REPORT REGARDING THE IMPLEMENTATION OF THE AGREEMENT ON THE CONSERVATION OF POPULATION OF EUROPEAN BATS DURING THE PERIOD 2012-2013

Designated Authority: Ministry of Environment and Climate Change
Name of the head of the institution: Mrs. Rovana PLUMB
Address: 12 Libertăţii Avenue, 5 District, Bucharest, Romania
Telephone: + 40 21 4089523
Fax: + 40 21 3124227

Name and contact officers: Dr. Nela MIAUTA - CMS National Focal Point
Antoaneta OPRIŞAN – EUROBATS National Focal Point
Ministry of Environment and Climate Change
Directorate for Sustainable Development and Nature Protection
12 Libertăţii Avenue, 5 District, Bucharest, Romania
Telephone: +40 21 4089545
Fax: +40 21 3124227
nela.miauta@mmediu.ro

Contributors that have provided input
National Environment Protection Agency
Local Environment Protection Agencies Alba, Arad, Bihor, Cluj, Covasna, Satu Mare, Timiş, Maramureş
Romanian Bat Protection Association
REPORT REGARDING THE IMPLEMENTATION OF THE AGREEMENT ON THE CONSERVATION OF POPULATIONS OF EUROPEAN BATS (EUROBATS) DURING THE PERIOD 2012-2013

1. Scientific research and monitoring
devolved and extensive monitoring program
Monitoring of target species and theirs habitats by the Association for the Conservation of Biological Diversity
The Local Environmental Protection Agencies collaborated with NGOs, the National Parks Administrations, custodians to monitoring the habitat status of bats populations.
Scientific research and monitoring of bats have been done by the Local Environment Protection Agency Satu Mare and Transylvanian Carpathian Society by implementing the project “Participatory management planning for protected areas on the lower river Tur” financed by the Sectoral Operational Programme for Environment, priority Axis 4, co-financed by the European Regional Development Fund. 18 bats species have been found in the areas from 32 species existing in the country.
The survey covered all the important habitats (lakes, forests, lands, buildings) using special methods and technic like mist nettings and bat detectors, accounting individual numbers in their shelters.
The survey contributed to the elaboration of the integrated management plan of the territory by including the results on the bat species (population size, distribution, management proposals).
The Romanian Bat Protection Association was responsible for the monitoring measures of bats population along the roads in a few counties during the period July – August;

- Establish the National Monitoring Plan on bats populations in order to report on the Article 17 – Habitate Directive;
- 1000 bats (*Myotis myotis, Myotis oxygnathus, Rhinolophus ferrumequinum, Miniopterus schreibersii*) were marked with rings to provide information about the fidelity of housing, population dynamics and social behavior.

2. **Education and awareness**

- Educational activities were carried out each year celebrating the International Bat Night, the International Day for Biological Diversity, the World Environment Day by the Romanian Bat Protection Association, the Explorers Speleological Association
- The projects “*Supporting of a better local government and information exchange at European level*” and “*Bat conservation in Pădurea Craiului, Bihor and Trascău Mountains* were implemented;”
- Exchange of experience among specialists concerned with bats protection. The event was attended by teachers from the primary, secondary and university education, being present 31 participants from both urban and rural environment. The experts have presented information about bats protection, were discussed aspects of bats ecology and physiology.
- Field visits were in Cefa Nature Park, to observe bats in the wild;
- Brochures were distributed for informing the lands administrators regarding the possibilities for developing some traditional activities which are compatible with the status of Natura 2000 sites;
- Meetings with private land owners and other stakeholders
- Warning signs were installed at 40 caves in Bihor, Cluj and Alba Counties;
- Informational panels installed at the cavities entrances and at the sinkholes with high vulnerability;
- Public awareness for bats identification, waste management in caves;
- Establish a webpage for bats conservation and informative materials (books, brochures, leaflets, documentary) were distributed;
- Informative panels were placed in 15 closed caves;
- Debates with the stakeholders (land owners, local authorities, owners associations, economic operators, custodians, administrators of Natura 2000, NGOs);
- A network of experts was created for increasing the sustainability and efficiency of bats survey and conservation actions;

3. **Strengthening institutional capacity**

   training session for presenting the methods of the monitoring of bat species.

   training courses for the project management team on 8310 habitat ecosystems, biology of the bat species, karst vulnerability, operating GIS data bases, habitats monitoring, bats monitoring, exploration and security rules, speleological techniques for vertical caves, equipping and passing cavities, hydrogeology, and geomorphology.

4. **International cooperation**

   Implementing the project „Supporting of a better local government and information exchange at European level.”
5. Protection of migratory species, conservation measures

There are many negative factors on the bat fauna like loss of the feeding habitat and shelters, also the uncontrolled speleology which can cause the disturbance of bat colonies in their underground habitats. The effects of these threats were compensated by concrete conservation measures;

- **LIFE08 NAT/RO/000504 “Bat conservation in Pădurea Craiului, Bihor and Trascău Mountains”,** were implemented by the Local Environment Protection Agency Bihor, the Romanian Bat Protection Association and “Emil Racoviță” Institute of Speleology – Romanian Academy;
- Ringing the bats species (*Rhinolophus ferrumequinum*, *Rhinolophus hipposideros*, *Myotis myotis*, *Myotis oxygnathus*, *Myotis bechsteinii*, *Barbastella barbastellus*, *Miniopterus schreibersii*) by a joint team of Romanian Bat Protection Association;
- Developed an Action Plan for concrete reconstruction, depollution and management activities;
- Rehabilitation of 65 polluted/spoiled caves closed to the public (habitat 8310) and elimination of the polluting sources;
- Preservation of the hibernation, birth and feeding populations zones for 11 bats species;
- Conservation measures regarding the bat species are included in the Management Plans of the natural protected areas ROSCI0037 Ciomad Balvanyos and ROSCI0036 Cheile Varghișului;
- Implementing the Waste Collecting System for households located in karst areas outside the settlements. (Betfia Cave, Măgura Cave, Huda lui Papara Cave, Vadu Crișului Cave, Fânațe Cave, Meziad Cave, Ungurului Cave, Scărișoara Cave and Poarta lui Ionele Cave);
- 9 important underground habitats were cleaned up from waste;
• 300 artificial bat boxes for bats have been mounted on trees in forests, near water surfaces, where the bats have difficulty to find natural shelters, in 57 locations of the Natura 2000 sites;

• Conservation of the underground habitats of bats closing the selected caves in an appropriate manner that does not harm bats by placing special grids at the entrance or around the entry to the cave. These constructions allow bats to fly in and out of the cave, without any restriction. The closed caves are: Țiclu Cave, Ampoița Cave, Ciur Izbuc Cave, Fânațe Cave, Măgura Cave, Coliboaia Cave, Onceasa Cave, Humpleu Cave, Bătrânului Cave, Betfia Pothole, Huda lui Papara Cave, Valea Leșului Cave, Aștileu Cave, Tășad Cave, Vadu Crișului Cave;

• Several studies have shown that artificial lighting in caves has negative effects on bat behavior. Disturbance caused by artificial illumination can cause delayed of parturition of the young bats and slowing the growth rate. These factors can influence the ability of feeding the newborn before the hibernation period (hibernation requiring large amounts of fat accumulation), theoretically contributing to a lower rate of survival after waking from hibernation. During the period 2012-2013 the lightening was changed in three caves: Ungurului Cave, Scărișoara Cave and Vadu Crișului Cave;

• A Management Plan for 7 bats species have been elaborated in order to assure the long term conservation of these species;

• Local Environment Protection Agency Maramureș developed the Management Plan for ROSCI0092 Ignis Natura 2000 site, financed by the Sectoral Operational Programme for Environment, priority Axis 4 and inventory activities, mapping, assessment and conservation measures for species and habitats of community interest (Myotis myotis);
• Local Environment Protection Agency Arad developed conservation measures for the bats species (*Myotis myotis*, *Rhinolophus ferrumequinum*, *Miniopterus schreibersii*);
• A guideline for the elaboration of management plans of underground bat roosts and surrounding habitats was elaborated;
• 15 caves was closed in a bat-friendly way, to minimize the disturbance of bat colonies;
• Warning signs were placed in 40 caves;

6. **Administrative, institutional, legislative measures**
   - Low No. 90/2000 for ratifying the Agreement on the conservation of populations of european bats (EUROBATS);

7. **Activities planned for next year**
   - Enhancing the institutional capacity for bats protection;
   - Monitoring the natural protected areas with high density of bats population;
   - Implement the Management Plans for natural protected areas where the bats species are present;
   - Take coordinated measures to maintain bats populations in a favourable conservation status or to restore them to such a status;
   - Develop the collaboration and exchange information between the research institutions, Local Environment Protection Agencies, NGOs;
   - Cross-border cooperation with the neighbouring countries and the international organizations for monitoring the bats populations.