	P	P	P	H	A	
	<i>Anania funebris</i>	63.024	1381		X	X			H	B			P	P	RR			NRR	H	A	Well established on Morecambe Bay Limestones
Small Eggar	<i>Eriogaster lanestris</i>	66.005	1633								M	M	P?	E?		E	E	P	H	A	Recent in Yorks and possibly Cumbria
Grass Eggar	<i>Lasiocampa trifolii</i>	66.006	1636								M			P					H	A	Ainsdale NNR
Chalk Carpet	<i>Scotopteryx bipunctaria</i>	70.043	1731		X	X			H	C		H	NRR				P	P	H	A	At northern edge of range
Yellow-ringed Carpet	<i>Entephria flavicinctata</i>	70.071	1743								M	M	?					P	H	A	Yorks Dales; 4 post-2000 records Cumbria
Chestnut-coloured Carpet	<i>Thera cognata</i>	70.078	1770								M		P			E	E	P	H	A	Cumbria: 14 post-2000 records, all VC69; Yorks: present VCs64 & 65, 1 1990 record VC62.
Netted Carpet	<i>Eustroma reticulatum</i>	70.088	1772		X	X			H	A	H		P	P					H	A	Support NT led project
Argent & Sable	<i>Rheumaptera hastata</i>	70.120	1787		X	X			H	A	H	H	P	R	P	P	P	P	H	A	
Dentated Pug	<i>Anticollix sparsata</i>	70.129	1863									M						P	H	A	Yorks: Askham Bog & Lower Derwent
Heath Rivulet	<i>Perizoma minorata</i>	70.135	1805								M	M	?			NRR	NRR	P	H	A	Seemingly recently from only a couple of sites in Yorkshire; recent record from Grizedale, Cumbria
Marsh Carpet	<i>Perizoma sagittata</i>	70.140	1810									M						P	H	A	Possibly recently from only a single site
Barred Tooth-striped	<i>Trichopteryx polycommata</i>	70.201	1880		X	X			H	B	H		P	P				P	H	A	
Dark Bordered Beauty	<i>Epione vespertaria</i>	70.228	1908		X	X			H	A		H	E			E		P	H	A	One English population known
Belted Beauty	<i>Lycia zonaria britannica</i>	70.250	1928		X	X			H	A	H			P	E?				H	A	One English population known
Bordered Grey	<i>Selidosema brunnearia</i>	70.262	1938								M		P	NRR					H	A	Recently only in Cumbria
Small Chocolate-tip	<i>Clostera pigra</i>	71.028	2017								M	M	E?	E?		E?	NRR	P	H	A	
Scarce Vapourer	<i>Orgyia recens</i>	72.018	2025		X	X			H	B		H						P	H	A	
Sandhill Rustic	<i>Luperina nickerlii</i> spp. <i>gueneei</i>	73.132	2354								H			P	P				H	A	
Least Minor	<i>Photodes captiuncula</i>	73.146	2344								H	H	P	P		R	P	P	H	A	
Double Kidney	<i>Ipimorpha retusa</i>	73.212	2311											E	E			P	H	A	Two sites near Ripon
Portland Moth	<i>Actebia praecox</i>	73.308	2099								M	M	P?	P		P	E?	E?	H	A	
Northern Dart	<i>Xestia alpicola</i>	73.363	2125		X	X			H	C	H	H	E?			E?			H	A	Not recorded in England since 1970s
Rosy Marsh Moth	<i>Coenophila subrosea</i>	73.364	2115										P	P					H	A	
	<i>Bankesia conspurcatella</i>	11.007	182											RR					H	B	
	<i>Nemapogon picarella</i>	12.022	221		X				H	C			NRR	NRR	NRR	NRR	NRR		H	B	
	<i>Atemelia torquatella</i>	22.001	448										NRR	NRR	NRR	P?	NRR		H	B	Northumberland: larvae found VC67 in 2016
Manchester Treble-bar	<i>Carsia sororiata</i>	70.191	1866								M	M	P	P	P	P	P?	P	H	B	
Large Red-belted Clearwing	<i>Synanthedon culiciformis</i>	52.007	381								M	M	E?	UC	P?		P	P	M	C	
Red-tipped Clearwing	<i>Synanthedon formicaeformis</i>	52.008	380								M	M	P?	P	P?	NRR	P	P	M	C	
Yellow-legged Clearwing	<i>Synanthedon vespiformis</i>	52.012	374								M	M						P	M	C	
Currant Clearwing	<i>Synanthedon tipuliformis</i>	52.013	373								M	M	E		P		P	P	M	C	
Six-belted Clearwing	<i>Bembecia ichneumoniformis</i>	52.014	382								M			P	P			P	M	C	
Cistus Forester	<i>Adscita geryon</i>	54.003	164								M		P	P				P	M	C	
Purple-bordered Gold	<i>Idaea muricata</i>	70.002	1698								M	M	P	P?	P		RR	P	M	C	
Dotted-border Wave	<i>Idaea sylvestraria</i>	70.010	1701								M	M						NRR	M	C	
Rosy Wave	<i>Scopula emutaria</i>	70.028	1691									M						P	M	C	Spurn Point
Oblique Striped	<i>Phibalapteryx virgata</i>	70.039	1718								M		P?					NRR	M	C	Cumbria: 7 records post-2000, all VC69
Cloaked Carpet	<i>Euphyia biangulata</i>	70.064	1793								M		RR		RR				M	C	Cheshire: Two records only, in 2008 and 2011: Cumbria: recorded once (2017, Bassenthwaite)
Waved Carpet	<i>Hydrelia sylvata</i>	70.113	1877								H		P	RR	V			NRR	M	C	Cumbria: Quite common in S Lakeland woodlands
Blomer's Rivulet	<i>Discoloxia blomeri</i>	70.116	1872								M	M	P	P	V	R	P	P	M	C	
Pretty Pinion	<i>Perizoma blandiata</i>	70.136	1806								M	M	E	E		R	R		M	C	
Barred Carpet	<i>Perizoma taeniata</i>	70.139	1801								M	M	P	P		R	R	P	M	C	
Lead-coloured Pug	<i>Eupithecia plumbeolata</i>	70.153	1814									M	UC			R		P	M	C	Cumbria: Single 2001 Roudsea record only one post 1960s; Yorks: scarce resident
Thyme Pug	<i>Eupithecia distinctaria</i>	70.172	1843								M	M	P	P	V	NRR		P	M	C	
Bleached Pug	<i>Eupithecia expallidata</i>	70.180	1833								M		UC	P	V		R		M	C	Gait Barrows, odd recent record from Cumbria.
Valerian Pug	<i>Eupithecia valerianata</i>	70.181	1821								M	M	P	P	P?	P	RR	P	M	C	
Broom-tip	<i>Chesia rufata</i>	70.196	1865								M	M	E?		P?	R		R	M	C	Cheshire: Seventeen records, the last in 2004
Large Thorn	<i>Ennomos autumnaria</i>	70.221	1911									M						P	M	C	Spurn
Marsh Oblique-barred	<i>Hypenodes humidialis</i>	72.060	2485								M	M						P	M	C	
Waved Black	<i>Parascotia fuliginaria</i>	72.066	2475								M	M	V	P	V		RR	V	M	C	

Wormwood	<i>Cucullia absinthii</i>	73.050	2211							M	M		E?	V			P	M	C	Scattered records in Yorkshire	
Star-wort	<i>Cucullia asteris</i>	73.055	2217								M		E?				P	M	C	Spurn	
Saxon	<i>Hyppa rectilinea</i>	73.110	2320							M	M		P	RR		P	NRR	M	C	Cumbria: Common in both VC69/70; Northumberland: widespread west-VC67	
Lyme Grass	<i>Chortodes elymi</i>	73.138	2348								M			P		P	P	M	C	Lancs: most dune systems; Northumberland: coast north to Lindisfarne; Durham: Teesmouth and Souter areas; Yorks: Spurn, Flamborough and Northern Yorks coast	
Mere Wainscot	<i>Chortodes fluxa</i>	73.145	2349								M						P	M	C	Yorks: scarce & local (3 or 4 sites)	
Crescent Striped	<i>Apamea oblonga</i>	73.161	2325							M	M		UC	P	P	R	P	M	C		
Angle-striped Sallow	<i>Enargia paleacea</i>	73.211	2313							M	M		UC		P?	R	RR	P	M	C	Yorks: locally common S,E & C (68 records from 28 sites in 2016)
Silvery Arches	<i>Polia trimaculosa</i>	73.260	2149								M		P		V		V?	M	C	Cumbria: Fairly common in S Lakeland woodlands from 2001 after c20 year absence	
White Colon	<i>Sideridis albicolon</i>	73.275	2152							M	M		P	P	V	P?	P	M	C		
Shore Wainscot	<i>Mythimna litoralis</i>	73.299	2201							M	M		P	P	P?	P	P	M	C		
Coast Dart	<i>Euxoa cursoria</i>	73.311	2083							M	M		P?	E	UC	UC	E	M	C	Cumbria: 7 records post-2000, S. Walney; Cheshire: 15 records but not since 2000; Northumberland: once common but none recorded since 2003	
Square-spot Dart	<i>Euxoa obelisca</i>	73.312	2080							M			E	V		P?		M	C	Northumberland: recorded 2016 from Lindisfarne where there are two (much) earlier records	
Sand Dart	<i>Agrotis ripae</i>	73.323	2093							M	M		P	P		P		M	C		
Lunar Yellow Underwing	<i>Noctua orbona</i>	73.344	2108	X	X				H	B		H	E	E	RR	E	E	M	C	Cheshire: 8 reared from larvae found Meols, 2008; Yorks recorded VC64 in 2006.	
Square-spotted Clay	<i>Xestia rhomboidea</i>	73.354	2131								H	H	UC		V	NRR	P	M	C	Fairly widespread mid-north Yorkshire; one known site in Co. Durham	
Plain Clay	<i>Eugnorisma depuncta</i>	73.366	2103								M		RR			RR	E?	M	C	Well-established in western Yorkshire	
Cream-bordered Green Pea	<i>Earias clorana</i>	74.011	2418								M			RR				M	C	Lancs: 1 record only, 2002; Yorks: recent expansion in S & E	

White-barred Clearwing	<i>Synanthedon sphecoformis</i>	52.006	375							M			E?	R			NRR	L	C		
Narrow-bordered Bee Hawk-moth	<i>Hemaris tityus</i>	69.008	1982	X	X			H	B	H	H		R	RR			R	R	L	C	
Broad-bordered Bee Hawk-moth	<i>Hemaris fuciformis</i>	69.009	1983								M						NRR	NRR	L	C	
Pinion-spotted Pug	<i>Eupithecia insigniata</i>	70.174	1820								M							NRR	L	C	
Scarce Pug	<i>Eupithecia extensaria</i> ssp. <i>occidua</i>	70.178	1847	X	X			H	A		H							E	L	C	
Campanula/Jasione Pug	<i>Eupithecia denotata</i>	70.185	1836								M								L	C	
Small Grass Emerald	<i>Chlorissa viridata</i>	70.306	1670								M		R						L	C	No records since 1980s
Dew Moth	<i>Setina irrorella</i>	72.050	2036								M								L	C	
Four-spotted	<i>Tyta luctuosa</i>	73.031	2465	X	X			H	B		M						R	RR	L	C	
Reed Dagger	<i>Simyra albovenosa</i>	73.035	2290								M							V	L	C	
Sword-grass	<i>Xylena exsoleta</i>	73.208	2242	X				H	C	H	H		E	E		E	RR	E	L	C	
White-spotted Pinion	<i>Cosmia diffinis</i>	73.214	2317	X	X			H	B	H				R	R		R	R	L	C	
Black-banded	<i>Polymixis xanthomista</i>	73.236	2253								H								L	C	
Bordered Gothic	<i>Heliophobus reticulata</i> ssp. <i>marginosa</i>	73.277	2153	X	X			H	C	H	H			E				E	L	C	
Grey	<i>Hadena caesia</i>	73.285	2174								H								L	C	
Light Feathered Rustic	<i>Agrotis cinerea</i>	73.316	2084								M					NRR			L	C	Northumberland: Low Newton and Warkworth in 1981 & 1990 respectively.

Wildlife and Countryside Act (1981) status: F = full protection; P = partial protection (sale only).
UK BAP and national legislative conservation status: X = listed; E? = probably extinct.
BC UK Threat Priority: H = High Priority; M = Medium Priority; L = Low Priority; R = Research.
BC Conservation Priority: A = Action urgent across UK range; B = Action less urgent across UK range, but may be required at the country/regional level; C = Action less urgent, but may be required at the landscape/site level. Also includes species with poorly understood autecology.
Regional Action Plan (RAP) Priority: H = High Priority; M = Medium Priority.
County status notes: P = Present post-2000 (more widespread than a few sites); PO = No records post-2000 but may still be resident; P? = Present post-2000 but breeding status doubtful; UNC = Uncommon; E = Extinct; NRR = No recent records post-2000; RR = Recent record; R = Record; LR = Year last record; FR = Year first record; UC = status uncertain; V = Vagrant.
County data extracted from: NMRS database with additional contributions/comments from Martin Tordoff (Cumbria); BC Cheshire and Wirral Branch; Charlie Fletcher (Yorkshire); Keith Dover and Tim Barker (County Durham).
Regional Conservation Strategy (RCS) Threat Priority: H = High Priority; M = Medium Priority; L = Low Priority.
Regional Conservation Strategy (RCS) Conservation Priority: A = Action urgent across all occupied landscapes/sites; B = Action necessary in some occupied landscapes/sites; C = Action less urgent regionally but may be necessary in some landscapes/sites.

TABLE 3: NORTHERN ENGLAND REGIONAL CONSERVATION STRATEGY PRIORITY LANDSCAPES

Branch	Cumbria						C; L	Lancs	Ch	North East Eng						Yorks		
High Priority Landscape	X	X	X	X		X	X					X	X	X	X	X		
Priority Landscape				X			X	X	X	X	X					X		
Landscape Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
Landscape Name	West Cumbria Coastal Plain	Solway Woods	North West Eden Valley	Cumbria High Fells	South Orton Fells	South Cumbria Low Fells	Morecambe Bay Limestones	North Bowland Fells	Sefton Coast and the Wirral (Lancashire)	Sefton Coast and the Wirral (Cheshire)	Border Uplands	North Northumberland Coastal Plain	Durham Coalfield Pennine Fringe	North East Brownfields	Durham Magnesian Limestone Plateau	Yorkshire Dales and Craven Lowlands	North York Moors	Yorkshire Wolds
High Priority Butterflies (Conservation Priority A)																		
Pearl-bordered Fritillary						H*	H*										H*	
High Brown Fritillary						H*	H*											
Marsh Fritillary		H*	H*	H*														
Duke of Burgundy						H*	H*										H*	
High Priority Butterflies (Conservation Priority B)																		
Dingy Skipper	H	H	H		H	H	H		H	H	H	H	H	H	H	H	H	
Large Heath		H		H		H	H	H		H							H	
Mountain Ringlet				H														
Scotch Argus					H		H									R		
Grayling	H					H	H	H	H		H		H				H	
Small Pearl-bordered Fritillary		H	H	H	H	H	H	H		H		H			H	H		
Small Blue	H																	
Northern Brown Argus					H		H							H	H			
Medium Priority Butterflies																		
Wall	M	M	M	M	E	M	M	E	M	E	M	M	M	M	M	M	M	
Silver-washed Fritillary						M	M										M	
Dark Green Fritillary			M	M	M	M	M	M		M	M	M			M	M		
Green Hairstreak				M		M	M	M		M		M	M		M	M		
White-letter Hairstreak							M	M	M	M				M	M	M	M	
High Priority Moths (Conservation Priority A only)																		
<i>Lampronia pubicornis</i>																		
<i>Acrolepiopsis betulella</i>																		
<i>Agonopterix atomella</i>																		
Goat Moth								H										
Welsh Clearwing				H														
Forester		H		H				H					H		H			
<i>Anania funebris</i>						H	H											
Small Eggar							H										H	
Grass Eggar							H	H										
Chalk Carpet														H			H	
Yellow-ringed Carpet				H												H		
Chestnut-coloured Carpet				H		H	H								H			
Netted Carpet				H		H	H											
Argent and Sable				H		H	H										H	
Dentated Pug																		
Heath Rivulet						H										H		
Marsh Carpet																		
Barred Tooth-striped						H	H									H		
Dark Bordered Beauty																		
Belted Beauty									H									
Bordered Grey						H	H											
Small Chocolate-tip																		
Scarce Vapourer																		
Sandhill Rustic								H	H									
Least Minor					H		H		H						H	H		
Double Kidney																		
Portland Moth								H			H							
Northern Dart				H					H									
Rosy Marsh Moth						H												
Total High Priority Butterflies	3	4	3	4	4	7	9	2	1	2	3	3	2	2	2	3	5	2
Total Medium Priority Butterflies	1	1	2	3	1	4	5	2	3	1	3	2	3	3	2	4	5	2
Total High Priority Moths (A only)	0	1	0	7	1	8	8	1	6	2	1	1	0	1	2	5	2	1
Total Priority Species	4	6	5	14	6	19	21	5	10	5	7	6	5	6	6	11	12	5

Key to species status
 E Extinct
 R Re/introduced
 ? Status uncertain

Key to conservation delivery progress
 Unknown
 No conservation delivery: e.g. occasional recording of target species; target species monitored on few sites.
 Limited conservation delivery: e.g. co-ordinated surveys undertaken enabling distribution of target species across the landscape to be mapped; co-ordinated monitoring undertaken across several sites, enabling assessment of target species abundance trends; management advice provided on some sites; recovery management implemented on some sites (e.g. work parties).
 Full conservation delivery: e.g. co-ordinated monitoring programme established on many sites enabling assessment of target species abundance trends and effectiveness of conservation action; management advice given to landowners across whole site networks; co-ordinated programme of recovery management implemented across whole site networks; long-term sustainable management (e.g. agri-environment schemes) implemented across sites.

TABLE 4: NORTHERN ENGLAND REGIONAL CONSERVATION STRATEGY OTHER PRIORITY SITES

Branch	Cumb		Lancs			Cheshire				North East Eng							Yorkshire							
Site Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	
Sites	Wainey Island	Ormsgill Slag Banks	Heysham Moss	Sunderland Point	Winmarleigh Moss	Witton Lime Beds	Tegg's Nose	Leftwich	Wybunbury Moss	Ford Moss	Holburn Moss East	Beanley Moss	Arcot Grasslands and Ponds	Tyne Riverside and Wylam Haughs	Hamsterley Forest	Waldridge Fell	Coatham Stob	Eston Moor	High Batts	Strensall Common	Askham Bog	Bishop Wood	Thorne and Hatfield Moors	
High Priority Butterflies (Conservation Priority B)																								
Dingy Skipper	H	H				H								H	H	H								
Small Blue		R																						
Grayling	H	H																						
Large Heath			R		H					H	H	H												H
Small Pearl-bordered Fritillary										E						R	E							
Medium Priority Butterflies																								
Wall	M	M			E	M							E	M	M	M				M	E		M	
Silver-washed Fritillary																		M						
Dark Green Fritillary	M	M								M					M									M
Green Hairstreak			M		M	M									M	M	M	M		M				M
White-letter Hairstreak								M						M	M	M	M	M						
High Priority Moths (Conservation Priority A only)																								
<i>Agonopteryx atomella</i>	H												H											
Forester	H																	H	H					
Argent and Sable									H															H
Dentated Pug																						H		
Marsh Carpet																						H		
Dark Bordered Beauty																						H		
Belted Beauty				H																				
Least Minor	H												H											
Double Kidney																			H					
Portland Moth	H																							
Scarce Vapourer																								H
Total High Priority Butterflies	2	3	1	0	1	1	0	0	0	1	1	1	0	1	2	1	0	0	0	0	0	0	0	1
Total Medium Priority Butterflies	2	2	1	0	1	0	2	1	0	1	0	0	0	2	4	3	2	3	0	2	0	0	0	3
Total High Priority Moths (A only)	4	0	0	1	0	0	0	0	1	0	0	0	2	0	0	0	1	1	1	1	2	1	1	1
Total Priority Species	8	5	2	1	2	1	2	1	1	3	1	1	2	3	6	4	3	4	?	3	2	1	5	

Key to species status
 E Extinct
 R Re/introduced
 ? Status uncertain




Key to conservation delivery progress
 Unknown
 No conservation delivery: e.g. occasional recording and/or monitoring of target species.
 Limited conservation delivery: e.g. co-ordinated monitoring enabling assessment of target species abundance trends; some management advice provided; some recovery management implemented.
 Full conservation delivery: e.g. co-ordinated monitoring enabling assessment of target species abundance trends and effectiveness of conservation action; regular management advice provided; co-ordinated programme of recovery management implemented; long-term sustainable management (e.g. agri-environment schemes) implemented.

TABLE 5: NORTHERN ENGLAND REGIONAL CONSERVATION STRATEGY PRIORITY ACTIONS

	Northern England RCS Threat Priority 2016-25	Northern England RCS Conservation Priority 2016-25	Northern England RCS Species Recovery Curve Stage 2016	Survey	Monitoring	Research	Bespoke Management	Mosaic Management	Staff led	Input from staff	Volunteer led	Comment
High and Medium Priority Butterflies												
Pearl-bordered Fritillary	H	A	3			X	X					Research autecology: climate change/nitrogen deposition; Trial management: Bracken
High Brown Fritillary	H	A	3			X	X					Research autecology: climate change/nitrogen deposition; Trial management: Bracken
Marsh Fritillary	H	A	4				X					
Duke of Burgundy	H	A	4				X					
Dingy Skipper	H	B	3/4			X		X				Trial management: brownfields, woodland
Large Heath	H	B	4					X				
Mountain Ringlet	H	B	2	X	X	X		X				Data deficient; Research autecology: climate change; Trial management: montane grassland
Scotch Argus	H	B	2			X		X				Research causes of decline England only
Grayling	H	B	3			X	X	X				Research autecology: climate change; Trial management: heathland
Small Pearl-bordered Fritillary	H	B	4			X	X	X				Research autecology: climate change; Mosaic management in part of range
Small Blue	H	B	4					X				
Northern Brown Argus	H	B	4			X	X					Research autecology: climate change
Wall	M	C	2			X		X				Research causes of decline
Silver-washed Fritillary	M	C	5					X				
Dark Green Fritillary	M	C	4					X				
Brown Hairstreak	M	C	4				X	X				
Green Hairstreak	M	C	2			X		X				Research causes of decline
White-letter Hairstreak	M	C	3	X	X	X		X				Data deficient
High Priority Moths (Conservation Priority A only)												
<i>Lampronia pubicornis</i>	H	A	1	X	X						V	
<i>Acrolepiopsis betulella</i>	H	A	1	X	X			X			V	
<i>Agonopterix atomella</i>	H	A	3	X	X		X				V	
Goat Moth	H	A	2	X	X			X			V	
Welsh Clearwing	H	A	3	X	X	X	X	X			V	
Forester	H	A	2	X	X	X		X	S		V	
<i>Anania funebris</i>	H	A	4	X	X		X	X			V	
Small Eggar	H	A	3	X	X	X		X			V	
Grass Eggar	H	A	1	X							V	
Chalk Carpet	H	A	2	X	X	X		X	S		V	
Yellow-ringed Carpet	H	A	1	X	X			X			V	
Chestnut-coloured Carpet	H	A	2	X	X			X			V	
Netted Carpet	H	A	4	X			X		S			In collaboration with University of Reading and National Trust
Argent & Sable	H	A	3/4	X	X		X	X	S		V	
Dentated Pug	H	A	2	X	X			X			V	
Heath Rivulet	H	A	1	X	X			X			V	
Marsh Carpet	H	A	2	X	X			X			V	
Barred Tooth-striped	H	A	3	X	X	X		X	S			
Dark Bordered Beauty	H	A	3	X	X	X	X		S			Transect count undertaken on sole site; small scale management undertaken; LCF project 2016-17
Belted Beauty	H	A	4			X		X			V	
Bordered Grey	H	A	1	X	X	X		X			V	
Small Chocolate-tip	H	A	1	X	X	X		X			V	
Scarce Vapourer	H	A	2	X	X	X		X			V	
Sandhill Rustic	H	A	1	X	X			X			V	
Least Minor	H	A	1	X	X	X		X			V	
Double Kidney	H	A	1	X	X						V	
Portland Moth	H	A	1	X	X	X		X			V	
Northern Dart	H	A	2	X	X			X			V	
Rosy Marsh Moth	H	A	2		X			X			V	

Species Recovery Curve Stages: 1 Status assessment; 2 Diagnosis; 3 Solution testing; 4 Recovery management; 5 Sustainable management.

Survey: Improved surveying requiring to assess range and distribution trends.

Monitoring: Improved monitoring required to assess population trends.

Research: To improve autecological knowledge, identify causes of decline and assess potential habitat management solutions.

Bespoke management: Habitat management tailored to meet specific ecological requirements of the target species.

Mosaic management: Generic or best practice habitat management which integrates the ecological requirements of a suite of species.