

Agabus brunneus (Diving beetle)

This small, flightless diving beetle is associated with shallow, sometimes intermittent, lowland streams in base-poor areas, where it is usually found deep in the gravel substrate.

The UKBAP Priority Habitat of particular importance to this species is lowland heathland, in particular the streams associated with this habitat.

Current status

National status

This species has a restricted British distribution, confined to two areas, one in west Cornwall and one centred on the New Forest, but extending to south Wiltshire. Since 1970 this species has been recorded from three 10km squares in west Cornwall and in four squares in the New Forest and Dorset heath area. It is now only found at six confidential sites.

In Great Britain this species is classified as *Vulnerable* and is a UKBAP Priority Species.

Status on the network

This diving beetle is known to occur in lowland streams near to the soft estate in Cornwall (A39) and the New Forest (A31). It is also known to occur in catchments crossed by the A30. However, the A39 is due to be de-trunked, when it will become the responsibility of the relevant Local Authority. Under the UKBAP, the Highways Agency is required to ensure that the requirements of *A. brunneus* are taken into account in any road proposals likely to affect its habitat.

Current factors affecting the species

Modification of habitat

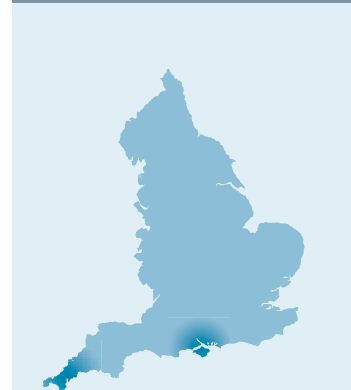
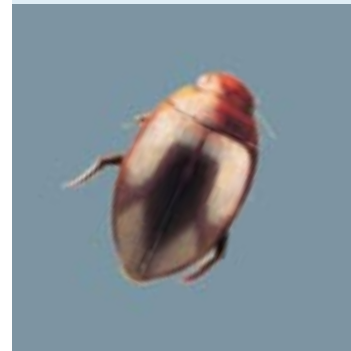
New road developments and road improvement schemes may affect local drainage systems and modify the habitat in such a way that it is no longer suitable for this species.

Inappropriate management/deterioration of existing habitat

Lack of management of stream banks may result in the deterioration of the habitat for this species as a result of scrub encroachment and shading-out.

Current action

A survey of the status of this species, commissioned by English Nature, has recently been completed.



Objectives

The aim of the Highways Agency Species Action Plan for the diving beetle *Agabus brunneus* is to implement appropriate management where this

species occurs and to ensure that new road developments avoid or adequately mitigate any potential impacts on this species and its habitat.

	Objective	Proposed actions
A	To avoid impacts of new road schemes or improvements on <i>Agabus brunneus</i> .	4
B	To mitigate unavoidable impacts on <i>Agabus brunneus</i> and its habitat.	4, 5
C	To monitor streams adjacent to and downstream of the network, where this species is known to occur, and safeguard through appropriate management.	2, 3
D	To raise awareness of HA staff, Managing Agents and consultants regarding the significance of <i>Agabus brunneus</i> on the soft estate.	1, 6
E	To review the results of the recent survey and take into account any implications for management.	2, 3, 5

Proposed action

The following table lists the actions required to achieve the objectives set out in this Plan. For some of the actions, potential partners have

been assigned as likely sources of cooperation. Targets are provided to give an indication of the timescale for the proposed action.

	Action	Potential partners	Target
	<i>Policy, guidance and advice</i>		
1	Provide detailed information to local area managers within network areas 1 and 3 on the management of the network adjacent to streams where <i>Agabus brunneus</i> is known to occur.	EN, EA	By 2004
	<i>Surveying and monitoring</i>		
2	Liaise with relevant organisations and/or specialists regarding the status of <i>Agabus brunneus</i> on or adjacent to the network, and record results on the Environmental Database.	EN	2002
3	Monitor for five years all new protection measures aimed at ensuring the continued survival of this species.	-	2002-7

	Action (continued)	Potential partners	Target
	<i>Mitigation and Management</i>		
4	For all new schemes and road improvements in network areas 1 and 3 (in areas where this species is known to occur) that are likely to affect headwater drainage systems ensure that the habitat requirements of <i>Agabus brunneus</i> are taken into account and ensure road run-off measures are implemented where appropriate.	EN, LAs EA	Ongoing
5	Monitor existing sites adjacent to and downstream of the road network (in particular at the A31 site), to ensure appropriate road run-off measures and management regimes are in place. Install improved measures, as required.	EA	2006
	<i>Communications and publicity</i>		
6	Information on <i>Agabus brunneus</i> should be included in environmental training for HA staff and Managing Agents.	-	From 2002

Links with other plans

This plan should be read in conjunction with the HAPs for water features and heathland.

The diving beetle *Agabus brunneus* is not listed as a Priority species within any of the LBAPs that have been reviewed, but a SAP has been produced for the species in the Environment Agency BAP.

Lead partner

The lead partner for *Agabus Brunneus* in the UKBAP is Action for Invertebrates.

