

EUROBATS National Implementation Report

In the Resolution 7.4, the 7th Meeting of Parties to EUROBATS decided to adopt a new format for the National Implementation Reports and instructed the Secretariat to make this new format available for online completion in time for MoP8.

Present format of national reports was carefully revised by the relevant Intersessional Working Group during the 20th Meeting of the Advisory Committee (2015) in order to include the Resolutions of MoP7 and is now available on the CMS Family Online Reporting System (ORS).

Please visit the Support Centre page in case of any questions regarding the Online Reporting System. The link is available in the bottom left corner.

A. General Information

Name of your country > ITALY

Period covered by this report > 2014-2018

Is your country a party to EUROBATS Agreement? ☑ Yes

Competent authority

Title, address, phone, fax, e-mail and other contact details > Ministry of the environment, land and sea Directorate-general for nature and sea protection Division IV – Protection of coastal and marine environment. Support for international activities Via Cristoforo Colombo, 44 - 00147 - Roma

Personal details of administrative focal point (s) > Vittorio De Cristofaro Directorate-general for nature and sea protection Division IV – Protection of coastal and marine environment. Support for international activities Ministry of the environment, land and sea Via Cristoforo Colombo, 44 - 00147 - Roma Tel.+39 06 5722 3447 e-mail: decristofaro.vittorio@minambiente.it

Please give details of designated scientifical focal points > Prof. Danilo Russo Wildlife Research Unit, Dipartimento di Agraria Università degli Studi di Napoli Federico II via Università, 100 80055 Portici (Napoli) - Italy tel. +39 0812532017, email: danrusso@unina.it

Compilers and contributors to this report > Prof. Danilo Russo Dr. Vittorio De Cristofaro Dr. Eugenio Dupré

B. Status of bat species within the territory

Please assess a national status ONLY for those bat species from the Annex 1 to EUROBATS Agreement that were recorded in your country

Rhinolophus blasii Peters, 1866

Status of the species occurrence ☑ Extinct

General comments

Comments

Add specific comments, if required > Last confirmed record for this species on the Italian territory dates back to 1927 (Trieste province).

Status in the National Red List (when it exists) ☑ RE, Regionally Extinct

Year of assessment > 2013

Has the status been reported under the Article 17 of the Habitat Directive or for the Emerald network (non-EU countries)? v No

Rhinolophus euryale Blasius, 1853

Status of the species occurrence $\ensuremath{\square}$ Resident

Overall national trend ☑ Negative

Status in the National Red List (when it exists) \square VU, Vulnerable

Year of assessment > 2013

Has the status been reported under the Article 17 of the Habitat Directive or for the Emerald network (non-EU countries)? vertice 27 of the Habitat Directive or for the Emerald network (non-

Year of report > 2013

Conservation status per biogeographical region

	F V	U1	U2	x x	N O
Alpine				V	
Atlantic					
Boreal					
Continental			Ø		
Macaronesian					
Mediterranean					
Arctic					

Black Sea			
Pannonian			
Steppic			
Anatolian			

Rhinolophus ferrumequinum (Schreber, 1774)

Status of the species occurrence $\ensuremath{\square}$ Resident

Overall national trend ☑ Negative

Status in the National Red List (when it exists) \square VU, Vulnerable

Year of assessment > 2013

Has the status been reported under the Article 17 of the Habitat Directive or for the Emerald network (non-EU countries)? vertice 27 of the Habitat Directive or for the Emerald network (non-

Year of report > 2013

Conservation status per biogeographical region

 FV = favourable; U1 = unfavourable-inadequate; U2 = unfavourable-bad); XX = unknown. NO = doesn't occur in the region

	F V	U1	U2	x x	N O
Alpine					
Atlantic					
Boreal					
Continental		Ø			
Macaronesian					
Mediterranean			Ø		
Arctic					
Black Sea					
Pannonian					
Steppic					
Anatolian					

Rhinolophus hipposideros (Bechstein, 1800)

Status of the species occurrence $\ensuremath{\square}$ Resident

Overall national trend version Negative

Status in the National Red List (when it exists) \square EN, Endangered

Year of assessment > 2013

Has the status been reported under the Article 17 of the Habitat Directive or for the Emerald network (non-EU countries)? vertice 27 of the Habitat Directive or for the Emerald network (non-

Year of report > 2013

Conservation status per biogeographical region

FV = favourable; U1 = unfavourable-inadequate; U2 = unfavourable-bad); XX = unknown. NO = doesn't occur in the region

	F V	U1	U2	x x	N O
Alpine					
Atlantic					
Boreal					
Continental		V			
Macaronesian					
Mediterranean		V			
Arctic					
Black Sea					
Pannonian					
Steppic					
Anatolian					

Rhinolophus mehelyi Matschie, 1901

Status of the species occurrence $\ensuremath{\square}$ Resident

General comments

Comments

Add specific comments, if required

Sardinia represents the stronghold of this species in Italy. On the Italian peninsula, R. mehelyi is almost extinct (one individual was recorded in 2014 in a karstic cave in Apulia, SE Italy) while the two sites known for Sicily (only one of which hosting a reproductive colony) are put at extreme risk by frequent roost disturbance.

Overall national trend ☑ Negative

Status in the National Red List (when it exists) \square VU, Vulnerable

Year of assessment > 2013

Has the status been reported under the Article 17 of the Habitat Directive or for the Emerald network (non-EU countries)? vertice 27 of the Habitat Directive or for the Emerald network (non-

Year of report > 2013

Conservation status per biogeographical region

 FV = favourable; U1 = unfavourable-inadequate; U2 = unfavourable-bad); XX = unknown. NO = doesn't occur in the region

	F V	U1	U2	x x	NO
Alpine					
Atlantic					
Boreal					
Continental					
Macaronesian					
Mediterranean		V			
Arctic					
Black Sea					
Pannonian					
Steppic					
Anatolian					

Barbastella barbastellus (Schreber, 1774)

Status of the species occurrence $\ensuremath{\square}$ Resident

Overall national trend ☑ Negative

Status in the National Red List (when it exists) \square EN, Endangered

Year of assessment > 2013

Year of report > 2013

Conservation status per biogeographical region

 FV = favourable; U1 = unfavourable-inadequate; U2 = unfavourable-bad); XX = unknown. NO = doesn't occur in the region

	FV	U1	U2	x x	N O
Alpine		N			
Atlantic					
Boreal					
Continental					
Macaronesian					
Mediterranean			V		

Arctic			
Black Sea			
Pannonian			
Steppic			
Anatolian			

Eptesicus nilssonii (Keyserling & Blasius, 1839)

Status of the species occurrence $\ensuremath{\square}$ Resident

Overall national trend ☑ Indeterminate

Status in the National Red List (when it exists) ☑ DD, Data Deficient

Year of assessment > 2013

Has the status been reported under the Article 17 of the Habitat Directive or for the Emerald network (non-EU countries)? vertice 2 Yes

Year of report

> 2013

Conservation status per biogeographical region

FV = favourable; U1 = unfavourable-inadequate; U2 = unfavourable-bad); XX = unknown.

NO = doesn't occur in the region

	F V	U1	U2	x x	N O
Alpine	\square				
Atlantic					
Boreal					
Continental					V
Macaronesian					
Mediterranean					1
Arctic					
Black Sea					
Pannonian					
Steppic					
Anatolian					

Eptesicus serotinus (Schreber, 1774)

Status of the species occurrence $\ensuremath{\square}$ Resident

Overall national trend ☑ Negative

Status in the National Red List (when it exists)

☑ NT, Near Threatened

Year of assessment > 2013

Has the status been reported under the Article 17 of the Habitat Directive or for the Emerald network (non-EU countries)? vertice 27 of the Habitat Directive or for the Emerald network (non-

Year of report > 2013

Conservation status per biogeographical region

 $\mathsf{FV}=\mathsf{favourable};\,\mathsf{U1}=\mathsf{unfavourable}\mathsf{-inadequate};\,\mathsf{U2}=\mathsf{unfavourable}\mathsf{-bad});\,\mathsf{XX}=\mathsf{unknown}.$ NO = doesn't occur in the region

	F V	U1	U2	x x	z o
Alpine					
Atlantic					
Boreal					
Continental	V				
Macaronesian					
Mediterranean	V				
Arctic					
Black Sea					
Pannonian					
Steppic					
Anatolian					

Hypsugo savii (Bonaparte, 1837)

Status of the species occurrence $\ensuremath{\square}$ Resident

Overall national trend ☑ Indeterminate

Status in the National Red List (when it exists) \square LC, Least Concern

Year of assessment > 2013

Has the status been reported under the Article 17 of the Habitat Directive or for the Emerald network (non-EU countries)? vertice 27 of the Habitat Directive or for the Emerald network (non-

Year of report > 2013

Conservation status per biogeographical region

	F V	U1	U2	x x	N O
Alpine	\checkmark				
Atlantic					
Boreal					
Continental	V				
Macaronesian					
Mediterranean	V				
Arctic					
Black Sea					
Pannonian					
Steppic					
Anatolian					

Myotis alcathoe von Helversen & Heller, 2001

Status of the species occurrence $\ensuremath{\square}$ Resident

General comments

Comments

Add specific comments, if required > A recent discovery for Italy, little information on its distribution and conservation status are available. The interpretation of distribution information warrants prudence given the strong resemblance to other species of the "mystacinus" group.

Overall national trend ☑ Indeterminate

Status in the National Red List (when it exists) ☑ DD, Data Deficient

Year of assessment > 2013

Has the status been reported under the Article 17 of the Habitat Directive or for the Emerald network (non-EU countries)? vertice 27 of the Habitat Directive or for the Emerald network (non-

Year of report > 2013

Conservation status per biogeographical region

	FV	U1	U2	x x	N O
Alpine				1	
Atlantic					
Boreal					
Continental					1

Macaronesian			
Mediterranean			
Arctic			
Black Sea			
Pannonian			
Steppic			
Anatolian			

Myotis bechsteinii (Kuhl, 1817)

Status of the species occurrence $\ensuremath{\square}$ Resident

General comments

Comments

Add specific comments, if required > An elusive forest species, its current distribution in Italy is likely underestimated and the assessment of conservation status warrants caution.

Overall national trend Negative

Status in the National Red List (when it exists) ☑ EN, Endangered

Year of assessment > 2013

Year of report > 2013

Conservation status per biogeographical region

	F V	U1	U2	x x	N O
Alpine		Ø			
Atlantic					
Boreal					
Continental		Ø			
Macaronesian					
Mediterranean		V			
Arctic					
Black Sea					
Pannonian					
Steppic					

Anatolian						
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Myotis blythii (Tomes, 1857)

Status of the species occurrence ☑ Resident

General comments

Comments

Add specific comments, if required > Difficult to tell apart from the cryptic species Myotis myotis, the two species are sympatric over much of the Italian territory, which may have occasionally caused confusion in assessing presence.

Overall national trend ☑ Negative

Status in the National Red List (when it exists) \square VU, Vulnerable

Year of assessment > 2013

Has the status been reported under the Article 17 of the Habitat Directive or for the Emerald network (non-EU countries)? vertice 2 Yes

Year of report > 2013

Conservation status per biogeographical region

 $\mathsf{FV}=\mathsf{favourable};\,\mathsf{U1}=\mathsf{unfavourable}\mathsf{-inadequate};\,\mathsf{U2}=\mathsf{unfavourable}\mathsf{-bad});\,\mathsf{XX}=\mathsf{unknown}.$ NO = doesn't occur in the region

	F V	U1	U2	x x	N O
Alpine		Ø			
Atlantic					
Boreal					
Continental		Ø			
Macaronesian					
Mediterranean		V			
Arctic					
Black Sea					
Pannonian					
Steppic					
Anatolian					

Myotis brandtii (Eversmann, 1845)

Status of the species occurrence ☑ Resident

General comments

Comments

Add specific comments, if required > Easy to mistake as other species from the "mystacinus" group that occur in sympatry over much of the Italian territory, which may have occasionally caused biases in assessing its distribution.

Overall national trend Indeterminate

Status in the National Red List (when it exists) ☑ DD, Data Deficient

Year of assessment > 2013

Has the status been reported under the Article 17 of the Habitat Directive or for the Emerald network (non-EU countries)?

☑ Yes

Year of report > 2013

Conservation status per biogeographical region

 FV = favourable; U1 = unfavourable-inadequate; U2 = unfavourable-bad); XX = unknown. NO = doesn't occur in the region

	F V	U1	U2	x x	N O
Alpine					
Atlantic					
Boreal					
Continental					
Macaronesian					
Mediterranean					
Arctic					
Black Sea					
Pannonian					
Steppic					
Anatolian					

Myotis capaccinii (Bonaparte, 1837)

Status of the species occurrence $\ensuremath{\square}$ Resident

Overall national trend ☑ Negative

Status in the National Red List (when it exists) \square EN, Endangered

Year of assessment > 2013

Year of report

> 2013

Conservation status per biogeographical region

 $\mathsf{FV}=\mathsf{favourable};\,\mathsf{U1}=\mathsf{unfavourable}{-}\mathsf{inadequate};\,\mathsf{U2}=\mathsf{unfavourable}{-}\mathsf{bad});\,\mathsf{XX}=\mathsf{unknown}.$ NO = doesn't occur in the region

	F V	U1	U2	x x	N O
Alpine					
Atlantic					
Boreal					
Continental			Ø		
Macaronesian					
Mediterranean			V		
Arctic					
Black Sea					
Pannonian					
Steppic					
Anatolian					

Myotis daubentonii (Kuhl, 1817)

Status of the species occurrence $\ensuremath{\square}$ Resident

Overall national trend ☑ Stable

Status in the National Red List (when it exists) \square LC, Least Concern

Year of assessment > 2013

Year of report > 2013

Conservation status per biogeographical region

 FV = favourable; U1 = unfavourable-inadequate; U2 = unfavourable-bad); XX = unknown. NO = doesn't occur in the region

	FV	U1	U2	x x	NO
Alpine					
Atlantic					
Boreal					
Continental					
Macaronesian					

Mediterranean		2	
Arctic			
Black Sea			
Pannonian			
Steppic			
Anatolian			

Myotis emarginatus (Geoffroy, 1806)

Status of the species occurrence $\ensuremath{\square}$ Resident

Overall national trend ☑ Stable

Status in the National Red List (when it exists) \square NT, Near Threatened

Year of assessment > 2013

Has the status been reported under the Article 17 of the Habitat Directive or for the Emerald network (non-EU countries)? vertice 27 of the Habitat Directive or for the Emerald network (non-

Year of report > 2013

Conservation status per biogeographical region

 FV = favourable; U1 = unfavourable-inadequate; U2 = unfavourable-bad); XX = unknown. NO = doesn't occur in the region

	F V	U1	U2	x x	N O
Alpine		V			
Atlantic					
Boreal					
Continental		Ø			
Macaronesian					
Mediterranean		Ø			
Arctic					
Black Sea					
Pannonian					
Steppic					
Anatolian					

Myotis myotis (Borkhausen, 1797)

Status of the species occurrence $\ensuremath{\square}$ Resident

General comments

Comments

Add specific comments, if required > In areas of sympatry with the cryptic Myotis blythii, confusion may arise in assessing the presence of this species.

Overall national trend ☑ Negative

Status in the National Red List (when it exists) \square VU, Vulnerable

Year of assessment > 2013

Has the status been reported under the Article 17 of the Habitat Directive or for the Emerald network (non-EU countries)? vertice 27 of the Habitat Directive or for the Emerald network (non-

Year of report > 2013

Conservation status per biogeographical region

FV = favourable; U1 = unfavourable-inadequate; U2 = unfavourable-bad); XX = unknown. NO = doesn't occur in the region

	F V	U1	U2	x x	N O
Alpine					
Atlantic					
Boreal					
Continental					
Macaronesian					
Mediterranean		Ø			
Arctic					
Black Sea					
Pannonian					
Steppic					
Anatolian					

Myotis mystacinus (Kuhl, 1817)

Status of the species occurrence ☑ Resident

General comments

Comments

Add specific comments, if required > May be confused with other bat species from the "mystacinus" group in the Italian regions where these occur in sympatry.

Overall national trend ☑ Negative

Status in the National Red List (when it exists) \square VU, Vulnerable

Year of assessment > 2013

Has the status been reported under the Article 17 of the Habitat Directive or for the Emerald network (non-EU countries)? vertice 27 of the Habitat Directive or for the Emerald network (non-

Year of report > 2013

Conservation status per biogeographical region

FV = favourable; U1 = unfavourable-inadequate; U2 = unfavourable-bad); XX = unknown. NO = doesn't occur in the region

	F V	U1	U2	x x	z o
Alpine					
Atlantic					
Boreal	V				
Continental					
Macaronesian					
Mediterranean	V				
Arctic					
Black Sea					
Pannonian					
Steppic					
Anatolian					

Myotis nattereri (Kuhl, 1817)

Status of the species occurrence ☑ Resident

General comments

Comments

Add specific comments, if required > Recent molecular work has shown that the Italian population belongs to a cryptic species differing from Myotis nattereri "sensu stricto". Moreover, this population comprises different lineages that warrant further taxonomic evaluation.

Overall national trend Negative

Status in the National Red List (when it exists) \square VU, Vulnerable

Year of assessment > 2013

Has the status been reported under the Article 17 of the Habitat Directive or for the Emerald network (non-EU countries)? vertice 2 Yes

Year of report > 2013

Conservation status per biogeographical region

 $\mathsf{FV}=\mathsf{favourable};\,\mathsf{U1}=\mathsf{unfavourable}{-}\mathsf{inadequate};\,\mathsf{U2}=\mathsf{unfavourable}{-}\mathsf{bad});\,\mathsf{XX}=\mathsf{unknown}.$ NO = doesn't occur in the region

	F V	U1	U2	x x	N O
Alpine		V			
Atlantic					
Boreal					
Continental		V			
Macaronesian					
Mediterranean		V			
Arctic					
Black Sea					
Pannonian					
Steppic					
Anatolian					

Myotis punicus Felten, 1977

Status of the species occurrence $\ensuremath{\square}$ Resident

General comments

Comments

Add specific comments, if required > Restricted to Sardinia and, as recently discovered, Sicily.

Overall national trend ☑ Negative

Status in the National Red List (when it exists) \square VU, Vulnerable

Year of assessment > 2013

Has the status been reported under the Article 17 of the Habitat Directive or for the Emerald network (non-EU countries)? vertice 2 Yes

Year of report

> 2013

Conservation status per biogeographical region

	F V	U1	U2	x x	N O
Alpine					
Atlantic					
Boreal					

Continental			
Macaronesian			
Mediterranean			
Arctic			
Black Sea			
Pannonian			
Steppic			
Anatolian			

Nyctalus lasiopterus (Schreber, 1780)

Status of the species occurrence $\ensuremath{\square}$ Resident

General comments

Comments

Add specific comments, if required > The rarest Italian bat species, with few recent records available.

Overall national trend ☑ Indeterminate

Status in the National Red List (when it exists) ☑ CR, Critically Endangered

Year of assessment > 2013

Year of report > 2013

Conservation status per biogeographical region

	F V	U1	U2	x x	N O
Alpine					\checkmark
Atlantic					
Boreal					
Continental			V		
Macaronesian					
Mediterranean			2		
Arctic					
Black Sea					
Pannonian					
Steppic					

Anatolian						
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Nyctalus leisleri (Kuhl, 1817)

Status of the species occurrence $\ensuremath{\square}$ Resident

Overall national trend ☑ Negative

Status in the National Red List (when it exists) \square NT, Near Threatened

Year of assessment > 2013

Year of report > 2013

Conservation status per biogeographical region

 $\mathsf{FV}=\mathsf{favourable};\,\mathsf{U1}=\mathsf{unfavourable}{-}\mathsf{inadequate};\,\mathsf{U2}=\mathsf{unfavourable}{-}\mathsf{bad});\,\mathsf{XX}=\mathsf{unknown}.$ NO = doesn't occur in the region

	F V	U1	U2	x x	N O
Alpine					
Atlantic					
Boreal					
Continental		V			
Macaronesian					
Mediterranean		Ø			
Arctic					
Black Sea					
Pannonian					
Steppic					
Anatolian					

Nyctalus noctula (Schreber, 1774)

Status of the species occurrence $\ensuremath{\square}$ Resident

Overall national trend ☑ Negative

Status in the National Red List (when it exists) \square VU, Vulnerable

Year of assessment > 2013

Has the status been reported under the Article 17 of the Habitat Directive or for the Emerald network (non-EU countries)?

🗹 Yes

Year of report > 2013

Conservation status per biogeographical region

 $\mathsf{FV}=\mathsf{favourable};\,\mathsf{U1}=\mathsf{unfavourable}\mathsf{-inadequate};\,\mathsf{U2}=\mathsf{unfavourable}\mathsf{-bad});\,\mathsf{XX}=\mathsf{unknown}.$ NO = doesn't occur in the region

	F V	U1	U2	x x	N O
Alpine				\checkmark	
Atlantic					
Boreal					
Continental					
Macaronesian					
Mediterranean				V	
Arctic					
Black Sea					
Pannonian					
Steppic					
Anatolian					

Pipistrellus kuhlii (Kuhl, 1817)

Status of the species occurrence $\ensuremath{\square}$ Resident

General comments

Comments

Add specific comments, if required > The most common Italian bat species, currently expanding towards higher altitudes in some mountainous regions of the country.

Overall national trend ☑ Positive

Status in the National Red List (when it exists) $\ensuremath{\square}$ LC, Least Concern

Year of assessment > 2013

Has the status been reported under the Article 17 of the Habitat Directive or for the Emerald network (non-EU countries)? vertice 27 of the Habitat Directive or for the Emerald network (non-EU countries)?

Year of report > 2013

Conservation status per biogeographical region

 FV = favourable; U1 = unfavourable-inadequate; U2 = unfavourable-bad); XX = unknown. NO = doesn't occur in the region

	F V	U1	U2	x x	N O
Alpine					
Atlantic					
Boreal					
Continental					
Macaronesian					
Mediterranean					
Arctic					
Black Sea					
Pannonian					
Steppic					
Anatolian					

Pipistrellus nathusii (Keyserling & Blasius, 1839)

Status of the species occurrence $\ensuremath{\square}$ Resident

Overall national trend ☑ Negative

Status in the National Red List (when it exists) \square NT, Near Threatened

Year of assessment > 2013

Year of report > 2013

Conservation status per biogeographical region

	F V	U1	U2	x x	N O
Alpine	\checkmark				
Atlantic					
Boreal					
Continental	\square				
Macaronesian					
Mediterranean	\square				
Arctic					
Black Sea					
Pannonian					

Steppic			
Anatolian			

Pipistrellus pipistrellus (Schreber, 1774)

Status of the species occurrence $\ensuremath{\square}$ Resident

Overall national trend ☑ Stable

Status in the National Red List (when it exists) \square LC, Least Concern

Year of assessment > 2013

Has the status been reported under the Article 17 of the Habitat Directive or for the Emerald network (non-EU countries)?

Year of report > 2013

Conservation status per biogeographical region

 $\mathsf{FV}=\mathsf{favourable};\,\mathsf{U1}=\mathsf{unfavourable}{-}\mathsf{inadequate};\,\mathsf{U2}=\mathsf{unfavourable}{-}\mathsf{bad});\,\mathsf{XX}=\mathsf{unknown}.$ NO = doesn't occur in the region

	FV	U1	U2	x x	N O
Alpine					
Atlantic					
Boreal					
Continental	\square				
Macaronesian					
Mediterranean	\square				
Arctic					
Black Sea					
Pannonian					
Steppic					
Anatolian					

Pipistrellus pygmaeus (Leach, 1825)

Status of the species occurrence ☑ Resident

General comments

Comments

Add specific comments, if required

> A cryptic species whose presence in Italy was established in 1999. Older records may refer to either P pygmaeus or the cryptic P pipistrellus. The recent discovery and the difficulty in telling the two species apart have created some confusion in the assessment of this species' status. There is, however, a general consensus on the fact that in Italy P. pygmaeus is way less common than P. pipistrellus and more at risk than the latter due to its greater foraging habitat specialization.

Overall national trend ☑ Indeterminate

Status in the National Red List (when it exists) DD, Data Deficient

Year of assessment > 2013

Has the status been reported under the Article 17 of the Habitat Directive or for the Emerald network (non-EU countries)? vertice 2 Yes

Year of report > 2013

Conservation status per biogeographical region

FV = favourable; U1 = unfavourable-inadequate; U2 = unfavourable-bad); XX = unknown. NO = doesn't occur in the region

	F V	U1	U2	x x	N O
Alpine					
Atlantic					
Boreal					
Continental		V			
Macaronesian					
Mediterranean		V			
Arctic					
Black Sea					
Pannonian					
Steppic					
Anatolian					

Plecotus auritus (Linnaeus, 1758)

Status of the species occurrence ☑ Resident

Overall national trend ☑ Negative

Status in the National Red List (when it exists) ☑ NT, Near Threatened

Year of assessment > 2013

Has the status been reported under the Article 17 of the Habitat Directive or for the Emerald network (non-EU countries)? vertice 2 Yes

Year of report > 2013

Conservation status per biogeographical region

FV = favourable; U1 = unfavourable-inadequate; U2 = unfavourable-bad); XX = unknown.

NO = doesn't occur in the region

	F V	U1	U2	x x	N O
Alpine	\square				
Atlantic					
Boreal					
Continental					
Macaronesian					
Mediterranean		V			
Arctic					
Black Sea					
Pannonian					
Steppic					
Anatolian					

Plecotus austriacus (Fischer, 1829)

Status of the species occurrence $\ensuremath{\square}$ Resident

Overall national trend ☑ Negative

Status in the National Red List (when it exists) \square NT, Near Threatened

Year of assessment > 2013

Year of report > 2013

Conservation status per biogeographical region

 FV = favourable; U1 = unfavourable-inadequate; U2 = unfavourable-bad); XX = unknown. NO = doesn't occur in the region

	F V	U1	U2	x x	N O
Alpine					
Atlantic					
Boreal					
Continental					
Macaronesian					
Mediterranean					
Arctic					
Black Sea					

Pannonian			
Steppic			
Anatolian			

Plecotus macrobullaris Kuzyakin, 1965

Status of the species occurrence $\ensuremath{\ensuremath{\square}}$ Resident

General comments

Comments

Add specific comments, if required > Little presence data are available for this recently discovered taxon.

Overall national trend ☑ Indeterminate

Status in the National Red List (when it exists) ☑ DD, Data Deficient

Year of assessment > 2013

Year of report > 2013

Conservation status per biogeographical region

 $\mathsf{FV}=\mathsf{favourable};\,\mathsf{U1}=\mathsf{unfavourable}{-}\mathsf{inadequate};\,\mathsf{U2}=\mathsf{unfavourable}{-}\mathsf{bad});\,\mathsf{XX}=\mathsf{unknown}.$ NO = doesn't occur in the region

	F V	U1	U2	x x	N O
Alpine					
Atlantic					
Boreal					
Continental				V	
Macaronesian					
Mediterranean					V
Arctic					
Black Sea					
Pannonian					
Steppic					
Anatolian					

Plecotus sardus Mucedda, Kiefer, Pidinchedda & Veith, 2002

Status of the species occurrence $\ensuremath{\square}$ Resident

General comments

Comments

Add specific comments, if required > Endemic to Sardinia.

Overall national trend ☑ Negative

Status in the National Red List (when it exists) \square EN, Endangered

Year of assessment > 2013

Year of report > 2013

Conservation status per biogeographical region

 $\mathsf{FV}=\mathsf{favourable};\,\mathsf{U1}=\mathsf{unfavourable}{-}\mathsf{inadequate};\,\mathsf{U2}=\mathsf{unfavourable}{-}\mathsf{bad});\,\mathsf{XX}=\mathsf{unknown}.$ NO = doesn't occur in the region

	F V	U1	U2	x x	N O
Alpine					V
Atlantic					
Boreal					
Continental					V
Macaronesian					
Mediterranean		4			
Arctic					
Black Sea					
Pannonian					
Steppic					
Anatolian					

Vespertilio murinus Linnaeus, 1758

Status of the species occurrence $\ensuremath{\square}$ Resident

General comments

Comments

Add specific comments, if required

> V. murinus is reported as occasional in the Italian Red List (http://www.iucn.it/scheda.php?id=1683226070) but recent observations of breeding individuals in the north of the country suggest that the species should, in fact, be regarded as a resident (Lapini et al. 2016. Gortania 38: 127-132). Previously only known for N Italy, V. murinus was recently recorded in the town of Prato, Tuscany (Dondini, G., Vergari, S. 2015. Barbastella 8: 10-12). The above records suggest that the species might be currently undergoing an expansion of its range.

Overall national trend ☑ Indeterminate

Status in the National Red List (when it exists)

☑ Other

Year of assessment > 2013

Other categories

National Red List Status details > Not applicable - regarded as a vagrant species in the 2013 IUCN Italian Red List.

Year of report > 2013

Conservation status per biogeographical region

 $\mathsf{FV}=\mathsf{favourable};\,\mathsf{U1}=\mathsf{unfavourable}{-}\mathsf{inadequate};\,\mathsf{U2}=\mathsf{unfavourable}{-}\mathsf{bad});\,\mathsf{XX}=\mathsf{unknown}.$ NO = doesn't occur in the region

	F V	U1	U2	x x	N O
Alpine					
Atlantic					
Boreal					
Continental				V	
Macaronesian					
Mediterranean					
Arctic					
Black Sea					
Pannonian					
Steppic					
Anatolian					

Miniopterus schreibersii (Kuhl, 1817)

Status of the species occurrence $\ensuremath{\ensuremath{\mathbb{Z}}}$ Resident

Overall national trend ☑ Negative

Status in the National Red List (when it exists) \square VU, Vulnerable

Year of assessment > 2013

Year of report > 2013

Conservation status per biogeographical region

FV = favourable; U1 = unfavourable-inadequate; U2 = unfavourable-bad); XX = unknown. NO = doesn't occur in the region

	F V	U1	U2	x x	N O
Alpine			V		
Atlantic					
Boreal					
Continental			V		
Macaronesian					
Mediterranean			V		
Arctic					
Black Sea					
Pannonian					
Steppic					
Anatolian					

Tadarida teniotis (Rafinesque, 1814)

Status of the species occurrence $\ensuremath{\square}$ Resident

Overall national trend Indeterminate

Status in the National Red List (when it exists) \square LC, Least Concern

Year of assessment > 2013

Has the status been reported under the Article 17 of the Habitat Directive or for the Emerald network (non-EU countries)? vertice 2 Yes

Year of report > 2013

Conservation status per biogeographical region

	F V	U1	U2	x x	N O
Alpine					
Atlantic					
Boreal					
Continental					
Macaronesian					
Mediterranean					
Arctic					

Black Sea			
Pannonian			
Steppic			
Anatolian			

C. Measures taken to implement Article III of the Agreement

Does the national legislation protect all bat species? $\ensuremath{\square}$ Yes

Please, give details of the legislation which is protecting bats

> Bats are protected by Italian Law since 1939. The Royal Decree "Regio Decreto" of 5 June 1939, n. 1016, "Testo Unico delle norme per la protezione della selvaggina e per l'esercizio della caccia" states that "it is always forbidden to kill or capture bats from any species" (art. 38). Nowadays, Italian bats are protected under the "Legge quadro in materia di fauna e attività venatoria" (L. 11 February 1992, n. 157), as well as under important international conventions signed by Italy (Bern Convention, 1979; Bonn Convention, 1979; Rio de Janeiro Convention, 1992); and, finally, under the "Habitats" Directive CEE/92/43. As part of the environment, bats are also protected by the Italian Law on the 'environmental damage' (L. 8 July 1986, n. 349). Bats, as well as bat sites and habitats, are also protected according to a more recent law on the "Actions against environmental crimes" (L. 22 May 2015, n. 68). This law regards as a criminal offense any act compromising or significantly altering, in a measurable way, the status of (art. 1) "an ecosystem, biodiversity, ..., and wildlife".

According to Italian law, it is forbidden to kill, capture, keep in captivity and trade bats; it is also forbidden to damage or disturb roosts and to bats, especially when hibernating or reproducing. Exceptions to these limitations should be authorized by the MATTM and by the local institutions responsible for the study area (regional, provincial or park administration). Authorizations rely upon the scientific judgment expressed by the Institute for Environmental Protection and Research (ISPRA) which will base the judgment on the validity of the scientific project, its conservation relevance, the appropriateness of methods and the species involved. According to law, MATTM and local institutions are responsible for promoting monitoring of bat conservation status, and regularly report on this to the European Union.

Which species are not protected and why? > All species are protected

1. Guidelines for the issue of permits for the capture and study of captured wild bats

Does the system of permits or licenses for the capture of bats exist in your country? $\ensuremath{\boxtimes}$ Yes

System of permits or licences to keep bats for educational or animal welfare purposes $\ensuremath{\square}$ In place

Comments

> Permits are released according to art 16 of the Habitats Directive

System of permits or licences for sampling, ringing, killing of bats for scientific studies $\ensuremath{\boxtimes}$ Exists

Comments (optional) > Permits are released according to art 16 of the Habitats Directive

2.Identified and protected sites which are important to the conservation of bats

Click "expand" to see the questions!

Resolution 5.7. Guidelines for the protection of overground roosts, with particular reference to roosts in buildings of cultural heritage importance

Please, give details or links

> The Italian Chiroptera Research Group carried out, in the past, a "roost project" to record all major bat roosting sites in the country. The relevant information is summarized in the following paper: http://www.italian-journal-of-mammalogy.it/The-Italian-bat-roost-project-a-preliminary-inventory-of-sites-andconservation-perspectives,77455,0,2.html The project is no longer active and updating the database would be an important stop to take.

The project is no longer active and updating the database would be an important step to take.

Comments

> -

2.5. National guidelines for custodians of historical buildings on the protection of bat roosts have been developed

🗹 Yes

Please attach a file or or provide a link

> http://www.minambiente.it/biblioteca/linee-guida-la-conservazione-dei-chirotteri-negli-edifici

Comments

> The document reports on the management of bat colonies roosting in buildings, with special emphasis on bats in historical buildings.

2.6. Summary report on interactions between the relevant cultural and natural heritage agencies (attach a file or provide a description)

There are not many cases of interactions between the relevant cultural heritage and nature conservation agencies. In some cases, a proactive and collaborative approach was adopted, but the process needs to evolve further towards a better perception of the importance of protecting bats along with the building they roost in.

Comments

> -

> -

Other activities carried out under this resolution (optional)

Resolution 7.6. Guidelines for the protection and management of important underground habitats for bats

Updated counts of bats at each listed site are submitted to the Secretariat $\ensuremath{\square}$ No

2.1. List of important underground sites

2.1. List of important underground sites for bats and measures of their protection (including Natura 2000, Emerald or other status) was submitted to EUROBATS ☑ Yes

When the latest update was submitted? > 2012

2.2. Management of important underground sites for bats is in accordance with EUROBATS Publication n°2 $\ensuremath{\boxtimes}$ Yes

Comments

> Underground habitats are protected when they fall within the boundaries of national or regional protected areas or in nature reserves, or when in Natura 2000 sites (overall coverage > 20% of the national area). Some

sites are also protected thanks to ad-hoc management actions, such as those undertaken in LIFE+ projects or other initiatives.

3.Consideration given to habitats which are important to bats

Click "expand" to see the questions!

Resolution 7.7. Bat conservation and sustainable forest management

National guidance has been developed based on the principles in the EUROBATS Bats and Forestry leaflet $\ensuremath{\square}$ No

Research in forest management that is sustainable for bats (attach file or provide links) > As part of a LIFE+ project, specific research was done to investigate the effects of forest management on bats. A paper on the subjects was published:

http://www.italian-journal-of-mammalogy.it/The-effect-of-thinning-on-bat-activity-in-Italian-high-forests-the-LIFE-ManFor-C,77179,0,2.html

Moreover, research is ongoing on the importance of old forest stands for bats, with special reference to barbastelles. Two recent publications as follows:

https://zslpublications.onlinelibrary.wiley.com/doi/abs/10.1111/jzo.12271

https://onlinelibrary.wiley.com/doi/full/10.1002/ece3.3111

Resolution 7.8. Conservation and management of critical feeding areas, core areas around colonies and commuting routes

Give details of activities devoted to raising awareness

> Perception of how important feeding sites and commuting routes are is still variable. Parks and nature reserves have developed actions to emphasize the importance of such habitats and protect it accordingly. In 2017, a coordinated Action including some of the main Italian National Parks was funded by the Italian Ministry for the Environment, with a special focus on the detection of areas characterised by high species diversity and ecological corridors that at a large scale may promote bat movement, dispersal and gene flow. The project is still ongoing.

Measures to take bats into account in land use and planning decisions $\ensuremath{\square}$ No

Research and monitoring to improve understanding of the use of landscape by bats are ongoing $\ensuremath{\square}$ Yes

research, if yes

Please, specify or give referencies to studies

> As mentioned above, a major project on identifying ecological corridors ("Azione di Sistema") funded by the Italian Environment Ministry is ongoing. The project involves important national parks (Vesuvio, Abruzzo Lazio and Molise, Alta Murgia, Gargano, Circeo, Aspromonte and Arcipelago Toscano) and relies on both field surveys and state-of-art modelling of corridor networks.

National guidelines, drawing on the general guidance published in EUROBATS Publication have been developed

☑ No

4. Activities to promote the awareness of the importance of conservation of bats

Click "expand" to see the questions!

4.1. International Bat Night. Give details for each year: number of events and number of people participated

> The organization of BatNights is not communicated to the Ministry. To answer this question, the scientific focal points invited bat specialists and enthusiasts to send details of the events that they have organized in the relevant period through the Chiroptera Mailing List. Attached please find a document showing the responses received, yet we stress that the document is likely to underestimate greatly the number of bat talks, walks, and demonstrations that took place in Italy in the time period considered.

You have attached the following documents to this answer.

BatNight_List_-_Italy.pdf - List of Bat Nights - Italy

4.2. Details of other important activities which are worth to mention (educational centres, etc.) > The Barrea City Council, through the efforts of its mayor Mr Andrea Scarnecchia, in cooperation with the Abruzzo Lazio and Molise National Park and under the scientific supervision of Prof Danilo Russo (Dept. of Agriculture, University Federico II, Naples) has established a bat exhibit centre providing information on the natural history of bats and the importance of protecting these mammals.

In summer, visitors at the centre may also watch non-invasively the daytime activities of a greater horseshoe bat colony through a real-time webcam system. The colony numbers over 350 bats and roosts in a nearby building.

4.3. Information on training and awareness raising for forest managers and workers, farmers, road workers, stakeholders involved in insulation of buildings, etc.

> The Abruzzo Lazio and Molise National Park is organizing meetings with builders and engineers to raise awareness on the impact that renovation work may have on the protection of bats.

Resolution 4.11. Recognising the important role of NGOs in bat conservation

4.4. Details of NGOs participating in /contributing to bat protection and most valuable activities that have the potential to substantially improve transboundary cooperation and mutual assistance > GIRC - Italian Chiroptera Research Group

the largest bat organization in the country, comprising bat specialists and enthusiasts. Partner of BatLife Europe.

http://www.pipistrelli.net/

Tutela Pipistrelli

This NGO is very active on the front of bat rehabilitation, it also promotes awareness campaigns on the importance of protecting bats.

http://www.tutelapipistrelli.it/

5. Additional actions undertaken to safeguard populations of bats

Click "expand" to see the questions!

Resolution 2.2. Consistent monitoring methodologies

5.1. Implementation of EUROBATS guidelines published in EUROBATS Publication n°5 to ensure consistency and information exchange between Parties and Range States ☑ Yes

Please give details

> The official document available for Italy is actually older than the EUROBATS Publication n°5, yet several key points are common to both publication, so although no real implementation was done, a methodological document was already available (both in Italian and English) and well known among bat workers. We aim to publish an update of the monitoring guidelines over the next years and in that case, we will take the EUROBATS publication into due account.

http://www.isprambiente.gov.it/files/pubblicazioni/quaderni/conservazionenatura/files/6732 19bisEngChirotteri completo.pdf

Resolution 5.4. Monitoring bats across Europe

5.11. Involvement in a long-term pan-European surveillance to provide trend data $\ensuremath{\boxtimes}$ No

Awareness-raising of the importance of underground sites $\ensuremath{\square}$ Yes

Collaboration and information exchange with other Parties and range states on surveillance and monitoring activities

🛛 No

5.14. Monitoring bats in accordance with EUROBATS Publication n°5 $\ensuremath{\square}$ No

5.15. Capacity building of bat workers and surveyors to support the undertaking of bat surveillance projects

Exists

Other activities under Resolution 5.4.

> Capacity building is mostly developed by universities. In the last years, bat detector and bioacoustics training courses were held in cooperation with the Belgian Museum of Natural History within the DEST (Distributed European School of Taxonomy) programme. http://batsound.com/?p=134

Resolution 6.6. Guidelines for the prevention, detection and control of lethal fungal infections in bats

5.17. Surveillance for the presence of fungal infections $\ensuremath{\square}$ Yes

Please provide details

> Although currently there is no systematic surveillance, the topic was investigated in the recent past, and awareness was raised among speleologists about the existence of this issue and the importance of preventing the spread of fungal diseases.

The only mycological study that was done in Italy we are aware of is the following:

http://www.italian-journal-of-mammalogy.it/First-mycological-investigations-on-italian-bats-,77309,0,2.html

Resolution 6.13. Bats as indicators for biodiversity

5.19. Does your country support a development of national, regional and pan-European biodiversity indicators for appropriate target audiences, using bat data ☑ No

5.20. Bat data is incorporated within high profile national multi-taxa indicators $\ensuremath{\boxtimes}$ No

5.22. Cooperation platforms that facilitate the required data exchange $\ensuremath{\square}$ Don't exist

Other activities carried out under this resolution (optional)

> Research on the use of bats as bioindicators in riparian habitats and forests is ongoing in the country. Some references as follows:

De Conno C. et al. (2017). Testing the performance of bats as indicators of habitat quality in riparian ecosystems. P. 80, Book of Abstracts, 14th European Bat Research Symposium, Basque Country. Cistrone L. et al. (2015). The effect of thinning on bat activity in Italian high forests: the LIFE+ "ManFor C.BD." experience. Hystrix It. J. Mamm. 2015;26(2):125–131.

Resolution 7.5. Wind turbines and bat populations

5.2. Raising awareness on the impact of turbines on bats and the existence of some unsuitable habitats or sites for construction ☑ Yes

If yes, how?

> NGOs such as GIRC and Tutela Pipistrelli raise public awareness on the potential impact of wind turbines on bats.

5.3. Pre-construction impact assessments, if possible, undertaken by suitably experienced bat experts $\ensuremath{\square}$ Yes

Please, give details

> Regional authorities are responsible for requesting and evaluating preconstruction environmental impact assessments. The attention paid to the topic varies across regions.

5.4. National guidelines were developed following Eurobats Pub. No. 6 $\ensuremath{\boxtimes}$ Yes

Please, attach a file or or provide a link > http://www.pipistrelli.net/drupal/system/files/LG_eolico_DEF.pdf

National guidelines are implemented Partially

Please, provide implementation details

> The regional authorities responsible for examining the environmental impact assessments may check that the guidelines are appropriately followed in studies, but this is not mandatory.

5.5. Investigations and research for mitigating bat mortality have been undertaken $\ensuremath{\square}$ No

5.6. Additional information on research on the impact of wind turbines on bat populations

List new references, attach reports or articles

> Roscioni F., Russo D., Di Febbraro M., Frate L., Carranza M.L. & Loy A. (2013). Regional-scale modelling of the cumulative impact of wind farms on bats. Biodiversity and Conservation 22: 1821-1835 Roscioni F., Rebelo H., Russo D., Carranza M.L., Di Febbraro M. & Loy A. (2014). A modelling approach to infer the effects of wind farms on landscape connectivity for bats. Landscape Ecology 29: 891-903.

5.7. Post-construction monitoring, if possible, is undertaken by suitably experienced bat experts

If yes, give details ☑ Yes

> there are very few cases we are aware of. Prost-construction monitoring is not mandatory in the country.

5.8. Raw data from environmental impact assessment and post-construction monitoring is available for independent scientific analysis v No

5.9. Blade feathering, higher cut-in wind speeds and shutting down turbines are used to reduce or avoid bat mortality

🗹 No

Resolution 7.9. Impact of roads and other traffic infrastructures on bats

5.23. Bats are taken into account during the planning, construction and operation of roads and other infrastructure projects v Yes

Please give details or attach a file with description

> This is not mandatory in all regions, but there are a few examples of bats being taken into account. This took place, for example, in the following case.

The project for the construction of Motorway A33 Asti-Cuneo (Roddi-Verduno) has considered the impacts on bats due to proximity to SCI IT1160029. The site hosts a nursery of Myotis myotis as well as a hibernation site of greater horseshoe bats and Myotis). The assessment has established the main flight paths followed by the bats by radiotracking ca. 20 reproductive or post-reproductive individuals, as well as through bat detector surveys, to identify sites where bats would cross the motorway. The final plan includes mitigation measures such as a bat bridge and some underpasses, whose effectiveness will be assessed through monitoring. The construction plan is currently stopped due to logistical and financial matters.

5.24 Pre-construction strategic and environmental impacts assessment procedures are mandatory \square Required occasionally

5.25. Post-construction monitoring

 $\ensuremath{\boxdot}$ Required occasionally

5.26. Raw data from environmental impact assessment and post-construction monitoring is available for independent scientific analysis v No

5.27. Research into the impact of new and, where appropriate, existing roads and other infrastructure on bats and into the effectiveness of mitigation measures \Box No

5.28. National guidelines are developed v No

Resolution 7.10. Bat Rescue and Rehabilitation

5.29. Animal rescue and rehabilitation systems are effective in the country $\ensuremath{\square}$ Yes

5.30. Collaboration between bat rehabilitators and scientists

Exists

Provide examples of collaboration

Cooperation is witnessed by several scientific articles on bat conservation and behaviour published in recent years that have focused on bats that had been rehabilitated, or that were under rehabilitation, such as: Serangeli M.T., Cistrone L., Ancillotto L., Tomassini A. & Russo D. (2012). The post-release fate of hand-reared orphaned bats: survival and habitat selection. Animal Welfare 21: 9-18.

Ancillotto L., Serangeli M.T. & Russo D. (2012). Spatial proximity between newborns influences the development of preferred social relationships. Ethology 118: 1-10.

Ancillotto L., Serangeli M.T. & Russo D. (2013). Curiosity killed the bat: Domestic cats as bat predators. Mammalian Biology 78: 369-373.

Ancillotto L. & Russo D. (2014). Selective aggressiveness in European free-tailed bats (Tadarida teniotis): influence of familiarity, age and sex. Naturwissenschaften 101: 221-228.

Ancillotto L., Allegrini C., Serangeli M.T., Jones G. & Russo D. (2015). Sociality across species: spatial proximity of newborn bats promotes heterospecific social bonding. Behavioral Ecology 26: 293-299.

5.31. Bat rehabilitators contribute their data to a national database $\ensuremath{\boxtimes}$ No

Other activities carried out under Resolution 7.10 (optional)

> The Italian Chiroptera Research Group website offers guidelines on how to provide first aid to bats (https://www.mammiferi.org/wp-content/uploads/2017/07/recupero_06-2008_0.pdf) and a list of rehabilitators and bat experts that may assist the public when a bat is found grounded (https://www.mammiferi.org/girc/recupero-chirotteri/).

The NGO "Tutela Pipistrelli" is also very active in the field of bat rehabilitation (http://www.tutelapipistrelli.it/). In February 2016, a national congress on bat rescue and rehabilitation was held in Pontecchio di Sasso

Marconi (Bologna), aiming at connecting bat researchers and rehabilitators.

Resolution 7.11. Bats and building insulation

5.32. Are there conflicts between insulation regulations and bat conservation? $\ensuremath{\boxdot}$ No

5.34. Impacts on bats are included in the environmental assessment of insulation programs

☑ No

Other activities carried out under Resolution 7.11 (optional)

> There is increasing attention on the potential conflicts arising between building renovation or construction and bats, yet we believe that in Italy the insulation issue is not relevant, or at least not a significant priority.

Resolution 7.12. Priority species for autecological studies

Rhinolophus blasii Peters, 1866

Some studies have been conducted (are ongoing) for this species in the country $\ensuremath{\boxtimes}$ Yes

Please add below or attach a list of references

> The species is deemed to be extinct in the country. However, some bat specialists (Dr Luca Lapini and Andrea Pereswiet-Soltan) have been conducting surveys to double-check the real absence of this species in Italy. We are not aware of any publication.

Nyctalus lasiopterus (Schreber, 1780)

Some studies have been conducted (are ongoing) for this species in the country $\ensuremath{\boxtimes}$ No

Plecotus sardus Mucedda, Kiefer, Pidinchedda & Veith, 2002

Some studies have been conducted (are ongoing) for this species in the country $\ensuremath{\boxtimes}$ Yes

Studies on:

	Winter roosts	Summer roosts	Swarming sites	Migratio n	Spatial and habitat use	Foraging behaviour	Die t
Yes							
No							

Please add below or attach a list of references

> http://www.italian-journal-of-mammalogy.it/A-gap-analysis-for-threatened-bat-populations-on-Sardinia,77157,0,2.html

6. Recent and ongoing programmes (including research and policy initiatives) relating to conservation and management of bats

Click "expand" to see the questions!

Resolution 2.3. Transboundary programme: species proposals

6.1. Inclusion of Myotis dasycneme and Pipistrellus nathusii in transboundary cooperation

🛛 No

Resolution 2.4. Transboundary programme: habitat proposals

6.2. National research on underground sites has been undertaken since the last reporting $\ensuremath{\boxtimes}$ Yes

Please list references

> we are not aware of published studies but monitoring of cave colonies is ongoing in several regions of the country.

6.3. National research on bats in forests

☑ Yes

Please list references

Ancillotto L., Cistrone L., Mosconi F., Jones G., Boitani L. & Russo D. (2015). The importance of non-forest landscapes for the conservation of forest bats: lessons from barbastelles (Barbastella barbastellus). Biodiversity and Conservation 24: 171-185.

Russo D., Di Febbraro M., Cistrone L., Jones G., Smeraldo S., Garonna A.P. & Bosso L. (2015). Protecting one, protecting both? Scale-dependent ecological differences in two species using dead trees, the rosalia longicorn beetle and the barbastelle bat. Journal of Zoology 297: 165-175.

Cistrone L., Posillico M., Altea T., Matteucci G., Posillico M., De Cinti B. & Russo D. (2015). The effect of thinning on bat activity in Italian high forests: the LIFE+ "ManFor C.BD." experience. Hystrix – the Italian Journal of Mammalogy 26: 125-131.

Russo D., Čistrone L., Budinski I., Console G., Della Corte M., Milighetti C., Di Salvo I., Nardone V., Brigham R.M. & Ancillotto R. (2017). Sociality influences thermoregulation and roost switching in a forest bat using ephemeral roosts. Ecology and Evolution 7: 5310-5321

Resolution 5.2. Bat rabies in Europe

6.5. National bat rabies surveillance network ☑ Yes

Please give details

> The bat rabies surveillance is carried out by national research institutions (Istituti Zooprofilattici Sperimentali). Details on the institution and FAO reference person in charge are linked below: https://www.izsvenezie.it/istituto/contatti/rubrica/de-benedictis-paola/

6.6. Vaccination against rabies is compulsory $\ensuremath{\square}$ No

6.7. Details of the institution(s) in charge of recording of all test results and their submission to the World Health Organisation

> please see response to 6.5

6.8. Other activities carried out under this resolution (optional)
> Guidelines on how to prevent rabies risk for personnel that comes frequently into contact with bats: https://www.izsvenezie.it/documenti/comunicazione/materiale-editoriale/2-manuali/lg-rabbia-chirotteri.pdf

Resolution 6.5. Guidelines on ethics for research and field work practices

6.9. National Code of Practice that addresses the context and legitimacy of acquisition, due diligence, longterm care, documentation, relevance and institutional aims ☑ Doesn't exist

Resolution 6.8. Monitoring of daily and seasonal movements of bats

Please select a species for which a research in daily/seasonal movements has been conducted from the

Barbastella barbastellus (Schreber, 1774)

New data on daily movements was obtained $\ensuremath{\ensuremath{\square}}$ Yes

Please attach a list of references

Ancillotto L., Cistrone L., Mosconi F., Jones G., Boitani L. & Russo D. (2015). The importance of non-forest landscapes for the conservation of forest bats: lessons from barbastelles (Barbastella barbastellus). Biodiversity and Conservation 24: 171-185.

Hypsugo savii (Bonaparte, 1837)

New data on daily movements was obtained $\ensuremath{\sc U}$ Yes

Please attach a list of references > Ancillotto et al. (under review). What is driving range expansion in a common bat? Hints from thermoregulation and habitat selection

Myotis daubentonii (Kuhl, 1817)

New data on daily movements was obtained $\ensuremath{\ensuremath{\square}}$ Yes

Please attach a list of references

Nardone V., Cistrone L., Di Salvo I., Ariano A., Migliozzi A., Allegrini C., Ancillotto L., Fulco A. & Russo D. (2015) How to be a male at different elevations: ecology of intra-sexual segregation in the trawling bat Myotis daubentonii. PLoS ONE 10(7): e0134573. doi: 10.1371/journal.pone.0134573.

Nyctalus leisleri (Kuhl, 1817)

New data on seasonal movements was obtained $\ensuremath{\ensuremath{\square}}$ Yes

Please attach a list of references

> Dondini et al (2012) Long distance migration of female Leisler's bat (Nyctalus leisleri) from Italy to Poland. Hystrix 23(2):95–96

http://www.italian-journal-of-mammalogy.it/Long-distance-migration-of-female-Leisler-s-bat-Nyctalus-leislerifrom-Italy-to-Poland,77268,0,2.html

The following paper is indirectly related to the seasonal movement as it focuses on the breeding range limits: Ancillotto L. & Russo D. (2014). Reassessing the breeding range limits for two long-distance migratory vespertilionid bats, Pipistrellus nathusii and Nyctalus leisleri in the Italian Peninsula. Mammalia 79: 245-248.

Pipistrellus kuhlii (Kuhl, 1817)

New data on seasonal movements was obtained $\[top]$ No

Pipistrellus nathusii (Keyserling & Blasius, 1839)

New data on seasonal movements was obtained Yes

Please attach a list of references

> The paper is indirectly related to seasonal movement as it focuses on the breeding range limits: Ancillotto L. & Russo D. (2014). Reassessing the breeding range limits for two long-distance migratory vespertilionid bats, Pipistrellus nathusii and Nyctalus leisleri in the Italian Peninsula. Mammalia 79: 245-248.

7. Consideration being given to the potential effects of pesticides on bats, and their food sources and efforts to replace timber treatment chemicals which are highly toxic to bats

Click "expand" to see the questions!

Resolution 4.5. Guidelines for the use of remedial timber treatment

7.1. Small projects to provide basic data to allow an assessment of the potential impact of industry on bat populations

☑ No

7.2. Raising awareness of product users is taking place $\ensuremath{\boxtimes}$ No

7.3. Legislation on products which have any adverse effects on bats $\ensuremath{\square}$ Exists

Comments (optional)

> As for pesticides used in the farming industry, Italy has applied the 2009/128/EC Directive on the sustainable use of pesticides.

Remedial timber treatment is unlikely to be a major threat to bats in the country given the type of buildings bats often roost in, yet the topic would deserve more attention.

Resolution 6.15. Impact on bat populations of the use of antiparasitic drugs for livestock

7.4. Efficient non-chemical methods to control livestock parasites and use of products of least toxicity to non-target species implemented ☑ No

7.5. Research on the use of antiparasitic drugs $\ensuremath{\square}$ No

7.6. Recommendations in Annex I to the Resolution 6.15 are adopted $\ensuremath{\boxtimes}$ No

7.7. Other activities carried out under this resolution

> There is work in progress on the role of bats as potential suppressors of blood-feeding insects that affect livestock. By raising awareness of the potential benefits provided to livestock farming by bats there is hope that livestock breeders will pay more attention to the need of minimizing the impact on bats of farming practices.

Reference:

Ancillotto L., Ariano A., Nardone V., Budinski I., Rydell J. & Russo D. (2017). Effects of free-ranging cattle and landscape complexity on bat foraging: Implications for bat conservation and livestock management. Agriculture Ecosystems and Environment 241: 54-61.

8. Further important activities to share with other Parties and Range States

Give details or provide links

> A COST Action is being submitted by University of Naples Federico II including 15 countries among its proposers, most of which Eurobats Parties or Range States. The proposal focuses on the effects of climate change on bats and the ecosystem services they provide. The main proposer has had official contacts with the Eurobats Secretariat and it is agreed that in case the proposal is successful, the Action will be implemented working side by side with Eurobats AC to achieve important common goals on the assessment and prediction of climate change effects on bats.