



## A LEAF-ROLLING WEEVIL

### *Byctiscus populi*

#### 1. INTRODUCTION

*Byctiscus populi* is a 4-5mm long weevil with brilliant metallic green coloration. It feeds predominantly on aspen in woodland and scrub habitats. It gets its common name from the fact that the female lays eggs in a specially created leaf-roll. The developing larva lives inside this shelter feeding on the leaf tissue. Regeneration of the host tree is important, because anecdotal evidence suggests that the suckering and sapling stages of tree growth are preferred by the weevil.



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In the UK, this species was formerly found at a number of localities in southern England but it has since declined and is currently known from just five counties. It is classified as Nationally Rare (RDB3) and is a priority species for the national BAP. In the sub-region the weevil has only been recorded from one locality, Oversley Wood, though several further potentially suitable sites exist in Warwickshire.

#### 2. OUR OBJECTIVES & TARGETS

	Target
A. To monitor the population in the sub-region.	annually
B. To maintain the size and range of the known population of <i>Byctiscus populi</i> .	2003-2015
C. To assess its habitat needs at its known locality.	2006
D. To increase the size and range of the population through sympathetic habitat management and by introducing it into other appropriate close-proximity areas within its known locality.	2010
E. To gain information about the species' requirements by liaising with research bodies and to investigate the potential of other Warwickshire sites to support this species.	2010-2015
F. To use <i>Byctiscus populi</i> as a flagship for the importance of aspen for other scarce insects.	2003-2015
G. To raise awareness amongst landowners and managers of this species and the habitat management needed to support it.	2003-2015

**ASSOCIATED HABITAT PLANS**

- Woodlands

**ASSOCIATED SPECIES PLANS****3. NATIONAL BAP OBJECTIVES & TARGETS**

- *Maintain populations at all known sites.*
- *Enhance populations at all known sites by 2010.*
- *Ensure that viable populations are established and maintained at a minimum of five well-separated sites, distributed across the former range, by 2010.*

**4. CURRENT STATUS**

Historically, this weevil was recorded in sixteen counties in the south of England, but it has declined considerably with confirmed post-1970 records from only Warwickshire, Worcestershire, Surrey, Middlesex, South Essex, East Sussex and East Kent. It is currently believed to be present at just five sites in England and is vulnerable and declining at three of these. Reasons cited for its decline are conversion of woodland for alternative land-use, selective removal of aspen in wooded areas and the cessation of coppicing. Similar declines have been noted in several other aspen-associated insects, most notably *Chrysomela tremula* which is probably now extinct in Britain.

In Warwickshire, the species has only been recorded from Oversley Wood where it was first discovered in June 1987. Adults have since been found in May, June and September 1996, May 1999 and May and September 2002 and October 2002 and leaf rolls have been observed in May 2002. The population, which is very localised and vulnerable, appears to exist in one small area at the east of the site where woodland merges into scrub and grassland. Several other potentially suitable sites exist and require detailed surveys e.g. Rough Hill Wood and Cold Comfort Wood.

**4.1 Legal and Policy Status**

No legal protection exists for this species, but its national RDB status and corresponding regionally scarce status in Warwickshire should give weight to any future site designation. Oversley Wood is a pSINC.

## 4.2 Current Factors Affecting The Species

- **Natural succession of scrub into woodland** – the species appears to prefer suckering and sapling re-growth and sheltered, warm pockets of woodland edge habitat.
- **Clearance of aspens during woodland management** – clearance of aspens could potentially wipe-out the weevil population
- **Conversion of broad-leaved woodland to coniferous woodland** – Oversley Wood is owned by the Forestry Commission so any land-use conversion for commercial reasons could adversely affect the weevil population
- **Cessation of coppicing** – the traditional practise of coppicing promoted re-growth which is preferred by this species
- **Over-collecting by entomologists** – this is a striking and rare species that is relatively easy to find in its haunts and is known from only a handful of sites in the UK. If the Warwickshire site is widely and indiscriminately disclosed, there is a possibility that entomologists will target the locality for this species.

## 5. CURRENT LOCAL ACTION

- Occasional visits to Oversley Wood by entomologists provide regular feedback to the BRC regarding the continuing presence of the weevil population, though no systematic survey or statistical monitoring (e.g. counting and mapping leaf rolls or sightings of adult specimens) has taken place.
- Oversley Wood has been assessed as a proposed Site of Importance for Nature Conservation (pSINC). It is likely that the site will be fully designated in the near future.

## 6. PROPOSED LOCAL ACTIONS (some dates amended - Core Steering Group - Feb 2008)

ACTION	Lead	Partners	By	Meets objective
<b>Policy &amp; Legislation</b>				
<b>PL1.</b> Ensure that Oversley Wood, if meeting the relevant criteria, is considered for designation as a SINC (it is already known to support an impressive list of scarce moths, flies and beetles).	WSP	SDC	2005	B

<b>PL2.</b> Actively encourage that Forestry Enterprise biodiversity policies account for the needs of this and other scarce species.	FE		2003-2015	B, G
<b>Site / Species Safeguard &amp; Management</b>				
<b>SM1.</b> Actively work to ensure that the relevant staff of Forestry Enterprise are informed of the weevil population and its significance and requirements.	HAGM		2003-2015	B, G
<b>SM2.</b> Actively promote that site management plans and proposals account for the needs of the weevil population.	FE	HAGM	2003-2015	B, G
<b>SM3.</b> Encourage colonisation of other areas of Oversley Wood by the weevil. This will hopefully be achieved by sympathetic management rather than by deliberate introduction of specimens.	HAGM	FE	2010	B, D
<b>SM4.</b> Consider the potential of introducing the beetle to other woodland sites in the county with aspen. This process will be reliant on accurate research into the species' exact habitat requirements and on having achieved a stable and very strong population at Oversley Wood. Ill-informed judgements could destroy or weaken the existing population.	HAGM	WWT, other research bodies, other land-owners	2010-2015	C, D
<b>Advisory</b>				
<b>A1.</b> Provide advice to Forestry Enterprise regarding management and conservation.	HAGM		2003-2015	B, G
<b>A2.</b> Raise awareness of the <i>Byctiscus populi</i> and its habitat requirements amongst relevant landowners and managers.	HAGM	FWAG FE WM NE WWT	2003-2015	G
<b>Research &amp; Monitoring</b>				
<b>RM1.</b> Establish regular monitoring of the weevil population at Oversley Wood, by counting leaf rolls and adults between May and September. Record results and responses of the population to any management changes in the wood.	HAGM	Local entomologists  FE	2003-2015	A, C
<b>RM2.</b> Look for possible research and monitoring projects and any potential funding for these.	HAGM	Univ.& Coll.  NE	2003-2015	A, B, E

<b>RM3.</b> Carry out searches for the beetle at other potentially suitable sites (using the HBA to scan for presence of aspen).	HAGM		2010	A, F, E
<b>Communication &amp; Publicity</b>				
<b>CP1.</b> Raise the profile of <i>Byctiscus populi</i> in Warwickshire via the media, natural history groups and woodland managers.	HAGM	WWT WM	2003-2015	G
<b>CP2.</b> Maintain contact between the HAGM and Forestry Enterprise with regard to woodland management and its effect on the species.	HAGM	FE	2003-2015	B
<b>CP3.</b> Maintain communication with the National BAP co-ordinators throughout.	HAGM		2003-2015	C

**Abbreviations:** NE – Natural England, FAWG – Farming and Wildlife Advisory Group, FE – Forestry Enterprise, HAGM – Herbert Art Gallery and Museum, SDC – Stratford District Council, WM - Warwickshire Museum, WSP – Wildlife sites Project, WWT – Warwickshire Wildlife Trust.

## 7. REFERENCES (see LBAP Bibliography web page)

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

UK Biodiversity Action Plan no.177

## 9. CONTACT

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