

# Report on the main results of the surveillance under article 11 for annex II, IV and V species (Annex B)

0.1 Member State	IT
0.2.1 Species code	1084
0.2.2 Species name	<b>Osmoderma eremita</b>
0.2.3 Alternative species scientific name	Omoderma italicum, Osmoderma cristinae
0.2.4 Common name	N/A

## 1. National Level

### 1.1 Maps

1.1.1 Distribution Map	Yes
1.1.1a Sensitive species	No
1.1.2 Method used - map	Estimate based on partial data with some extrapolation and/or modelling (2)
1.1.3 Year or period	2007-2012
1.1.4 Additional map	No
1.1.5 Range map	Yes

## 2. Biogeographical Or Marine Level

### 2.1 Biogeographical Region

### 2.2 Published sources

#### Mediterranean (MED)

The present species assessment (fields 0.1-2.9) has been compiled by Fabio Stoch (on behalf of the Comitato Scientifico per la Fauna d'Italia) and Anna Alonzi, Piero Genovesi, Francesca Ronchi (ISPRA). Information, unpublished data and expert judgements have been provided by Paolo Audisio (Rome). Distribution data for the following grid cells have been removed by the Ministry of Environment: 10kmE415N233; 10kmE427N237.

Audisio P., Brustel H., Carpaneto G.M., Coletti G., Mancini E., Trizzino M., Dutto M., De Biase A., 2007. Updating the taxonomy and distribution of the European *Osmoderma*, and strategies for their conservation (Coleoptera, Scarabaeidae, Cetoniinae). *Fragmenta entomologica* 39: 273–290.

Campanaro A., Bardiani M., Spada L., Carnevali L., Montalto F., Antonini G., Mason F., Audisio P., 2011. Linee Guida per il monitoraggio e la conservazione dell'entomofauna saproxilica/ Guidelines for monitoring and conservation of saproxylous insects. Cierre Grafica, Verona, 8 pp. + CD-ROM.

Chiari S, Zauli A, Mazziotta A, Luiselli L, Audisio P, Carpaneto GM. 2012. Surveying an endangered saproxylous beetle, *Osmoderma eremita*, in Mediterranean woodlands: a comparison between different capture methods. *Journal of Insect Conservation* DOI 10.1007/s10841-012-9495-y.

Sparacio I. 1994. *Osmoderma cristinae* n.sp. Di Sicilia (Insecta Coleoptera: Cetoniidae). *Naturalista siciliano* 17(3/4): 305–310.

### 2.3 Range

2.3.1 Surface area - Range (km <sup>2</sup> )	28800
2.3.2 Method - Range surface area	Estimate based on partial data with some extrapolation and/or modelling (2)
2.3.3 Short-term trend period	2001-2012
2.3.4 Short-term trend direction	stable (0)
2.3.5 Short-term trend magnitude	min max
2.3.6 Long-term trend period	
2.3.7 Long-term trend direction	N/A
2.3.8 Long-term trend magnitude	min max
2.3.9 Favourable reference range	area (km <sup>2</sup> )

# Report on the main results of the surveillance under article 11 for annex II, IV and V species (Annex B)

	operator	approximately equal to (≈)		
	unknown	No		
	method	Expert opinion		
2.3.10 Reason for change	Use of different method			
2.4 Population				
2.4.1 Population size (individuals or agreed exception)	Unit	N/A		
	min	max		
2.4.2 Population size (other than individuals)	Unit	number of map 10x10 km grid cells (grids10x10)		
	min	56	max	56
2.4.3 Additional information	Definition of locality			
	Conversion method	not available		
	Problems	it is impossible to convert grids into individuals		
2.4.4 Year or period	2007-2012			
2.4.5 Method – population size	Estimate based on partial data with some extrapolation and/or modelling (2)			
2.4.6 Short-term trend period	2001-2012			
2.4.7 Short term trend direction	decrease (-)			
2.4.8 Short-term trend magnitude	min	max	confidence interval	
2.4.9 Short-term trend method	Estimate based on expert opinion with no or minimal sampling (1)			
2.4.10 Long-term trend period				
2.4.11 Long term trend direction	N/A			
2.4.12 Long-term trend magnitude	min	max	confidence interval	
2.4.13 Long-term trend method	N/A			
2.4.14 Favourable reference population	number			
	operator	more than (>)		
	unknown	No		
	method	Expert opinion		
2.4.15 Reason for change	Use of different method			
2.5 Habitat for the Species				
2.5.1 Surface area - Habitat (km²)				
2.5.2 Year or period				
2.5.3 Method used - habitat	Absent data (0)			
2.5.4 a) Quality of habitat	Moderate			
2.5.4 b) Quality of habitat - method	Expert opinion			
2.5.5 Short term trend period	2001-2012			
2.5.6 Short term trend direction	decrease (-)			
2.5.7 Long-term trend period				
2.5.8 Long term trend direction	N/A			
2.5.9 Area of suitable habitat (km²)				
2.5.10 Reason for change	Genuine Improved knowledge/more accurate data Use of different method			
2.6 Main Pressures				

# Report on the main results of the surveillance under article 11 for annex II, IV and V species (Annex B)

Pressure	ranking	pollution qualifier(s)
problematic native species (I02)	high importance (H)	N/A
forestry clearance (B02.02)	high importance (H)	N/A
forest exploitation without replanting or natural regrowth (B03)	medium importance (M)	N/A
burning down (J01.01)	high importance (H)	N/A
collection of animals (insects, reptiles, amphibians.....) (F03.02.01)	medium importance (M)	N/A
intensive maintenance of public parks /cleaning of beaches (G05.05)	high importance (H)	N/A

2.6.1 Method used – pressures based only on expert judgements (1)

## 2.7 Main Threats

Threat	ranking	pollution qualifier(s)
forestry clearance (B02.02)	high importance (H)	N/A
forest exploitation without replanting or natural regrowth (B03)	high importance (H)	N/A
problematic native species (I02)	high importance (H)	N/A
burning down (J01.01)	high importance (H)	N/A
collection of animals (insects, reptiles, amphibians.....) (F03.02.01)	medium importance (M)	N/A
intensive maintenance of public parks /cleaning of beaches (G05.05)	high importance (H)	N/A

2.7.1 Method used – threats expert opinion (1)

## 2.8 Complementary Information

2.8.1 Justification of % thresholds for trends

2.8.2 Other relevant Information

The main problems with *Osmoderma* conservation in Italy is the cutting of trees and forest exploitation, and the control of the expanding *Corvus corone cornix*. In the MED region, *Osmoderma eremita* was recently splitted in two species: *O. italicum* and *O. cristinae* (see Audisio et al., 2007, and Sparacio, 1994 in 2.2). The three species are treated herein as a single species; however *O. cristinae* seems close to extinction mainly due to collection by amateur entomologists (Audisio, personal communication).

2.8.3 Trans-boundary assessment

## 2.9 Conclusions (assessment of conservation status at end of reporting period)

2.9.1 Range	assessment Favourable (FV) qualifiers N/A
2.9.2. Population	assessment Inadequate (U1) qualifiers declining (-)
2.9.3. Habitat	assessment Inadequate (U1) qualifiers declining (-)
2.9.4. Future prospects	assessment Inadequate (U1) qualifiers declining (-)
2.9.5 Overall assessment of Conservation Status	Inadequate (U1)

# Report on the main results of the surveillance under article 11 for annex II, IV and V species (Annex B)

2.9.5 Overall trend in Conservation Status

declining (-)

## 3. Natura 2000 coverage and conservation measures - Annex II species

### 3.1 Population

3.1.1 Population Size

Unit N/A  
min max

3.1.2 Method used

Absent data (0)

3.1.3 Trend of population size within

N/A

### 3.2 Conversation Measures

3.2.1 Measure

3.2.2 Type

3.2.3 Ranking

3.2.4 Location

3.2.5 Broad Evaluation

Legal protection of habitats and species (6.3)

Administrative

high importance (H)

Inside

Maintain  
Enhance  
Long term

## 2. Biogeographical Or Marine Level

2.1 Biogeographical Region

2.2 Published sources

### Continental (CON)

The present species assessment (fields 0.1-2.9) has been compiled by Fabio Stoch (on behalf of the Comitato Scientifico per la Fauna d'Italia) and Anna Alonzi, Piero Genovesi, Francesca Ronchi (ISPRA). Information, unpublished data and expert judgements have been provided by Paolo Audisio (Rome). Distribution data for the following grid cells have been removed by the Ministry of Environment: 10kmE427N237.

Audisio P., Brustel H., Carpaneto G.M., Coletti G., Mancini E., Trizzino M., Dutto M., De Biase A., 2007. Updating the taxonomy and distribution of the European *Osmoderma*, and strategies for their conservation (Coleoptera, Scarabaeidae, Cetoniinae). *Fragmenta entomologica* 39: 273–290.

Campanaro A., Bardiani M., Spada L., Carnevali L., Montalto F., Antonini G., Mason F., Audisio P., 2011. Linee Guida per il monitoraggio e la conservazione dell'entomofauna saproxilica/ Guidelines for monitoring and conservation of saproxylic insects. Cierre Grafica, Verona, 8 pp. + CD-ROM.

### 2.3 Range

2.3.1 Surface area - Range (km<sup>2</sup>)

47300

2.3.2 Method - Range surface area

Estimate based on partial data with some extrapolation and/or modelling (2)

2.3.3 Short-term trend period

2001-2012

2.3.4 Short-term trend direction

stable (0)

2.3.5 Short-term trend magnitude

min max

2.3.6 Long-term trend period

2.3.7 Long-term trend direction

N/A

2.3.8 Long-term trend magnitude

min max

2.3.9 Favourable reference range

area (km<sup>2</sup>)  
operator approximately equal to (≈)  
unkown No  
method Expert opinion

# Report on the main results of the surveillance under article 11 for annex II, IV and V species (Annex B)

2.3.10 Reason for change Use of different method

## 2.4 Population

2.4.1 Population size (individuals or agreed exception)	Unit	N/A		
	min		max	
2.4.2 Population size (other than individuals)	Unit	number of map 10x10 km grid cells (grids10x10)		
	min	107	max	107
2.4.3 Additional information	Definition of locality			
	Conversion method	not available		
	Problems	it is impossible to convert grids into individuals		
2.4.4 Year or period	2007-2012			
2.4.5 Method – population size	Estimate based on partial data with some extrapolation and/or modelling (2)			
2.4.6 Short-term trend period	2001-2012			
2.4.7 Short term trend direction	decrease (-)			
2.4.8 Short-term trend magnitude	min	max	confidence interval	
2.4.9 Short-term trend method	Estimate based on expert opinion with no or minimal sampling (1)			
2.4.10 Long-term trend period				
2.4.11 Long term trend direction	N/A			
2.4.12 Long-term trend magnitude	min	max	confidence interval	
2.4.13 Long-term trend method	N/A			
2.4.14 Favourable reference population	number			
	operator	more than (>)		
	unknown	No		
	method	Expert opinion		
2.4.15 Reason for change	Use of different method			

## 2.5 Habitat for the Species

2.5.1 Surface area - Habitat (km <sup>2</sup> )	
2.5.2 Year or period	
2.5.3 Method used - habitat	Absent data (0)
2.5.4 a) Quality of habitat	Moderate
2.5.4 b) Quality of habitat - method	Expert opinion
2.5.5 Short term trend period	2001-2012
2.5.6 Short term trend direction	decrease (-)
2.5.7 Long-term trend period	
2.5.8 Long term trend direction	N/A
2.5.9 Area of suitable habitat (km <sup>2</sup> )	
2.5.10 Reason for change	Genuine Improved knowledge/more accurate data Use of different method

## 2.6 Main Pressures

Pressure	ranking	pollution qualifier(s)
forestry clearance (B02.02)	high importance (H)	N/A
problematic native species (I02)	high importance (H)	N/A
burning down (J01.01)	medium importance (M)	N/A
intensive maintenance of public parks /cleaning of beaches (G05.05)	high importance (H)	N/A

# Report on the main results of the surveillance under article 11 for annex II, IV and V species (Annex B)

2.6.1 Method used – pressures based only on expert judgements (1)

## 2.7 Main Threats

Threat	ranking	pollution qualifier(s)
forestry clearance (B02.02)	high importance (H)	N/A
problematic native species (I02)	high importance (H)	N/A
intensive maintenance of public parks /cleaning of beaches (G05.05)	high importance (H)	N/A

2.7.1 Method used – threats expert opinion (1)

## 2.8 Complementary Information

2.8.1 Justification of % thresholds for trends

2.8.2 Other relevant Information

One of the main problems with *Osmoderma* conservation in Italy is the cutting of trees in urban gardens, where the species is fairly common, and the control of the invasive *Corvus corone cornix*. In the CON region, *Osmoderma eremita* was recently splitted in two species: *O. eremita* and *O. italicum* (see Audisio et al., 2007 in 2.2).

2.8.3 Trans-boundary assessment

## 2.9 Conclusions (assessment of conservation status at end of reporting period)

2.9.1 Range	assessment Favourable (FV) qualifiers N/A
2.9.2. Population	assessment Inadequate (U1) qualifiers unknown (x)
2.9.3. Habitat	assessment Inadequate (U1) qualifiers declining (-)
2.9.4. Future prospects	assessment Inadequate (U1) qualifiers declining (-)
2.9.5 Overall assessment of Conservation Status	Inadequate (U1)
2.9.5 Overall trend in Conservation Status	declining (-)

## 3. Natura 2000 coverage and conservation measures - Annex II species

### 3.1 Population

3.1.1 Population Size	Unit N/A min max
3.1.2 Method used	Absent data (0)
3.1.3 Trend of population size within	N/A

### 3.2 Conversation Measures

3.2.1 Measure	3.2.2 Type	3.2.3 Ranking	3.2.4 Location	3.2.5 Broad Evaluation
Restoring/improving forest habitats (3.1)	Legal Recurrent	medium importance (M)	Both	Maintain Enhance Long term

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Adapt forest management (3.2)	Administrative Contractual	high importance (H)	Both	Maintain Long term
Legal protection of habitats and species (6.3)	Legal	high importance (H)	Both	Long term Unknown

## 2. Biogeographical Or Marine Level

### 2.1 Biogeographical Region

### 2.2 Published sources

### Alpine (ALP)

The present species assessment (fields 0.1-2.9) has been compiled by Fabio Stoch (on behalf of the Comitato Scientifico per la Fauna d'Italia) and Anna Alonzi, Piero Genovesi, Francesca Ronchi (ISPRA). Information, unpublished data and expert judgements have been provided by Paolo Audisio (Rome).

Distribution data for the following grid cells have been removed by the Ministry of Environment: 10kmE415N233.

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Campanaro A., Bardiani M., Spada L., Carnevali L., Montalto F., Antonini G., Mason F., Audisio P., 2011. Linee Guida per il monitoraggio e la conservazione dell'entomofauna saproxilica/ Guidelines for monitoring and conservation of saproxylous insects. Cierre Grafica, Verona, 8 pp. + CD-ROM.

### 2.3 Range

#### 2.3.1 Surface area - Range (km<sup>2</sup>)

13200

#### 2.3.2 Method - Range surface area

Estimate based on partial data with some extrapolation and/or modelling (2)

#### 2.3.3 Short-term trend period

2001-2012

#### 2.3.4 Short-term trend direction

stable (0)

#### 2.3.5 Short-term trend magnitude

min max

#### 2.3.6 Long-term trend period

#### 2.3.7 Long-term trend direction

N/A

#### 2.3.8 Long-term trend magnitude

min max

#### 2.3.9 Favourable reference range

area (km<sup>2</sup>)

operator

approximately equal to (≈)

unknown

No

method

Expert opinion

#### 2.3.10 Reason for change

Use of different method

### 2.4 Population

#### 2.4.1 Population size

(individuals or agreed exception)

Unit N/A

min max

#### 2.4.2 Population size

(other than individuals)

Unit number of map 10x10 km grid cells (grids10x10)

min 38 max 38

#### 2.4.3 Additional information

Definition of locality

Conversion method not available

Problems

it is impossible to convert grids into individuals

#### 2.4.4 Year or period

2007-2012

#### 2.4.5 Method – population size

Estimate based on partial data with some extrapolation and/or modelling (2)

# Report on the main results of the surveillance under article 11 for annex II, IV and V species (Annex B)

2.4.6 Short-term trend period	2001-2012		
2.4.7 Short term trend direction	unknown (x)		
2.4.8 Short-term trend magnitude	min	max	confidence interval
2.4.9 Short-term trend method	Estimate based on expert opinion with no or minimal sampling (1)		
2.4.10 Long-term trend period			
2.4.11 Long term trend direction	N/A		
2.4.12 Long-term trend magnitude	min	max	confidence interval
2.4.13 Long-term trend method	N/A		
2.4.14 Favourable reference population	number		
	operator	N/A	
	unknown	Yes	
	method	Expert opinion	
2.4.15 Reason for change			

## 2.5 Habitat for the Species

2.5.1 Surface area - Habitat (km <sup>2</sup> )			
2.5.2 Year or period			
2.5.3 Method used - habitat	Absent data (0)		
2.5.4 a) Quality of habitat	Moderate		
2.5.4 b) Quality of habitat - method	Expert opinion		
2.5.5 Short term trend period	2001-2012		
2.5.6 Short term trend direction	stable (0)		
2.5.7 Long-term trend period			
2.5.8 Long term trend direction	N/A		
2.5.9 Area of suitable habitat (km <sup>2</sup> )			
2.5.10 Reason for change	Improved knowledge/more accurate data Use of different method		

## 2.6 Main Pressures

Pressure	ranking	pollution qualifier(s)
forestry clearance (B02.02)	high importance (H)	N/A
problematic native species (I02)	high importance (H)	N/A
2.6.1 Method used – pressures	based only on expert judgements (1)	

## 2.7 Main Threats

Threat	ranking	pollution qualifier(s)
forestry clearance (B02.02)	high importance (H)	N/A
problematic native species (I02)	high importance (H)	N/A
2.7.1 Method used – threats	expert opinion (1)	

## 2.8 Complementary Information

2.8.1 Justification of % thresholds for trends		
2.8.2 Other relevant Information	One of the main problems with <i>Osmoderma</i> conservation in Italy is the cutting of trees in urban gardens, where the species is fairly common, and the control of the invasive <i>Corvus corone cornix</i> . In the ALP region, maybe some populations from the Tarvisio area (northeastern Italy) have to be ascribed to <i>O. barnabita</i> , a Balkanic species (Audisio, University of Rome La Sapienza, personal communication)	
2.8.3 Trans-boundary assessment		



# Report on the main results of the surveillance under article 11 for annex II, IV and V species (Annex B)

## 2.9 Conclusions (assessment of conservation status at end of reporting period)

2.9.1 Range	assessment Favourable (FV) qualifiers N/A
2.9.2. Population	assessment Unknown (XX) qualifiers N/A
2.9.3. Habitat	assessment Inadequate (U1) qualifiers declining (-)
2.9.4. Future prospects	assessment Inadequate (U1) qualifiers declining (-)
2.9.5 Overall assessment of Conservation Status	Inadequate (U1)
2.9.5 Overall trend in Conservation Status	declining (-)

## 3. Natura 2000 coverage and conservation measures - Annex II species

### 3.1 Population

3.1.1 Population Size	Unit N/A min max
3.1.2 Method used	Absent data (0)
3.1.3 Trend of population size within	N/A

### 3.2 Conversation Measures

3.2.1 Measure	3.2.2 Type	3.2.3 Ranking	3.2.4 Location	3.2.5 Broad Evaluation
Restoring/improving forest habitats (3.1)	Legal	medium importance (M)	Both	Long term
Legal protection of habitats and species (6.3)	Legal	high importance (H)	Both	Long term Unknown