

# NOBLE CHAFER

*Gnorimus nobilis*

Hampshire Biodiversity Partnership

Species  
Action  
Plan

## 1 INTRODUCTION

The Noble Chafer, a large metallic green beetle, has been identified by the UK Biodiversity Steering Group as a priority species for conservation action. A species action plan (SAP) for the Noble Chafer was published as part of Tranche 2 of UK action plans in UK Biodiversity Group: Tranche 2 Action Plans<sup>1</sup>, (Volume 6, page 37).

The Noble Chafer has been rare in Britain for over a century and appears to have undergone a considerable decline in range over this period. In Hampshire, the species is only known from parts of the New Forest.

## 2 CURRENT STATUS

### 2.1 Ecology and Habitat Requirements

The Noble Chafer is a saproxylic species, the larvae develop in the rotting wood and wood mould of old standing trees. The larvae normally take two years to complete their development<sup>2</sup>. Adults have been recorded between late May and early September, though the main period of adult emergence would appear to be late June. Away from breeding sites, adults are most often recorded visiting flat, open flowers such as hogweed or elder.

In Europe, the Noble Chafer has been recorded breeding in a range of broadleaved tree species including fruit trees, lime, beech and oak. In the UK the species appears to be more specialised in its choice of breeding site, with the majority of larval records coming from rotting fruit trees such as apple, plum and cherry. There is a single UK record of larvae being found in oak wood mould<sup>3</sup>, and two of the more recent New Forest records are associated with oak trees<sup>4</sup>. It may be that, within the New Forest at least, the beetle is using both oak and / or fruit trees as breeding sites.

### 2.2 Population and Distribution

The Noble Chafer is found throughout Europe, from northern Spain eastwards into the Ukraine.<sup>5</sup> The species reaches the northern limit of its distribution around the shores of the Baltic, being found in Denmark, southern Sweden and the Baltic States. In many countries on the northern edge of its range it is rare or in decline. The Noble Chafer is included in the Red Data Lists of the UK, Denmark,

Sweden, Germany and Latvia. The species receives legal protection in Germany and parts of Austria and Belgium (Wallonia)<sup>6</sup>.

In the UK, the Noble Chafer is confined to southern England, though there are old records from Norwich, Carlisle and 'Devonshire'<sup>7,8</sup>. There are modern (post-1980) records from 14 10km grid squares.

The majority of the modern records come from the fruit growing areas of Herefordshire, Worcestershire and Gloucestershire, and the species has recently been rediscovered in south Oxfordshire after some 85 years.<sup>9</sup> There is only one post-1980 for Kent, though there are a number of records from the area around East Malling in the 1940s. In Hampshire, the Noble Chafer is only known from parts of the New Forest.

The New Forest can be regarded as a 'classic' locality for the Noble Chafer, there are sporadic records for this species in the Forest going back to at least 1894<sup>10</sup>. Within the New Forest, the Noble Chafer has been recorded from 7 1km grid squares, mostly to the east and south-east of Lyndhurst<sup>4</sup>.

### 2.3 Important Sites

The majority of Noble Chafer records from the New Forest come from a few entomologically well worked sites such as Mallard Wood or Matley Bog. Whether these records accurately reflect the distribution of the species within the New Forest is unknown. There are large areas of similar wooded habitat to the north and west of Lyndhurst, which may be worth investigating to see if the species is present. Until more detailed distribution data is available, it is probably appropriate to treat the whole of the New Forest as a single 'important site'.

### 2.4 Protection

The Noble Chafer receives no statutory protection in the UK. It is listed as 'vulnerable' (category 2) in the British Red Data list<sup>7</sup> and also features on the red list of other European countries.

Much of the New Forest has already been designated as SSSI. The New Forest has also been designated as a candidate Special Area of Conservation (cSAC) EC Habitats Directive .

### **3 CURRENT FACTORS AFFECTING THE NOBLE CHAFER**

- Loss of habitat, particularly through the grubbing out of old 'traditional' orchards and the replacement of ancient decaying fruit trees, leading to gaps in the age structure so that further generations of old trees with decaying centres are no longer available.
- Loss of habitat such as old orchards or broad leaved woodland through clear felling or conversion to other land use.
- Habitat destruction through inappropriate management, e.g. the removal of dead wood from living trees or the destruction or removal of standing and fallen dead wood for reasons of 'tidyness', public safety or for use as firewood.
- Habitat destruction due to lack of knowledge of the requirements of saproxylic species such as the Noble Chafer when 'renovating' or 'restoring' old orchards.
- Increasing fragmentation and isolation of suitable habitats.
- Loss of pollen and nectar sources for adult beetles due to overgrazing or inappropriate management of grassland areas.

### **4 CURRENT ACTION**

#### **4.1 National**

- The Lead Partner for the UK Biodiversity Action Plan for the Noble Chafer is the People's Trust for Endangered Species (PTES). PTES chair the Noble Chafer Steering Group, which set up in 1999. Members include English Nature (EN), Joint Nature Conservation Committee (JNCC), Hampshire Wildlife Trust (HWT), Herefordshire Nature Trust, Gloucester Wildlife Trust, Worcester Wildlife Trust, Common Ground, Forestry Commission (FC), Consultant Ecologists and Surveyors and the National Trust (NT)

- The Noble Chafer Steering Group has collated historical records for the Noble Chafer to establish its historic range and identify key sites and areas for the species.

- Initial surveys to investigate whether the species is still present at previously known sites have been undertaken. Surveys in south Oxfordshire, Worcestershire and Herefordshire were carried out in 1999. Further surveys were carried out in south Oxfordshire, Herefordshire, Worcestershire, Gloucestershire, Kent and the New Forest during 2000. The New Forest survey found a single female Noble Chafer near Lyndhurst in July 2000.

- PTES have produced a colour postcard highlighting the differences between the Noble Chafer and the similar looking (and much commoner) Rose Chafer *Cetonia aurata*. This has been circulated to Wildlife Trusts, local naturalists' groups in areas known to hold populations of the Noble Chafer and FC employees in the New Forest.

- A recording form with identification details and contact details of persons able to confirm the identity of a suspected Noble Chafer have also been produced and circulated.

- In 1986, a pair of Noble Chafers were captured in the New Forest and used to establish a captive-bred culture<sup>2</sup>. This culture has now produced some seven generations in captivity and still appears to be viable. The beetle found in the New Forest in 2000 was also held captive for a short period and produced some fertile eggs<sup>4</sup>. All of these are now being reared by a member of the Noble Chafer Steering Group and could potentially form the nucleus of any future reintroduction program for the Noble Chafer.

#### **4.2 Local**

- HWT included a note and appeal for any Hampshire Noble Chafer records in the Spring 1999 Newsletter of the Hampshire Network for Invertebrate Conservation.

- The FC funded a small amount of survey work in the New Forest in 2000.

## 5 OBJECTIVES

The overall aim of this Plan is to protect and increase the distribution and population of The Noble Chafer in Hampshire. This broad aim translates the specific objectives set out below. Where feasible, objectives have been allocated targets against which achievement can be measured. The 'Proposed Action' table in section 6 identifies the action to be taken to meet these objectives.

	OBJECTIVES	PROPOSED ACTIONS
<b>A</b>	Maintain existing populations and range of the Noble Chafer in Hampshire, preventing further fragmentation or loss.	<b>1-10, 12-13, 15-16</b>
<b>B</b>	Enhance the status of the Noble Chafer in Hampshire by increasing the population strength at existing sites, and seek to restore at appropriate sites.	<b>1-10, 12, 15-16</b>
<b>C</b>	Establish a comprehensive understanding of Noble Chafer distribution, status and ecological requirements in Hampshire through appropriate research, survey and monitoring.	<b>9-13, 16</b>
<b>D</b>	Promote communication, education and awareness of the status and needs of the Noble Chafer.	<b>3-6, 8, 11-16</b>

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## 6 PROPOSED ACTION

The following table lists the actions required to achieve the objectives set out in this Plan. Each action has been assigned to one or more 'Key Partners'. Key Partners are those organisations that are expected to take responsibility for the delivery of the actions assigned to them, according to the targets set in this Plan. Other organisations may also be involved in the delivery of action, and they have been indicated in the 'Others' column.

Key to symbols in Action Table:

- ◆ To be completed by the indicated year. Work can commence at any time before the due date, at the discretion of the Key Partner.
- ◆⇨ Design or production of a plan/strategy to be completed by this year and then followed by its implementation.
- ➡ To start by the indicated year and usually followed by ongoing work. A start arrow in year 2000 can indicate a new action, or a new impetus to existing work.
- ⇨ Work that has already begun and is ongoing.

	ACTION	DELIVERY BY		YEAR						MEETS OBJ.
		Key Partner	Others	2000	2001	2002	2003	2004	2010	
				◆ = complete by    ➡ = start by ⇨ = ongoing    ◆⇨ = design by and implement						
<b>Site and Species Policy and Protection</b>										
1	Ensure protection of populations of the Noble Chafer within designations such as SSSI/cSAC/SINC through appropriate management.	EN	HCC, LA	⇨	⇨	⇨	⇨	⇨	⇨	A, B
2	For newly discovered and existing populations lying outside designated conservation areas, consider an appropriate designation such as SSSI, SINC.	EN, HCC	HWT, LAs	⇨	⇨	⇨	⇨	⇨	⇨	A, B
3	Endeavour to take account of the conservation requirements of this species when reviewing and adjusting agri-environment schemes.	MAFF			➡					A, B, D
4	Ensure that advisors receive appropriate advice/training in the identification and habitat management requirements of the Noble Chafer	PTES, EN, HWT	MAFF, FWAG, HCC		➡					A, B, D
5	Ensure that future development, drainage or hydrological alterations do not affect the integrity of existing Noble Chafer sites, and that the needs of the species are properly recognised in the strategic planning process.	LAs, EN		⇨	⇨	⇨	⇨	⇨	⇨	A, B, D
<b>Site and Species Management</b>										
6	Encourage sympathetic habitat management of historically occupied sites. EN through Management Statements/ Agreements; MAFF through agri-environment schemes.	EN, MAFF,	FWAG, LA, HWT,		➡					A, B, D
7	Utilise survey and research information to identify unoccupied sites, which are, or may become suitable for, supporting populations of the species	EN, MAFF,	FWAG, LA, HWT							A, B

					➔					
8	Ensure that the requirements of the Noble Chafer are considered during the production and implementation of other relevant action plans.	EN,	HWT, HCC		➔					A, B, D
<b>Research, Survey and Monitoring</b>										
9	Conduct further surveys for the Noble Chafer in the New Forest and surrounding areas to establish the distribution of the species in Hampshire. Undertake further research on the ecological requirements of the species.	PTES, EN, FC	HWT		↔	↔	↔	↔		A, B, C
10	Establish a regional database for Noble Chafer records from which records can be forwarded to appropriate national and local databases.	HWT	EN, HCC		➔					C, D
<b>Communication, Awareness and Promotion</b>										
11	Seek to increase awareness of the ecology and conservation requirements of Noble Chafer, particularly amongst forestry workers, aboriginalists, LA tree offices and woodland and orchard owners. Use the Noble Chafer as a flagship species to highlight the needs of all saproxylic invertebrates (possible tie in with Stag Beetle SAP)	PTES, EN, HWT	LAs MAFF, FWAG		↔	↔	↔	↔	↔	A, B, D
12	Hold training workshop for Noble Chafer identification, habitat requirements and surveying techniques, aimed at advisors, landowners and FC staff.	PTES	HWT							A, C, D
13	Disseminate survey and monitoring information to relevant local biological databases, landowners and conservation groups.	HWT	PTES, EN, FC	↔	↔	↔	↔	↔	↔	D
14	Promote an appreciation for, and the conservation of, Noble Chafer in Hampshire through provision of habitat guidelines, workshops, events and open days, press releases and appeals for records.	HWT	PTES, EN	↔	↔	↔	↔	↔	↔	A, B, D
16	Maintain liaison with the national Noble Chafer BAP Steering Group in order to facilitate efficient exchange of information on research progress and national issues.	HWT		↔	↔	↔	↔	↔	↔	A, B, C, D

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**KEY TO ORGANISATIONS:**

EA Environment Agency  
 EN English Nature  
 FWAG Farming and Wildlife Advisory Group  
 FC Forestry Commission  
 HCC Hampshire County Council

HWT Hampshire Wildlife Trust  
 MAFF Ministry of Agriculture, Fisheries and Food  
 LAs Local Authorities  
 PTES People's Trust for Endangered Species

## REFERENCES

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This is one of many Habitat, Species and Topic Action Plans being prepared by the Hampshire Biodiversity Partnership. It will be monitored by the Partnership and fully reviewed in 2005.

This species action plan has been prepared by Matthew Smith on behalf of the Hampshire Biodiversity Partnership.

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