



BLOODY- NOSED BEETLE

Timarcha tenebricosa

1. INTRODUCTION

This distinctive, flightless, black leaf-beetle is found mainly in southern England. It generally inhabits grassland and heathland on well-drained soils, where it feeds on various species of bedstraw plants (*Galium*). The species gets its common name from the fact that it exudes a blood-like substance from the mouth if disturbed. This defence reaction is supposed to frighten predators and apparently makes the beetle distasteful if eaten. In Warwickshire, it feeds solely on cleavers (goosegrass – *G. aparine*) which is a common plant in hedgerows and a variety of other habitats. The adult beetles can be found during most months, but the majority emerge from hibernation in April to breed, at the same time as over-wintering eggs hatch into larvae. The larvae feed on the food plant in spring and early summer and they are very conspicuous due to their metallic black appearance and large size. By late July, another generation of adults is produced and these feed-up until late August when most either die-off or go into hibernation. Adults that breed in autumn produce over-wintering eggs.



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2. OUR OBJECTIVES & TARGETS

	Target
A. To monitor and conserve the Warwickshire population of bloody-nosed beetle	ongoing
B. To look at the potential of other sites in the county to support this species	2010
C. Monitor any development proposals that may affect known populations and ensure that the long-term survival of the species in Warwickshire is secured through mitigation and compensation measures	by 2012
D. Raise awareness of the beetle and its habitat requirements	ongoing

ASSOCIATED HABITAT PLANS

- Lowland Neutral Grassland
- Roadside Verges
- Disused Industrial & Railway Land

ASSOCIATED SPECIES PLANS

3. NATIONAL BAP OBJECTIVES & TARGETS

The bloody-nosed beetle is not the subject of a national BAP.

4. CURRENT STATUS

This beetle is widespread in southern England, particularly in coastal counties.

In the Victoria County History of Warwickshire, the species was recorded from 'all localities' in the county, but this phrase is interpreted to mean a number of historically well-worked sites in north-west Warwickshire which include Knowle and Sutton Park. Unfortunately, the beetle has suffered a very serious decline in the county in the last hundred years or so and it is currently confined to two small areas in the Lawford Heath district. One of these sites is the railway cutting due west of Cawston Grange Farm where the beetle was discovered in 1975 and the other area is a road verge along Coal Pit Lane near Manor Farm where it was first found in 1994. At the time of writing the Coal Pit Lane colony is under potential threat from proposals for a new airport. The populations have been casually monitored for a number of years, and appear to fluctuate markedly from one year to the next.

Due to the beetle's distinctive appearance and large size, it is very unlikely to have been overlooked elsewhere in Warwickshire. The flightless nature of the species renders the relic Warwickshire population vulnerable and in need of protection.

4.1 Legal and Policy Status

No legal protection exists for this species.

4.2 Current Factors Affecting The Species

- **Death from impact with road vehicles** – At the road verge site, specimens which wander onto the road (particularly in autumn when the foodplant has died-off) regularly get crushed or damaged by cars. Adults that have been swept up into vehicle wheel arches are regularly found dead or dying at the edge of the road. Although this allows for a convenient visual check of population numbers, its effect on the population is cause for concern. On occasions, hundreds of specimens have been reported in this state.

Warwickshire, Coventry and Solihull Local Biodiversity Action Plan

- **Mowing regimes of grass verge** – the current mowing regime possibly favours conservation of the species because it creates short turf adjacent to the road, but leaves the base of the hedgerow and its associated cleavers intact.
- **Succession of vegetation to tall scrub.** This is a problem along the railway line west of Cawston Grange Farm, where it is proving detrimental to the beetle.
- **Ploughing and herbicide treatment of field verges** – has led to loss of potential habitat – this is an issue adjacent to the railway footbridge where arable farmland is ploughed very close to the footbridge leaving only a small but significant ‘mound’ of vegetation undisturbed - this verge has been sprayed with herbicide in the past.
- **Disturbance and destruction of specimens by the public on disused railway line, road verge and footpath across footbridge** – because the beetles are large they sometimes provoke a reaction of disgust - people might believe them to be noxious and destroy them.
- **Potential airport development** – which could destroy the site of the Coal Pit Lane colony.
- **Rugby Western Relief Road** – plans for this road have the potential to impact on the colony.

5. CURRENT LOCAL ACTION

- Casual recording by entomologists provides regular feedback to the Biological Records Centre regarding the continuing presence of the beetle population and counts of adults and larvae. The extent of the species’ distribution along Coal Pit Lane road verge was assessed in September 2002, but no controlled systematic survey or statistical analysis has yet been undertaken
- There has been a degree of public awareness about the species by word-of-mouth to villagers in the vicinity of the known site and the Warwickshire Museum and Wildlife Trust have known about the beetle’s existence here for many years.
- A student project has been initiated in conjunction with Coventry University to determine the extent of the distribution and the abundance of the populations in the Lawford Heath District of Warwickshire (for report contact Steve Lane, Keeper of Natural History, Herbert Art Gallery & Museum, Coventry (02476 832374, email: steve.lane@coventry.gov.uk)

6. PROPOSED LOCAL ACTIONS

ACTION	Lead	Partners	By	Meets objective
Policy & Legislation				
PL1. Ensure that all relevant policy is included in Local Planning Documents (see ODPM Planning Policy Statement PPS9) to protect the Coal Pit Lane site from localised development.	LBAPSG	RBC	2005	A
PL2. Actively encourage that biodiversity policies account for the needs of this species on the inhabited section of the disused railway west of Cawston Grange Farm.	WCC	Sustrans	2005	A
Site / Species Safeguard & Management				
SM1. Actively work to ensure that relevant staff of the County Council, their contracted road verge management company, Ling Hall Quarry (whose land might be inhabited) and NetworkRail are informed of the known beetle populations, their distribution, their regional significance and their requirements.	HAGM		2004	A
SM2. Actively promote that any site management plans and proposals for the disused railway account for the needs of the beetle.	WCC	HAGM	2003 onwards	A
SM3. Actively promote that any site management plans and proposals for the road verge account for the needs of the beetle.	WBRC	HAGM WCC	2003 onwards	A
SM4. Consider the potential of other suitable sites within the county for introduction and colonisation by this species.	HAGM	WWT ROs LOs	2010+	B, C
Advisory				
A1. Provide advice to key groups including local landowners(with caution), the local authority, Ling Hall Quarry and NetworkRail, with respect to best practice management for the benefit of the beetle.	HAGM		ongoing	A

Research & Monitoring				
RM1. Establish regular and controlled monitoring of bloody-nosed beetle in both locations and their immediate surrounds (counting dead and live adults and larvae and mapping these and the foodplant distributions). Record any changes in response to management practices at both locations.	HAGM	LEs Cov. Univ	2003 onwards	A
RM2. Continue to check other sites in Lawford Heath area for fragments of the population.	HAGM		2005	A
RM3. Encourage local naturalist groups, local property and land owners and beetle enthusiasts to record their observations of the species.	HAGM	LAs LEs LP LOs LQ NHSs	2003 onwards	A
RM4. Establish a student research project to carry out mapping of foodplant, larvae and adults (as in RM1), and also to investigate the significance of vehicle impact mortality and mowing regimes on the road verge population and of vegetation succession and disturbance on the railway population.	HAGM	Universities and colleges	2003	A
Communication & Publicity				
CP1. Raise the profile of bloody-nosed beetle in Warwickshire by informing internet groups, naturalist newsletters and any other form of media interpretation.	HAGM	WWT WM	ongoing	A
CP2. Maintain contact with all parties involved in habitat management and research.	HAGM	All	ongoing	A, B, C

Abbreviations: HAGM - Herbert Art Gallery and Museum, LO – Landowners, LE – local entomologist, LBAPSG – Local Biodiversity Action Plan Steering Group, LQ – Ling Hall Quarry, NHS – Natural History Society, LP – local people, RBC – Rugby Borough Council, RO – research organisation, WBRC – Warwickshire Biological Record Centre, WWC – Warwickshire County Council, WM - Warwickshire Museum, WWT – Warwickshire Wildlife Trust.

7. REFERENCES

8. FURTHER INFORMATION (see separate **Links** web page for links to web sites)

9. CONTACT

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