



UK priority species pages – Version 2

To find out more about the JNCC priority species pages visit <http://www.jncc.gov.uk/page-5161>

To find out more about JNCC visit <http://www.jncc.gov.uk/page-1729>

SPECIES PAGES FOR 2007 UK BAP PRIORITY SPECIES

(see endnotes for an explanation of the various components of this compilation).

Decticus verrucivorus (Linnaeus, 1758)

Wart-biter

1 General information

Level 1	Terrestrial invertebrates
Level 2	cricket
On 1997 UK BAP list	Species Action Plan

2 UK BAP criteriaⁱ

1. International threat	2. International responsibility (2a) + moderate decline in UK (2b)	3. Marked decline in the UK	4. Other important factor(s)
False	False	False	True

3 Evidence for Criteriaⁱⁱ

Criterion 1	
Criterion 2a	
Criterion 2b	
Criterion 3	
Criterion 4	<p>Substantial threat to a food plant or to a highly specialised habitat, if it is impossible to predict the resulting rate of decline in the species; For a species on the current Priority List, factors that caused the original decline are still operating or the species' population has not recovered to a point where it is likely to be viable in the long term The species is declining and is a good 'indicator' for a declining group of species, a threatened habitat or conservation issue The geographic range of a species is very restricted AND there is evidence of species decline. This can be interpreted using IUCN categories and criteria.</p>

4 Distribution by Country

England	Scotland	Wales	Northern Ireland	International Waters
Y	N	N	N	

5 Distribution Information

Distribution data source	BAP 2005 reporting
Distribution data notes	
number of sites (where less than or equal to 10)	5
Units used for number of sites	Site(s) / population(s)

6 Actions identified by expertsⁱⁱⁱ

Action number	Action text	Reporting category
1	Further autecological research needed to secure the long term prospects for this species. It has specialised requirements within a rare and vulnerable habitat type (species rich chalk grassland). This threat is exacerbated by the small population size of most of the extant UK colonies.	Species-specific research
2	Appropriate site management and continuation of the re-introduction programme initiated under BAP part 1	Species-specific management action
3	Survey is needed to find any new sites, monitoring is needed to understand the status of the species at existing sites. These data are needed to allow reporting against success criteria.	Species-specific monitoring/survey

7 Signpost to Priority Habitat^{iv}

Priority Habitat Name
Calcareous Grassland : Lowland Calcareous Grassland

8 Additional information from specialists^v

Attribute	Value
NBN current scientific name	Decticus verrucivorus
NBN common name	Wart-biter
classification level 1	Terrestrial invertebrates
classification level 2	cricket
Crit 1 Global threat	Unknown
Crit 1 European threat	Declining in parts of its continental range
Crit 1 Supporting info	Occurs throughout Europe (except in extreme south) and in temperate Asia. Decline in parts of continental Europe is noted (for example) by Holst (1986), Hjermand & Imms (1996) and Kleukers & van Nieuwerkerken (1996). A fuller assessment of European status is planned.
Crit 2 % of global pop	Not known
Crit 2 % of European popn	Not known
Crit 2 % of int population Supporting info	UK population likely to represent a small proportion of global/European population, at a species level. However, northern European (inc. UK) populations are subspecies verrucivorus; southern European/Asian populations differ sufficiently to be recognised as a number of distinct subspecies

	(eg. Samways & Harz, 1982). UK populations represent those at the extreme edge of range, and morphological differences have been suggested between UK/continental forms of subspecies verrucivorus, and even between UK populations (eg. Marshall & Haes, 1988).
Crit 2 Decline %	0
Crit 2 Decline no of years	25
Crit 2 Decline dates	1979-2004
Crit 2 declines supporting info	See below
Crit 3 Decline %	0
Crit 3 Decline no of years	25
Crit 3 Decline dates	1979-2004
Crit 3 supporting info	On the basis of best available information, there were four UK colonies in 1979 (one in Wiltshire, two in E.Sussex and one in Dorset). Since the 1980s, the species has been supported by work under English Nature`s Species Recovery Programme and the UK BAP, including captive rearing at London Zoo (eg. Pearce-Kelly et al., 1998; Jones et al., 1999). Largely as a consequence of these efforts, the first three of the above colonies have survived, but the Dorset population now appears to be extinct; a former population in Kent has been successfully re-introduced (eg. Cheesman, 2001); and a second re-introduction (in E.Sussex) is in the early stages of establishment. Given the uncertain future of this (and other small, extant UK colonies), a conservative estimate of 0% decline/increase over 25 years is recorded here.
Crit 4 other important factors	This species is under substantial threat of decline or extinction, owing to its specialised requirements within a rare and vulnerable habitat type (species rich chalk grassland). This threat is exacerbated by the small population size of most of the extant UK colonies. This is a current BAP Priority Species, not yet sufficiently recovered to be viable in the long term. However, success has been demonstrated in re-introduction attempts, indicating that recovery targets are attainable, given appropriately managed sites where suitable habitat occurs. As one of the country`s largest and most spectacular species, <i>D. verrucivorus</i> has flagship status in the conservation of Orthoptera and

	<p>insects/invertebrates in general. This has been demonstrated recently by the use of this species as the focus of a fundraising campaign by the Kent Wildlife Trust. I believe there is a strong case for designating <i>D. verrucivorus</i> as Critically Endangered in the UK, under the IUCN Red List Categories and Criteria (V.3.1) sub-criteria B2a/b[decline projected in (i)-(iv) in the absence of Priority Species status]/c(iv).</p>
<p>Sources</p>	<p>Brown, V.K., Cheesman, O.D., Maxen, J., Shaughnessy, J.P. & Edwards, B. (1996) English Nature Species Recovery Programme – Wart-biter Bush Cricket (<i>Decticus verrucivorus</i>) 1996 Report. Unpublished report to English Nature under contract F80-37-21. Brown, V.K., Cheesman, O.D., Maxen, J., Shaughnessy, J.P. & Edwards, B. (1997) English Nature Species Recovery Programme – Wart-biter Bush Cricket (<i>Decticus verrucivorus</i>) 1997 Report. Unpublished report to English Nature under contract FIN/CON/061. Cheesman, O.D. (2001) The Wart-biter Bush-cricket. In <i>Playing God or Gardening? A Conference on Re-introductions</i>. Suffolk Natural History - Transactions of the Suffolk Naturalists` Society 37, 31-36. Cheesman, O.D. & Brown, V.K. (1999) Conservation of the wart biter bush cricket – flagship or pharmaceutical? <i>Antenna</i> 23: 70-75. Cheesman, O.D. & Shaughnessy, J.P. (2002) English Nature Species Recovery Programme – Wart-biter Bush-cricket (<i>Decticus verrucivorus</i>) 2001 Report. Unpublished report to English Nature under contract FST20-37-05. Cheesman, O.D. & Shaughnessy, J.P. (2003) English Nature Species Recovery Programme – Wart-biter Bush-cricket (<i>Decticus verrucivorus</i>) 2002 Report. Unpublished report to English Nature under contract CPAU03/02/173. Cheesman, O.D., Brown, V.K., Shaughnessy, J.P., Edwards, B. & Maxen, J. (1998) English Nature Species Recovery Programme – Wart-biter Bush Cricket (<i>Decticus verrucivorus</i>) 1998 Report. Unpublished report to English Nature under contract FIN/CON/061. Cheesman, O.D., Wilde, I.S.H., Brown, V.K., Shaughnessy, J.P., Edwards, B. & Maxen, J.</p>

	<p>(1999) English Nature Species Recovery Programme – Wart-biter Bush Cricket (<i>Decticus verrucivorus</i>) 1999 Report. Unpublished report to English Nature under contract FST20-37-05. Cheesman, O.D., Wilde, I.S.H., Shaughnessy, J.P. & Edwards, B. (2000) English Nature Species Recovery Programme – Wart-biter Bush Cricket (<i>Decticus verrucivorus</i>) 2000 Report. Unpublished report to English Nature under contract FST20-37-05. Cherrill, A. (1989) The diet of the Wart Biter, <i>Decticus verrucivorus</i> (L.). British Ecological Society Bulletin 20 (2), 115-118. Cherrill, A. (1993) The conservation of Britain's wart-biter bush-crickets. British Wildlife 5, 26-31. Cherrill, A.J. & Brown, V.K. (1990a) The life cycle and distribution of the Wart-biter <i>Decticus verrucivorus</i> (L.) (Orthoptera: Tettigoniidae) in a chalk grassland in southern England. Biol. Cons. 52, 125-143. Cherrill, A.J. & Brown, V.K. (1990b) The habitat requirements of adults of the Wart-biter <i>Decticus verrucivorus</i> (L.) (Orthoptera: Tettigoniidae) in southern England. Biol. Cons. 52, 145-157. Cherrill, A.J. & Brown, V.K. (1991) Variation in coloration of <i>Decticus verrucivorus</i> (L.) (Orthoptera: Tettigoniidae) in southern England. Ent. Gaz. 42, 175-183. Cherrill, A.J. & Brown, V.K. (1991) Effects of the summer of 1989 on the phenology of the Wart-biter, <i>Decticus verrucivorus</i> (L.) (Orthoptera: Tettigoniidae). Br. J. Ent. Nat. Hist. 4, 163-168. Cherrill, A.J. & Brown, V.K. (1992). Variation in body size between heathland and chalk grassland populations of the bush-cricket, <i>Decticus verrucivorus</i> (L.) (Orthoptera: Tettigoniidae), in southern England. Ent. Gaz. 43, 77-82. Cherrill, A.J. & Brown, V.K. (1992). Ontogenetic changes in the micro-habitat preferences of <i>Decticus verrucivorus</i> (L.) (Orthoptera: Tettigoniidae) at the edge of its range. Ecography 15, 37-44. Cherrill, A.J. Shaughnessy, J. & Brown, V.K. (1991). Oviposition behaviour of the bush-cricket <i>Decticus verrucivorus</i> (L.) (Orthoptera: Tettigoniidae) Entomologist 110, 37-42. Haes, E.C.M., Cherrill, A.J. & Brown, V.K. (1990). Meteorological</p>
--	---

	<p>correlates of Wart-biter (Orthoptera: Tettigoniidae) abundance. Entomologist 109, 93-99. Hjermand, D.O. & Imms, R.A. 1996. Landscape ecology of the wart-biter Decticus verrucivorus in a patchy landscape. Journal of Animal Ecology 65, 768-780. Holst, K.T. (1986) The Saltatoria (Bush-crickets, crickets and grasshoppers) of Northern Europe. Fauna Entomologica Scandinavica 16. E.J.Brill/Scandanavian Science Press Ltd, Leiden. Jones, R., Pearce-Kelly, P. & Cheesman, O. (1999) Population biology and management considerations in invertebrate captive rearing programmes – with particular reference to Orthoptera. Aspects of Applied Biology 53, 219-226. Kleukers, R.M.J.C. & van Nieukerken, E.J. 1996. Distribution dynamics of Orthoptera in the Netherlands. Proceedings of the XX International Congress of Entomology, Firenze, Italy, August 25-31, 1996, p.103. Marshall, J.A. & Haes, E.C.M. (1988) Grasshoppers and Allied Insects of Great Britain and Ireland. Harley Books, Colchester. Pearce-Kelly, P., Jones, R., Clarke, D., Walker, C., Atkin, P. & Cunningham A.A. (1998) The captive rearing of threatened Orthoptera: a comparison of the conservation potential and practical considerations of two species` breeding programmes at the Zoological Society of London. Journal of Insect Conservation 2, 201-210. Samways, M.J. & Harz, K. (1982) Biogeography of intraspecific morphological variation in the bush crickets Decticus verrucivorus (L.) and D. albifrons (F.) (Orthoptera: Tettigoniidae). Journal of Biogeography 9: 243-254. Shaughnessy, J.P. & Cheesman, O.D. (2003) Wart-biter Bush-cricket (Decticus verrucivorus) 2003 (with particular reference to monitoring carried out at Calstone & Cherhill Downs SSSI). Unpublished report to the National Trust. Shaughnessy, J.P. & Cheesman, O.D. (2005) Wart-biter Bush-cricket (Decticus verrucivorus) 2004 (with particular reference to monitoring carried out at Calstone & Cherhill Downs SSSI). Unpublished report to the National Trust.</p>
Quality	Generally, very good.
Criterion(existing bap species)	4

10 Species designations^{vi}

Abbreviation	Reporting Category	Designation	Designation description	Year	Source	Comment
England NERC S.41	Biodiversity Lists - England	England NERC S.41	Species “of principal importance for the purpose of conserving biodiversity” covered under section 41 (England) of the NERC Act (2006) and therefore need to be taken into consideration by a public body when performing any of its functions with a view to conserving biodiversity.	2008	Natural Environment and Rural Communities Act 2006 - Species of Principal Importance in England (section 41) and Wales (section 42)	Geographic constraint=Listing is for England only
BAP:2007	Biodiversity Action Plan UK list of priority species	Priority Species	The UK List of Priority Species and Habitats contains 1150 species and 65 habitats that have been listed as priorities for conservation action under the UK Biodiversity Action Plan (UK BAP).	2007	UK list of Priority Habitats and Species	status on former BAP list: Species Action Plan
RedList_GB_Pre94:VU	Red Listing based on pre 1994 IUCN guidelines	Vulnerable	Taxa believed likely to move into the Endangered category in the near future if the causal factors continue operating. Superseded by new IUCN categories	1987	Red Data Book of Insects	pre 1994 IUCN criteria

			in 1994, but still applicable to lists that have not been reviewed since 1994.			
WACA:Sch5_sect9.1(kill/injuring)	Wildlife and Countryside Act 1981	Schedule 5 Section 9.1 (killing/injuring)	Section 9.1. Animals which are protected from intentional killing or injuring.	1981	Wildlife and Countryside Act Schedules 1,5 and 8 (protected birds, animals and plants)	
WACA:Sch5_sect9.1(taking)	Wildlife and Countryside Act 1981	Schedule 5 Section 9.1 (taking)	Section 9.1 Animals which are protected from taking.	1981	Wildlife and Countryside Act Schedules 1,5 and 8 (protected birds, animals and plants)	
WACA:Sch5_sect9.2	Wildlife and Countryside Act 1981	Schedule 5 Section 9.2	Section 9.2 Animals which are protected from being possessed or controlled (live or dead).	1981	Wildlife and Countryside Act Schedules 1,5 and 8 (protected birds, animals and plants)	
WACA:Sch5_sect9.4a	Wildlife and Countryside Act 1981	Schedule 5 Section 9.4a	Section 9.4 Animals which are protected from intentional damage or destruction to any structure or place used for shelter or protection.	1981	Wildlife and Countryside Act Schedules 1,5 and 8 (protected birds, animals and plants)	

WACA:Sch5_sect9.4b	Wildlife and Countryside Act 1981	Schedule 5 Section 9.4b	Section 9.4 Animals which are protected from intentional disturbance while occupying a structure or place used for shelter or protection.	1981	Wildlife and Countryside Act Schedules 1,5 and 8 (protected birds, animals and plants)	
WACA:Sch5Sect9.4c	Wildlife and Countryside Act 1981	Schedule 5 Section 9.4c	Animals which are protected from their access to any structure or place which they use for shelter or protection being obstructed.	2007	Wildlife and Countryside Act Schedules 1,5 and 8 (protected birds, animals and plants)	Geographic constraint=Does not apply to Scotland
WACA:Sch5_sect9.5a	Wildlife and Countryside Act 1981	Schedule 5 Section 9.5a	Section 9.5 Animals which are protected from being sold, offered for sale or being held or transported for sale either live or dead, whole or part.	1981	Wildlife and Countryside Act Schedules 1,5 and 8 (protected birds, animals and plants)	
WACA:Sch5_sect9.5b	Wildlife and Countryside Act 1981	Schedule 5 Section 9.5b	Section 9.5 Animals which are protected from being published or advertised as being for sale.	1981	Wildlife and Countryside Act Schedules 1,5 and 8 (protected birds, animals and plants)	

UK BAP 2008 reporting^{vii}

(nb this only applies to species on the original 1997 UK BAP priority species list)

11 General status

Country	Attribute	Value
UK		
	Date	2007
	Status unknown	No
	Value	5
	Units	Site(s) / population(s)
	Accuracy	Partial survey
	Adequate data	Yes
	Data on NBN	Unknown
	Refer to LBAP data	No
	Data source / comments	Shaughnessy, J. P. (2007) Wart-bitre Bush-cricket <i>Decticus verrucivorus</i> (L.) (Orthopter:Tettigoniidae)
	Edits made by reporting group	
England		
	Date	2007
	Status unknown	No
	Value	5
	Units	Site(s) / population(s)
	Accuracy	Partial survey
	Adequate data	Yes
	Data on NBN	Unknown
	Refer to LBAP data	No

	Data source / comments	Shaughnessy, J. P. (2007) Wart-bitre Bush-cricket Decticus verrucivorus (l.) (Orthopter:Tettigoniidae)
	Edits made by reporting group	

8 Trends

Country	Attribute	Value
UK		
	Date	2007
	Status unknown	No
	Trend	Stable
	Accuracy	Partial survey
	Adequate data	Yes
	Data on NBN	Unknown
	Refer to LBAP data	No
	Data source / comments	Shaughnessy, J.P., 2007. Wart-biter Bush-cricket Decticus verrucivorus (L.) (Orthoptera: Tettigoniidae). Unpublished Report to the National Trust
	Edits made by reporting group	
England		
	Date	2007
	Status unknown	No
	Trend	Stable
	Accuracy	Partial survey
	Adequate data	Yes
	Data on NBN	Unknown
	Refer to LBAP data	No
	Data source / comments	Shaughnessy, J.P., 2007. Wart-biter Bush-cricket Decticus verrucivorus (L.) (Orthoptera: Tettigoniidae). Unpublished Report to the National Trust

	Edits made by reporting group	
--	-------------------------------	--

9 Successes

Success text	Success category 1	Success category 2	England	NI	Scotland	Wales	Edits by reporting group
No successes reported			No	No	No	No	No success reported

10 Threats

Threat category 1	Threat category 2	England	NI	Scotland	Wales	Edits made by reporting group
No threats reported	No threats reported	No	No	No	No	No threat recorded by Lead Partner

15 Constraints

Rank	Constraint category 1	Constraint category 2	Constraint summary	England	NI	Scotland	Wales	Solution category	Solution summary
				Yes	No	No	No		
1	Funding and incentives	Agency grant - support required	No funding available for full survey or for monitoring existing sites.	Yes	No	No	No	Funding, resources and incentive schemes	Provide funding to pay for agreed actions

11 State of Knowledge

State of knowledge category	Notes	Edits made by reporting group
Knowledge sufficient to make some impact, but more research needed		

ENDNOTES

ⁱ An explanation of these criteria is included at Annex 3 of [UK Biodiversity Action Plan: Report on the Species and Habitat Review](#). BRIG (ed. Ant Maddock) 2007. This review was organised in two stages. Stage 1 looked at the scientific evidence for selecting the UK List of Priority Species and Habitats while stage 2 considered the conservation action needed for these species and habitats and provided signposts to the means of implementing action.

ⁱⁱ The information on evidence and the species distribution is as presented on the UK BAP website. Users can download a spreadsheet of the [Stage 1 species evidence](#) from the home page of the UK BAP website.

ⁱⁱⁱ Actions were assigned to each and every priority species by expert groups convened at Stage 2 of the Review process. These were subsequently categorised into “signpost categories”. This information is as shown on the UK BAP website See the link for [categorisation \(signposting\) of UK priority species](#).

^{iv} Where a species action is clearly linked to a BAP priority habitat, the name of the relevant habitat or habitats was identified by the stage 2 expert group.

^v This information has been derived from Stage 1 of the priority species review, and is presented in the “marine”, “terrestrial invertebrates” and “other terrestrial species” sheets within the spreadsheet of the [Stage 1 species evidence](#). The information presented here varies according to the taxonomic group. Please note that some of these data have been written for other Expert Group members and may not be of great value to a wider audience.

^{vi} Information on conservation designations has been extracted from JNCC's collation of information on [species designations](#). The designations shown in version 2 of these pages are as at December 2010.

^{vii} As part of the 2008 UK BAP reporting round lead partners of national plans were asked to answer a number of specific questions. The data will be analysed and used for the UK and country level reports. All of the responses provided through BARS as part of the 2008 reporting exercise are available to [download](#). Note that in the December 2010 version of these pages (version 2) includes corrections to previously truncated text fields.