

TABLE 1: WEST MIDLANDS REGIONAL CONSERVATION STRATEGY PRIORITY BUTTERFLIES

Common Name	Scientific Name	Ecological classification	1 km squares occupied in West Midlands (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	West Midlands RAP 1997	West Midlands RAP 2008	West Midlands RCS Threat Priority 2016-25	West Midlands RCS Conservation Priority 2016-25
Wood White	<i>Leptidea sinapis</i>	HS	79	0.61	21	-45	EN	P	X	X				M	M	H	A	H	H	H	A
Grayling	<i>Hipparchia semele</i>	HS	43	0.33			VU		X	X				L	H	H	B	M	H	H	A
Pearl-bordered Fritillary	<i>Boloria euphrosyne</i>	HS	47	0.36	-62***	-21	EN	P	X	X				H	H	H	A	H	H	H	A
Small Pearl-bordered Fritillary	<i>Boloria selene</i>	HS	79	0.61	17		NT		X	X				M	H	H	B	H	H	H	A
Silver-studded Blue	<i>Plebejus argus</i>	HS	5	0.04			VU	P	X	X				M	H	H	B	H	H	H	A
Dingy Skipper	<i>Erynnis tages</i>	HS	266	2.05	-2	-55**	VU		X	X				L	H	H	B	M	H	H	B
Grizzled Skipper	<i>Pyrgus malvae</i>	HS	99	0.76	-23	-67**	VU		X	X				M	H	H	B	H	H	H	B
Wall	<i>Lasiommata megera</i>	WCS	225	1.73	-88***				X	X				L	L	H	R	M	R	H	B
Large Heath	<i>Coenonympha tullia</i>	HS	5	0.04			VU	P	X	X	VU			M	H	H	B	H	H	H	B
Dark Green Fritillary	<i>Argynnis aglaja</i>	HS	95	0.73										L	M	M		M	H	H	B
High Brown Fritillary	<i>Argynnis adippe</i>	HS	8	0.06	-95***		CR	F	X	X				H	H	H	A	H	H	H	B
Brown Hairstreak	<i>Thecla betulae</i>	HS	189	1.45			VU	P	X	X				M	H	M	C	H	H	H	B
White-letter Hairstreak	<i>Satyrus w-album</i>	WCS	284	2.18	-5	-88***	EN	P	X	X				M	H	H	C	M	H	H	B
Small Blue	<i>Cupido minimus</i>	HS	23	0.18			NT	P	X	X				M	H	M	C	H	H	H	B
Small Heath	<i>Coenonympha pamphilus</i>	WCS	669	5.14	-59***	-87***			X	X				L	L	H	R		R	M	C
Silver-washed Fritillary	<i>Argynnis paphia</i>	HS	261	2.01	-52***	27								L	L	L		M	M	M	C
White Admiral	<i>Limenitis camilla</i>	HS	158	1.22	-62***	-62**	VU		X	X				L	H	H	C	M	H	M	C
Purple Emperor	<i>Apatura iris</i>	HS	16	0.12			NT	P						M	M	M				M	C
Green Hairstreak	<i>Callophrys rubi</i>	HS	263	2.02	-15	-64*								L	M	M		M	M	M	C
Brown Argus	<i>Aricia agestis</i>	WCS	345	2.65	-22	295*								L	L	L			M	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; R = Research.

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.

Explanation of proposed changes:

High Brown Fritillary: Now extinct in region but a candidate for reintroduction.

Wall: Continued to decline and is now found only in the west of the region.

White Admiral: Range expansion continued northwards within the region and found in most large woodland systems as far north as mid-Shropshire.

Purple Emperor: Introduced but now well established.

Small Heath: Declined in distribution and only common in more upland areas.

Brown Argus: Range expansion has continued in region and although under-recorded, is becoming much more widespread utilising a wide range of Geranium spp. as its larval foodplant.

FIGURE 1: WEST MIDLANDS REGIONAL CONSERVATION STRATEGY PRIORITY LANDSCAPES AND SITES MAP

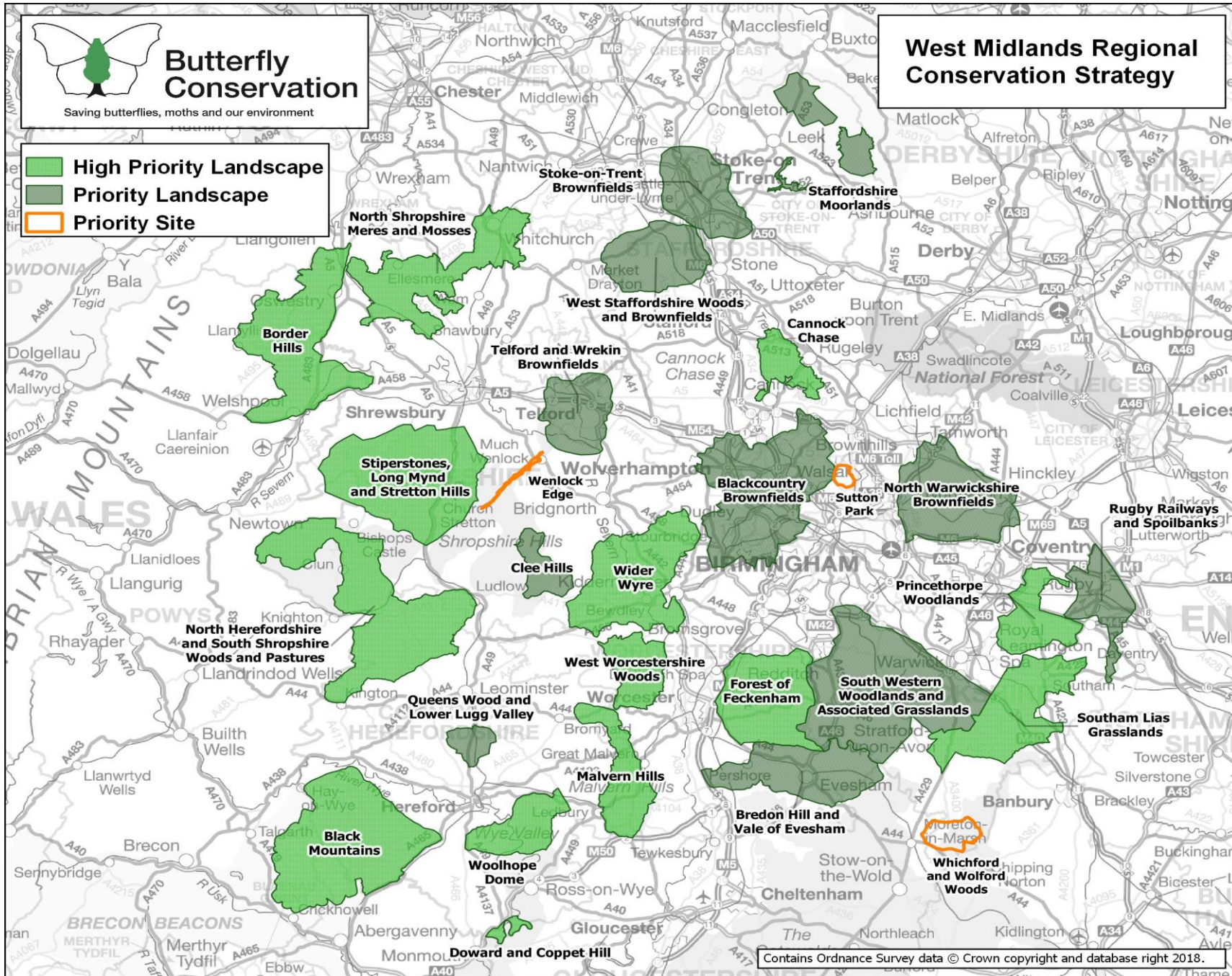


TABLE 4: WEST MIDLANDS REGIONAL CONSERVATION STRATEGY OTHER PRIORITY SITES

Branch	WM	Warks	
Site Number	24	25	26
Site name	Wenlock Edge	Sutton Park	Whitchford & Wolford Woods
High Priority Butterflies (Conservation Priority B)			
Dingy Skipper	H		H
Wall	H		
Dark Green Fritillary	H		
White-letter Hairstreak		H	H
Small Blue			H
Medium Priority Butterflies			
Small Heath	M	M	
Silver-washed Fritillary	M		M
White Admiral			M
Purple Emperor			
Green Hairstreak	M	M	
Total High Priority Butterflies	3	1	3
Total Medium Priority Butterflies	3	2	2
Total High Priority Moths (A only)	0	0	0
Total Priority Species	6	3	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 trend 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 5: WEST MIDLANDS REGIONAL CONSERVATION STRATEGY PRIORITY ACTIONS

Common Name	West Midlands RCS Threat Priority 2016-25	West Midlands RCS Conservation Priority 2016-25	West Midlands 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												
Wood White	H	A	4				X					
Grayling	H	A	3			X	X	X				
Pearl-bordered Fritillary	H	A	4				X					
Small Pearl-bordered Fritillary	H	A	3			X	X	X				Research autecology: climate change; Mosaic management in part of range
Silver-studded Blue	H	A	4				X	X				
Dingy Skipper	H	B	3/4			X		X				Trial management: brownfields, woodland
Grizzled Skipper	H	B	3/4			X		X				Trial management: brownfields
Wall	H	B	2			X		X				Research: causes of decline
Large Heath	H	B	3					X				
Dark Green Fritillary	H	B	4					X				
High Brown Fritillary	H	B	2			X						Research: reintroduction feasibility in Malvern Hills and Wyre Forest
Brown Hairstreak	H	B	4				X	X				
White-letter Hairstreak	H	B	3	X	X	X		X				
Small Blue	H	B	4					X				
Small Heath	M	C	2			X		X				Research: causes of decline
Silver-washed Fritillary	M	C	5					X				
White Admiral	M	C	2			X		X				Research autecology: climate change; trial management: woodland
Purple Emperor	M	C	4				X					
Green Hairstreak	M	C	2			X		X				Research: causes of decline
High Priority Moths (Conservation Priority A only)												
<i>Sterrhopterix fusca</i>	H	A	1	X	X	X		X		S	V	Research autecology: identify threats at Fenn's and Whixall Mosses; liaise with site managers
<i>Phyllonorycter sagitella</i>	H	A	2	X	X			X			V	Maintain survey effort; liaise with site managers & encourage site management to maintain range of age classes of Aspen
<i>Agonopterix atomella</i>	H	A	3	X			X			S	V	Maintain survey effort; liaise with site managers to maintain plentiful supply of dyer's greenweed
<i>Dichomeris ustalella</i>	H	A	2	X	X	X		X			V	Increase survey effort; establish monitoring programme
<i>Celypha woodiana</i>	H	A	3	X	X		X			S	V	Maintain survey effort; liaise with site managers to maintain annual supply of mistletoe
<i>Ancylis tineana</i>	H	A	2	X	X	X		X		S	V	Maintain survey effort; research autecology: identify threats at Fenn's and Whixall Mosses; liaise with site managers
<i>Grapholita pallifrontana</i>	H	A	3	X	X		X			S	V	Maintain survey effort; liaise with site managers
Welsh Clearwing	H	A	3	X	X				S			Maintain survey effort; liaise with site managers & ensure mature birch habitat continuity at Cannock Chase
Forester	H	A	2	X	X	X				S	V	Undertake surveys to assess status in region; where present liaise with site managers & encourage age appropriate site management
Kentish Glory	H	A	2			X				S	V	Undertake reintroduction feasibility study in Wyre Forest
Narrow-bordered Bee Hawk-moth	H	A	4	X	X	X			S			Maintain survey effort; liaise with site managers & undertake appropriate site management
Yellow-ringed Carpet	H	A	1	X	X						V	Undertake surveys to assess status in region; liaise with appropriate site managers
Drab Looper	H	A	4	X	X				S			Maintain survey effort; liaise with site managers & encourage appropriate site management to maintain good stands of Wood Spurge
Argent & Sable	H	A	3/4	X	X	X			S			Maintain survey effort; liaise with site managers & encourage appropriate site management
Barred Tooth-striped	H	A	3	X	X			X	S			Maintain survey effort; liaise with site managers & encourage appropriate site management
Common Fan-foot	H	A	4	X	X			X		S	V	Maintain survey effort; liaise with site manager & encourage appropriate site management
White-spotted Pinion	H	A	4	X	X			X			V	Maintain survey effort; liaise with site manager & encourage appropriate site management
Silvery Arches	H	A	1	X	X	X		X			V	Research: autecology & identify threats and status; liaise with site managers
Silurian	H	A	2	X	X			X		S	V	Maintain survey effort; liaise with site managers/interested parties

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.