## AGREEMENT ON THE CONSERVATION OF BATS IN EUROPE Technical notes on the implementation of the Agreement in San Marino Republic

#### A. General Information

Party Range: S. MARINO REPUBLIC

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## B. Status of Bats within the Territory of the Republic

## 1. Summary Details of Resident Species

14 bat taxa occur on the territory of San Marino Republic (Table 1). The national atlas project (coordinated by the Centro Naturalistico Sammarinese) is ongoing and maps are ready for all the species on a UTM base.

Table 1. San Marino Republic species

n	Taxa	San Marino (Italian) name
1	Rhinolophus euryale	Rinolofo euriale
2	Rhinolophus ferrumequinum	Rinolofo maggiore
3	Rhinolophus hipposideros	Rinolofo minore
4	Myotis bechsteinii	Vespertilio di Bechstein
5	Myotis nattereri	Vespertilio di Natterer
6	Myotis myotis	Vespertilio maggiore
7	Pipistrellus kuhlii	Pipistrello albolimbato
8	Pipistrellus pipistrellus	Pipistrello nano
9	Hypsugo savii	Pipistrello di Savi
10	Eptesicus serotinus	Serotino
11	Plecotus auritus	Orecchione
12	Plecotus austriacus	Orecchione meridionale
13	Miniopterus schreibersii	Miniottero
14	Tadarida teniotis	Molosso di Cestoni

#### 2. Status and Trends

There is not enough information on trends for the Republic. Only the wintering community of the "Piagge" tunnel in Montalbo with around 4000 *Miniopterus* and other species is surveyed in the last 4 years and it is remarkable stable.

Rhinolophus euryale is present in winter with few individuals but a reproductive group of about 60 female was recently found in the "Piagge" tunnel in summer. No information on trend, like for other rhinolophids, only stable as hibernating. Rhinolophus ferrumequinum is present in winter with few individuals, stable as trend. Rhinolophus hipposideros is known for no more than two dozen of wintering specimens in different underground sites, but also a small breeding colony (less than 20 females) was found in a attic in 2008. Myotis bechsteinii have just one sight of a male. Myotis nattereri is present with few individuals during summer. Myotis myotis is found with few specimens during hibernation in caves. Pipistrellus kuhlii, Pipistrellus pipistrellus and Hypsugo savii are widespread in all the landscapes of the Republic with stable trends. Eptesicus serotinus shows only males in summer in some of the tunnels around the Titano Mountain. The two Plecotus auritus and Plecotus austriacus are knows as just few individuals. Miniopterus schreibersii is present all year round in "Piagge tunnel" and Canepa

cave, but in winter a large group is located in the tunnel, coming from the Onferno colony (Gemmano, Rimini, Italy, Scaravelli et al. 2005)

#### 3. Habitats and Roost Sites

The national atlas is collecting now data for all the species and a database on caves is also established. On the Republic territory there are just some small woods and the traditional agriculture is declining, so the majority of the bat habitats are in peril due to the strong pressure by urban and industrial use.

Few roost are actually know and the largest, in the tunnel Piagge close to Borgomaggiore, was gated thanks to Centro Naturalistico Sammarinese. Other roost are in natural cave, protected by a "natural heritage law". The attics and private resting sites are very complicated to protect as there is a lack about this theme in the legislation.

#### 4. Threats

The main threats to bats in San Marino Republic come from loss of habitat and loss of roosting sites. There is a strong pressure to use all the old tunnels in the Republic, to restore ancient buildings and churches and any space will be found for wild species. Also industries and urban areas are still asking for spaces, destroying the last agricultural lands. The national plan for wildlife and to establish protected areas is slowly on the way.

### 5. Data Collection, analysis, interpretation and dissemination

The Centro Naturalistico Sammarinese is the only official institution that is collecting information on bat presence and distribution. National atlas and database are projects on the way.

## C. Measures Taken to Implement Article III of the Agreement

## 6. Legal measures taken to protect bats, including enforcement action

The Republic ratified the Agreement and there are new proposal to establish new laws on animal protection.

## 7. Sites identified and protected which are important to bat conservation

Some sites are listed in the national plan of protected areas but problem are related to buildings and forest roost as in other parts of European range. Just Tunnel Montalbo is protected mainly for the presence of bats.

#### 8. Consideration given to habitats which are important to bats

Any consideration is actually devoted to these areas

# 9. Activities carried out to promote the awareness of the importance of the bat conservation

The national "Centro Naturalistico Sammarinese" every year have schools projects and activities to inform and to sensibilize. Also bat nights and conference are promoted every year. A CD with information, images, video is distribute to.

#### Update of literature on bats in San Marino

- Scaravelli D., 2008. Prime indagini sui mammiferi della Repubblica di San Marino in AA.VV, 2008 Scritti, Studi e Ricerche di Storia Naturale della Repubblica di San Marino. Vol.1 (1997-2007). Centro Naturalistico Sammarinese. R.S.M.: 3-16
- Scaravelli D., 2008. Chirotteri della Repubblica di San Marino, rapporto 2005 in AA.VV, 2008 Scritti, Studi e Ricerche di Storia Naturale della Repubblica di San Marino. Vol.1 (1997-2007). Centro Naturalistico Sammarinese. R.S.M.: 143-162
- Scaravelli D., 2008. Chirotteri della Repubblica di San Marino, rapporto 2007 in AA.VV, 2008 Scritti, Studi e Ricerche di Storia Naturale della Repubblica di San Marino. Vol.1 (1997-2007). Centro Naturalistico Sammarinese. R.S.M.: 163-168