

25th Meeting of the Advisory Committee

Videoconference, 30 April 2021

Record of the Advisory Committee Meeting



1. Attendance

This is listed as Annex 1 to the Record.

2. Opening Remarks

The Chair of the Advisory Committee, Prof. Danilo Russo, greeted all the participants and thanked the members of the Intersessional Working Groups (IWGs) that had met prior to the 25th Advisory Committee Meeting (AC25) for their good work. He also stated that online meetings could be quite challenging, and that he counted on the cooperation of all participants to make this videoconference a success. Prof. Russo referred to the guidelines for the videoconference that the Secretariat made available on the EUROBATS website, the purpose of which was to regulate the course of the meeting. He explained that, since this was a meeting of the Advisory Committee, the priority for interventions would be given to the Advisory Committee members.

In continuation, the EUROBATS Executive Secretary, Mr. Andreas Streit, welcomed the participants. He expressed his regrets that in the previous year no face-to-face meeting could have been organised, not even a videoconference, since the Secretariat hoped for a physical meeting to take place later in the year. However, Mr. Streit was pleased by the fact that the IWGs restarted their work and achieved significant progress, demonstrated also by the reports that were being posted on the EUROBATS website. Several IWG reports were received during the meeting day and would also be made available online. The Executive Secretary thanked the country- and NGO-representatives for sending the written short summaries of their activities in the past two years, which would be included in the record of the meeting. He also asked all those delegates who had not yet sent their reports, to do so not later than the end of the following week. Finally, Mr. Streit welcomed all the new participants of AC25, especially quite a few new EUROBATS Focal Points, and wished everybody good discussions and a productive meeting.

Before starting with the agenda of the meeting, the Chair took the opportunity to commemorate three colleagues who suddenly passed away in the previous months: Mr. Per Ole Syvertsen, the EUROBATS Scientific Focal Point for Norway, a dear colleague who attended the EUROBATS AC meetings for many years; Prof. Ingemar Ahlén from Sweden, a reference point and pioneer in the use of bat detectors in Europe; and Dr. Jens Rydell, a colleague and an excellent friend who devoted his whole career to bat ecology and conservation. The Chair then invited Ms. Marie Nedinge, the EUROBATS Scientific Focal Point from Sweden, to say a few words in memory of the deceased colleagues. The death of the three scientists was a huge loss for the EUROBATS community, but also for Sweden in particular. Though not from Sweden, Mr. Syvertsen was cooperating with all Scandinavian countries. Prof. Ingemar Ahlén had been a mentor to Ms. Nedinge for more than 50 years, and he was the person who made bat detectors sturdy and well working. He spread the word that this was a useful method to use. Dr. Jens Rydell was a friend of Ms. Nedinge for more than 50 years, who did significant work on wind power as well as light pollution. Ms. Nedinge invited the participants, if they wanted to honour Dr. Rydell, to put out a light at night, as he was pleading for less light pollution. During the European Bat Research Symposium the following week, a talk would also be held in honour of the recently deceased experts.

3 Adoption of the Agenda

There being no objections or comments, the agenda was adopted.

4 Adoption of the Rules of Procedure

The Rules of Procedure were also adopted unanimously.

5 Summary Reports by the Parties, Non-Party Range States, and Observers

The Representatives of the Parties, Non-Party Range States, and Observers were asked to submit to the Secretariat their reports in writing, so that these could be included in the minutes of the meeting.

PARTIES:

BELGIUM:

All through 2019 and the first quarter of 2020, bat census, research and conservation efforts continued at the usual level. Winter census counts were performed at hundreds of small and larger hibernation objects, involving hundreds of volunteers. Summer 2019 saw the reappearance of the greater horseshoe bat in Flanders. The species was identified at two different locations, hunting over larger waterways. The

species has not been seen since 1995, when the last known colony location was destroyed. In Wallonia, mainly below the rivers Sambre and Meuse, the greater horseshoe bat has made a comeback during the last decade, with an estimated 500-1,000 individuals currently hibernating in larger caves. This, however, still represents only 30 percent of the population before 1950-60.

Also on the positive side, the barbastelle population has started gradually increasing, having disappeared from the Flanders and the Brussels Regions well before the 1980s. A single encounter was recorded in 2014, leading to an intensified search by the leading NGO Natuurpunt and its partners. Five colonies, totalling 150-200 bats, were located within an area of 20 square kilometres. Tracking revealed that some barbastelles covered up to 50 km in a single night. The reappearance of barbastelle in the north of Belgium is not an indication of improved forest management systems. Colony trees and lined tree lanes are still being removed at a high tempo, often in full knowledge of the possible impact on bat populations. Over the last decade, Barbastelle has been increasingly encountered in the very south of the Walloon region, mainly owing to the searching efforts of NGO volunteers during the LIFE Belgian Nature Integrated Project.

In the Walloon region, mitigation, or avoidance of artificial lights at night, is gradually being introduced for some road tracks, after fruitful discussions with lighting designers.

In spring 2020 everything changed. In the second week of April, all Belgian regions paused all bat related on-site activities as a precautionary measure to avoid any possible spill-over of COVID-19 to bat populations. The stop followed the IUCN Species Survival Commission Bat Specialist Group recommendations, and anticipated the EUROBATS recommendations from the 10th of May, 2020. Since then, all the work in the Flanders and Brussels Regions has been on hold. The winter census counts were equally skipped. In the Walloon region exemptions are being given for field research under strict precaution and mask requirements.

Further information on the possible risks of a spill-over of COVID-19 variants to wild bat populations are being awaited. Finally, a series of mammals, including bats, were tested for COVID after a stay in and prior to the release from animal rescue centres. None of the tested animals were positive.

CROATIA

The Croatian Agency for the Environment and Nature (CAEN) ceased to exist, due to a Government's decision, as of the 1st of January 2019. It was part of the Ministry of

the Environment and Energy until 2020 when the Ministry was renamed into the Ministry of Economy and Sustainable Development, and former CAEN was renamed into the Institute for Environment and Nature as part of the Ministry. The Croatian fauna database (that will include all bat data) as part of the Nature Protection Information System is still under development and its finalisation is planned by the end of 2023. Another planned project is development and testing of a bat-monitoring programme, which is expected to start in the second half of 2021.

Due to the COVID-19 pandemic, the Institute for Environment and Nature published on the 3rd of June 2020 recommendations for researchers and cavers on precautionary measures to minimize the risk of transmitting SARS-CoV-2 from humans to bats. (<http://www.haop.hr/hr/tematska-podrucja/prirodne-vrijednosti-stanje-i-ocuvanje/bioraznolikost/sismisi/preporuke-iz-mjera>).

Bat research was not restricted, as well as caving or cave research, since it would be impossible to control such a measure. It was recommended not to visit caves when large colonies were present (a list of underground sites was included in the recommendation).

Nevertheless, regular winter monitoring at the Veternica Cave, as well as most of bat monitoring, stopped in the year of 2020 or was performed to a limited extent due to the COVID-19 pandemic. Therefore, *Pseudogymnoascus destructans* in the Veternica cave was not monitored.

Overground roosts are continuing to be under significant threats, even those in which bats are conservation targets.

Report on the conservation status of bats in Croatia in accordance with Article 17 of the Habitats Directive was submitted in 2019 and most of the bat species are in unfavourable status (U1 and U2). With regard to the implementation of mitigation measures for the windfarm Jelinak (with one of the highest mortality rates recorded compared to EUROBATS collisions/mortality data), the legal options to prescribe mitigation measures that are different from the ones in the construction permit are still being considered by the Ministry.

International Bat Night was organised on a limited basis, and some events were held on-line.

CZECH REPUBLIC:

The overall activity was affected by the situation caused by the COVID-19 pandemic. The restrictions mostly influenced public events, workshops, programmes for schools.

Bat monitoring and surveys:

Ongoing and new monitoring and survey programs:

- Long-term monitoring (907 hibernacula monitoring; 394 maternity colonies);
- Short-term monitoring (140 surveys of occurrence of bats in buildings across the whole country);
- Local surveys.

Conservation:

Bats, Buildings and Insulation projects:

- **A seminar for EUROBATS members was planned by Ministry of Environment, but the COVID-situation did not allow for it. This seminar is now planned for autumn 2021. During the month of May, the invitations will be distributed.**
- Special consultancy line, taking part in administration procedures;
- Special workshops and online-seminars focused on bats in buildings: projects „Conservation of bats residential in towns“ and „Hidden life in sights – excursion into the mystery of flying mammals“;
- Project „The bat is our neighbour“ continues, 8 plaquettes were given to the representatives of the general public, who engaged in saving colonies in buildings (schools, castles, private houses).

Bat Rescue and Rehabilitation

- Publication „Bat care –2nd extended edition“ (152 pages).

Impact of Roads and Other Traffic Infrastructures on Bats

- Scientific project on bat activity around bridges over the roads.

Bats and forests:

- Scientific project on the role of bats in reducing pests (Lepidoptera) in infested forest sites.

Bats and pathogens:

- Statements of ČESON (Czech Bat Conservation Trust) and scientists regarding the situation concerning COVID-19.

Education, public events, promotion:

Most of the promotion work has been done by the NGO Czech Bat Conservation Trust (ČESON), and, locally in Prague, also by the NGO Nyctalus. This includes:

- IBN on 45 sites and several public events (e.g. walks with bat detectors for public);
- Itinerant exhibition „Bats – invisible and mysterious“;
- Bat interactive map concerning sights available on <https://napude.sousednetopyr.cz/navstivte-netopyry/netopyri-mapa/>;
- Publication „Bat’s year full of adventure“;
- Educational material for children „Bats in underground“ and „Bats in parks“, fairy tales about bats and coronavirus, a colouring book „Year of a bat“;
- Online seminar for grammar school teachers concerning educational program „Bats and forests“;
- Art competition for children from Prague schools;
- Online transmission from summer bat colonies, 3 bat observation sites in castles;
- Geocaching game „In bat-world with Dracula“ (from 2017 to 2020 7,500 participants);
- Updating of web pages about old trees management in parks and tree lanes and potential occurrence of bat colonies www.vestrome.sousednetopyr.cz.

ESTONIA

In 2020, bats were announced “the animal of the year” by the Estonian Teriological Society. Upon this occasion over 30 events and 2 exhibitions were held, and many articles in the media were published.

The Estonian Red List has been renewed based on the latest IUCN guidance. Bat populations have also been assessed. Following species were considered data deficient and in need of further study: *Myotis mustacinus*, *Myotis nattereri*, *Pipistrellus pipistrellus*, *Vespertilio murinus*.

The national monitoring of bats has continued.

General progress of action implementation within EstBatLIFE Project. Visitor counting was done for the period of one year (2018/2019) on all project sites and was concluded with a report published on the 26th of June 2019. Winter counts and mapping of all bats on all four project sites was performed in two winters (2017/2018 and 2018/2019) as planned and the report was also published on the 26th of June 2019. All project reports are available under: <https://elfond.ee/bats/the-project/reports>

All entrances on all project sites have been secured with temporary electronic security systems (off-grid video surveillance by security company) and all entrances have also been fenced. A 24-meter long culvert (with 2 meters in diameter) has been placed into the Piusa caves against the collapsing roof. All three project sites have been cleaned where cleaning work with voluntary camps was foreseen. Securing environmental conditions on the Humala project site is still ahead and is planned to be done during the summer of 2021. Setting up permanent electricity connections onto all project sites and setting up permanent security systems for securing site entrances is planned to be done during summer 2021.

Monitoring of the impact of the project actions is in progress. Terms of reference for monitoring the effects of project actions on target species and visitation flows have been prepared and both bat and visitor counts are on-going according to the terms. Preliminary results of the visitor count show that fencing with electronic surveillance systems is working well in keeping human access under control. For socio-economic impact monitoring, two meetings have been carried out for three project site stakeholders and one is still planned for summer 2021. Additionally, meetings with state stakeholders were held in 2018 and 2019. Preliminary versions of socio-economic and ecosystem reports have been done and will be finalised during 2021.

Public awareness raising and dissemination of the results are performing well. A study tour to the Netherlands and participation at two EUROBATS meetings (Tallinn, Skopje) have been accomplished. The project website is available in three languages (Estonian, English, and Russian). Information boards have been placed on all project sites. An information folder with educational topics on bats for outdoor use has been produced. It was also distributed among the participants of the training for tourist guides in May and June 2020. An online web-camera showing the pond bat life has been set in Piusa and is publicly available under: www.youtube.com/eestimaa_looduse_fond. The pond bat was declared as the mammal of the year in 2020 in Estonia. The Night Flyers exhibition is open in the Estonian Museum of Natural History and has been very popular. The exhibition is also set up as a virtual museum

on the web: <https://www.loodusmuuseum.ee/en/virtualmuseum>. In total 14 very popular public International Bat Night events were held during 2018-2019 in different places all over Estonia and at least 10 events were held during 2020.

FINLAND:

The 15th European Bat Research Symposium is being organised by the Finnish bat researchers in the beginning of May (4.-7.5.2021). Due to the pandemic, the symposium was postponed from 2020 and is now taking place online. The programme consists of a wide selection of interesting talks as well as many nice between-sessions activities. See the webpage <https://ebrs2021.fi/> for more information.

Active bat research of multiple approaches is being conducted especially in the BatLab Finland, led by PhD, adjunct professor (docent) Thomas Lilley. The lab is based in the Finnish Museum of Natural History Luomus.

The NGO Finnish Chiropterological Society is preparing new guidelines on bat surveys, covering different planning processes and several survey techniques. This document is referring to several EUROBATS guidelines, such as those on bats and wind turbines, recommended experience and skills of experts with regard to quality of assessments, and conservation and management of critical feeding areas.

GEORGIA:

From the activities that have been carried out in Georgia since the last meeting, the following should be highlighted:

- In 2019, for the Emerald site Ghliana, also included in the EUROBATS important underground sites, a management plan was elaborated and submitted. The management plan was developed upon the request of the Ministry of Environment Protection and Agriculture.
- In 2019 and 2020, in close cooperation to the NCDC Georgia, bats from six colonies were sampled on different diseases with non-lethal methods.
- In 2020, a new mixed maternity colony of *Myotis blythii* and *Minioterus schreibersii* with about 2,500 individuals was found.
- In July 2020, a 10-minute public awareness video about the importance of bats was taken by one of the main TV channels in Georgia, "Imedi", and, at the time, the video had more than 300,000 views.

GERMANY:

The long-awaited new Red List of Mammals was published in 2020. 11 of the 25 species are classified as endangered. In the case of the greater mouse-eared bat, whiskered bat, and lesser horseshoe bat, there are signs of a cautious easing of the endangerment situation. 9 species are assessed as not endangered.

The Red List can be downloaded under https://www.rote-liste-zentrum.de/files/Download_RoteListe_Saeugetiere_2020_20210317-1601.zip.

Several federal projects on bats are still ongoing, for example on the barbastelle, on bat migration across the North and Baltic Seas, the enhancement of curtailment algorithms for wind turbines and the investigation of possible disturbances caused by the operation of wind turbines in forests. A project should be highlighted, conducted by the University of Greifswald, which aims to compile bat data nationwide in a database, and evaluate it regarding status and trends (<https://zoologie.uni-greifswald.de/struktur/abteilungen/angewandte-zoologie-und-naturschutz/forschung/bedrohte-daten-von-bedrohten-arten/>). Also in 2020, a project on the effects of insect decline on bats was launched, in which the grey long-eared bat was being studied as an example.

At the beginning of the year, a script with German translations of the resolutions from the last two EUROBATS Meetings of the Parties was published to make those available to the German bat conservationists:

(<https://www.bfn.de/fileadmin/BfN/service/Dokumente/skripten/Skript573.pdf>). The script also contains the German versions of the last two German national reports as well as contributions from the German Länder.

As in 2020, the BVF has again invited people to take part in the nationwide greater noctule bat census this year:

(<https://sites.google.com/prod/view/abendseglerzugzaehlung>).

HUNGARY:

The following bat protection activities in 2019 and in 2020 could be highlighted:

Research activities:

- Since 2004 a countrywide monitoring program has been conducted which includes a long-term survey of the trends in bat populations. The program took place in 2019 and in 2020 as well, and it included 49 hibernating sites (caves or mine tunnels), 141 summer roosts in buildings, 9 swarming sites and 9 roosts of Schreiber's bat.

- In 2019 a new study was published about the results of this programme. Most of the statistical analyses have not indicated significant changes in the population size, however, the hibernating population of lesser horseshoe bat is increasing, while the decline in the number of large Myotis specimens is alarming. In case of the greater horseshoe bat, the impact of nature conservation activities could be observed: a significant decline was detected at buildings without management, while an increase in population size at buildings under special nature conservation control could be seen as a positive response to management efforts.
- In 2019, one of the national park directorates made parasitological and epidemiological studies.
- A new guide has been published, Public lighting and wildlife protection – Professional guide for nature conservation authorities and national park directorates, to support decision-making on applications for the installation or replacement of an outdoor light or light source.
- Between 25th and 27th October 2019, the XII Hungarian Bat Protection conference was held in Alsódobsza. During the three days about 20 presentations were made. Beside this, there was a short field trip and the participants placed some artificial bat nests.

Conservation activities:

- Two churches have been renovated with bat-friendly methods.
- A lot of summer roosts in buildings, such as attic of houses or farms, have been renovated with bat-friendly methods.
- Numerous artificial bat roosts have been placed in blocks of flats and forests.
- In one cave in Hungary, cave Abaliget, domestic cats have caused serious problems. Around a cave an electric fence was made, and the colleagues of the national park directorates placed a camera trap to test the fence effectiveness.
- In 2019 there were few cases where different bat species were taken to a rescue centre. These small-size bat species usually recovered successfully.

Public awareness activities:

- International Bat Night has been organized by a few national park directorates.

- Permanent and temporary poster and photo exhibitions have been made by a few national park directorates. In addition, several oral presentations have been given in primary schools.

ITALY:

Due to the COVID-19 pandemic, field research and public events on bats have been greatly limited. Bat specialists were actively involved in countering the fake information circulated in the news about the origin of the pandemic from bats and gave interviews and online talks on this topic.

In 2020, a rabid cat died after biting several persons. It was found to be infected with the West Caucasian Lyssavirus and suspected to have contracted it from bats through predation. Investigations showed that *Miniopterus schreibersii* in the area were tested serologically positive to the virus, but to date, the pathogen has not been detected in bats. Active surveillance is ongoing, and the Italian Ministry of Health released a communication directed to all relevant parties, including veterinarians, bat specialists, and rehabilitation centres, to prevent possible risks.

Studies on potential interspecific competition in pipistrelle bats and effects of climate change on these species have also been published.

ISRAEL:

1. On the 12th of December 2019, the Egyptian Fruit Bat (*Rousettus aegyptiacus*) was finally declared a Protected Species following a revision to the current Wildlife Protection Law, as pledged when Israel joined the EUROBATS Agreement.
2. In mid-May 2020, the Israel Nature & Parks Authority (INPA) closed three caves inhabited in large numbers by multiple bat species for public visitation during the COVID-19 lockdown in Israel, following consultation with EUROBATS and other experts. The INPA also issued safety instructions for scientific work on bats and for bat rehabilitators. The cave visitation restrictions were lifted in mid-April 2021, following a reassessment by the INPA.
3. The INPA together with the Mammal Center of the Society for Protection of Nature in Israel (an NGO) has continued expanding the National Monitoring Plan for Israel's Bat Species. During the eighth year of monitoring, almost 100 sites (roost and foraging sites) throughout the country were surveyed. No major changes from last year's monitoring were observed. Based on a recent review of the last five years of monitoring, several avenues of advancement have been suggested, such as moving to full spectrum bat recording monitoring.

4. The INPA is currently working on revising the Israeli Red Data Book for mammals and conducting dedicated surveys for this purpose.
5. The INPA is compiling a list of important underground sites for bats, which will be submitted to EUROBATS during 2021.
6. Wind Farm Planning: The Israeli National Planning Commission has formally adopted a comprehensive methodology for minimizing risk to both bats and birds, as part of a master plan for energy infrastructure (TAMA 41). Suggested by INPA together with the Environmental ministry, the methodology includes sensitivity mapping, proper survey techniques and methodology, mortality thresholds, collision-risk modelling (for birds), requirements for an annual take permit by the INPA, post-construction surveys and commitment for increased monitoring and active measures if mortality thresholds are exceeded. The 2014 EUROBATS Guidelines for wind turbines have been translated to Hebrew and implemented for both the planning and operational stages.
7. 6 species of bats have been discovered so far in monitoring of two small windfarms now operational: *Pipistrellus kuhlii*, *Rhinolophus ferrumequinum*, *Rhinopoma cystops*, *Rhinopoma micrphylum*, *Tadarida teniotis*, *Taphozous nudiventris*. Calculated mortality for 2020 was 4.3 bats/turbine/year at Gilboa wind farm and exceeded 10 bat/turbine/year at Sirin wind farm.
8. Major efforts and success have been invested to combat light pollution in protected areas and with major infrastructure projects. Current knowledge of the effects on bats and other nocturnal wildlife is incorporated in addressing the issue.
9. International Bat Night was not celebrated during 2020 because of the COVID-19 lockdown.

MOLDOVA

1. New Sites and Rare Species

In 2019-2021, the monitoring of important bat sites was performed in 22 locations. Four sites were surveyed, three of which were studied for the first time. The most important were the Molovata-Noua limestone mines in the central part of the country, where 10 bat species were found, including a – for Moldova – large hibernation colony of *Myotis myotis* with about 80 individuals (CR in the Red Book of Moldova). This species had not been recorded since the 1970's. Several individuals of *M. myotis* were registered in three other sites, also located in the central part of the country. For the first time, after more than 20 years, the species *M. nattereri* (CR in the Red Book of Moldova) was recorded in the Molovata Noua and Holercani mines. *M. bechsteinii*

(CR in the Red Book of Moldova), previously registered on one site, was found on four other sites. *Barbastella barbastellus* (CR in the Red Book of Moldova) population in the Saharna mines is stable, counting about 15-20 individuals in the hibernation period.

2. Maternity Colonies

In the stone mines near Hordinesti (northern part of the country), in June 2017, a large maternity colony of *Myotis blythii* was found. The colony consisted of about 500 females. Since then the colony has been monitored every year and, in June 2020, it counted about 800 females.

In the stone mines from Viscauti (central part of the country), in July 2017, a maternity colony of *Myotis daubentonii* was found with about 200 individuals. The colony was divided in three compact groups of 50-80 individuals. Unfortunately, the colony has been decreasing, and in July 2020, it counted about 100 individuals.

Near the same locality, at about one km from the mines, in a grotto with a very narrow entrance, a maternity colony of *Rhinolophus hipposideros* was recorded with about 40 females in July 2017, all with a juvenile attached to the ventral part. In July 2020, the colony decreased and consisted of about 30 females with juveniles.

In the attic of a church in Bolduresti village, a nursery colony of *Eptesicus serotinus* with about 50 females has been found, while in early 2000 it counted 136 individuals.

Following bat experts' recommendations, all sites have been included in the Emerald network.

3. Influence of Climatic Conditions

The climatic conditions in recent years have had a direct impact on bat populations, especially at the end of the hibernation period. At the end of February 2020, after a warm and snowless winter, a very warm weather was recorded for this period, with air temperatures between 10-15 degrees, which disrupted the hibernation process of bats. Active flying individuals were observed inside and outside mines, due to the appearance of the trophic source insects. In general, most individuals woke up easily and became active if disturbed. The warm weather from the end of winter was followed by periods of low temperatures in March to April and a lack of trophic resources, so that bats were forced to re-enter hibernation. At the end of April, in several mines, dead individuals of *M. blythii* and *M. mystacinus* were found.

In 2021, in March and the beginning of April, the temperature during the day reached 10-12 degrees, while during the night it was decreasing to -4°C, and even -8°C. These conditions negatively influenced the survival of some individuals. In the Chisinau city, at the end of March, 12 individuals of *Nyctalus noctula* entered two rooms of the University of Medicine (central area of the city). Upon the arrival of bat experts on the second day, three of them were dead. Two dead individuals of *M. blythii* were collected near the entrance of the Cupchini mines (one adult female and one young male). In the Saharna mines, one *M. dasycneme* and one *R. hoptosideros* were collected, and in the Goianul Nou mines one dead *P. austriacus* was found. At the end of March, on the reserve "Prutul de Jos" in the southern part of Moldova, a frozen individual of *Pipistrellus kuhlii* was found hanging on the wall of a building. The species had not been registered previously in the reserve.

4. Bat Rescue and Rehabilitation

In September 2018, two colonies (with 85 and 88 individuals) of *N. noctula* were extracted from large buildings in the centre of Chisinau and released in the square of the Institute of Zoology.

In winter 2019-2020 and 2020-2021, 18 individuals of *N. noctula*, 5 *E. serotinus*, 1 *P. pipistrellus*, 2 *P. kuhlii*, 2 *Vespertilio murinus* were collected from various buildings of Chisinau, they were fed and released in March into the green sectors of the city. In December 2020, a large colony of *N. noctula* (238 individuals) was rescued from a balcony of an apartment. They were moved into another empty building near the Institute of Zoology. The event was covered by television: (<https://www.jurnaltv.md/news/dae047e3a7783908/o-colonie-de-lilieci-240-la-numar-s-a-adapostit-intr-un-apartament-din-sectorul-buiucani.html>).

5. Scientific events

The bat specialists participated at the Scientific Doctoral Conference (in May, 2020) with one oral presentation, as well as at the 4th (online) edition of the Romanian National Bat Conference (in October, 2020) with two oral presentations, and at the 11th (online) Baltic Theriological Conference (in February, 2021) with one oral presentation.

POLAND:

1. The 28th Polish Bat Conference was organized in November 2019. More than 100 participants (scientists and amateurs) were present and about 40 presentations on bats were held.

2. The year of 2021 is the year of National Monitoring of Natura 2000 Species mentioned by the Habitats Directive. Among others, there are a few bat species as well. This monitoring is organised by the Institute of Nature Conservation of the Polish Academy of Sciences in Cracow.

PORTUGAL:

Reporting under Article 17 of the Habitats Directive has been completed in due time. Mainland-, Azores-, and Madeira EUROBATS Focal Points have contributed to a national data paper about mammals' occurrence, which is still in preparation.

In mainland Portugal, management plans of Natura 2000 sites are being prepared, with bats as focal species in several SACs.

A project to collect information on mammals, including bats, is ongoing. Main objectives of this project are the revision of the Mammals Red Data Book and the organisation of the information for the next reporting under Article 17 of the Habitats Directive. Information will also be used for the Atlas of the European Mammals.

It has been considered that visiting bat roosts (particularly underground ones, with more physical challenges) becomes impractical if the individual protection measures stipulated by the EUROBATS recommendations are strictly observed (use of disposable masks and gloves near bats, hand washing before and after visits, etc.). In addition to the EUROBATS measures, there has been a measure suggested by a Portuguese virologist, which referred to the use of disposable glasses. Furthermore, the procedures suggested by EUROBATS between roosts (disinfection of boots between roosts, use of disposable coveralls over speleology coveralls) and the Portuguese Health Institution guidelines regarding social distance have been considered difficult to apply. In practice, the difficulty of predicting where bats are and the difficulty of keeping the distance of 2 meters between persons would imply a permanent use of disposable masks and gloves. Given the limitations set out above, and considering the potential risk of bat infection in roosts if individual protection measures are not strictly adhered to, despite the recognized interest in monitoring roosts, ICNF recommended in April 2020 the *suspension of monitoring visits to bat roosts* until further notice. In maternity season 2020 no data were collected. In hibernation season 2021 ultrasound recordings at entrances of roosts of national importance were performed to confirm the presence of bats. A similar methodology will be applied in maternity roosts of national importance during season 2021. Regarding the *search for roosts to assess the presence* of bats or visits to roosts usually without bats, ICNF recommends the use of a mask from the encounter of a

bat, and the abandonment of the roost if more than 10 bats are found. Regarding *bat capture and handling activities outside roosts*, ICNF has maintained the allowance of the activities outside roosts for holders of a valid license, provided that the protective measures stipulated for by the EUROBATS recommendations are ensured (use of disposable masks and gloves, washing / disinfection of hands and material before and after activity) and the Portuguese Health Institution guidelines are followed. Regarding *rehabilitation centers*, ICNF has recommended the compliance with the protective measures provided by the EUROBATS recommendations (use of disposable masks and gloves, washing/disinfecting hands and material before and after bat activities).

In the Azores Autonomous Region, the LIFE IP AZORES NATURA provides an action for assessing the distribution and conservation needs for *Nyctalus azoreum*. *N. azoreum* is restricted to the Azores archipelago and is protected by the Habitats Directive. This action will last until 2026.

Madeira Autonomous Region submitted a proposal "Using the endangered Madeira pipistrelle as one of the flagship species for the conservation of Natura 2000 SAC Laurissilva da Madeira (PTMAD0001)" on the 2.^a Call of LIFE4BEST-ORs "Supporting biodiversity action in the EU's Outermost Regions". The final decision will be known until the 15th May, 2021.

ROMANIA:

Since the last meeting in 2019 in Skopje, the monitoring of key underground roosts has continued in Romania within the frame of several projects and/or is done voluntarily by several bat NGOs. Examples include monitoring of the Vârghişului Gorge by the Myotis Bat Conservation Group, of Liliəcilor Cave from Rarău by Club Speo Bucovina, or that of Huda lui Papară and Şura Mare by the Centre for Bat Research and Conservation (CBRC). In parallel, the national bat monitoring programme gathers data in Natura 2000 sites with Annex II bat species, for reporting under Article 17 of the Habitats Directive. Nationwide, bat experts take part in POIM projects (Large Infrastructure Operational Programme), in order to create or to renew the management plans of Natura 2000 sites.

In 2019, the CBRC jointly with the Myotis Group finalised a project financed by the Columbus Zoo and Aquarium and aimed at training and involving cavers in bat conservation. Also in 2019, the CBRC took part in the EUROBATS EPI project that explored the threat of Lloviu virus re-emergence in Central European *Miniopterus schreibersii* populations, a joint project of Hungary, Austria, Slovakia, Romania,

Serbia, Croatia, Slovenia, Bulgaria, and Bosnia and Herzegovina, conducted by the Nature Conservation Foundation of Tolna County (Hungary).

The Myotis Group is taking part in the survey and monitoring of several Natura 2000 sites in Romania, while also collaborating with the University of Agricultural Sciences and Veterinary Medicine Cluj-Napoca (UASVM) in the study of bat parasites from Dobrogea Region (the UASVM also undertakes extensive research on bat parasites on the national level). In 2019, the Myotis Group implemented a program funded by the Environmental Partnership Foundation to promote the Vârghişului Gorge and Şugău Cave and their bat populations, as well as to draw attention to the need for bat protection. Presentations were held in the schools of surrounding localities, a trip was organised to the protected areas, and in August 2019 the International Bat Night was organized in the Vârghişului Gorge. The Myotis Group is also active in bat rescue and giving advice to the public, as well as in creating conservation and visitation guidelines, e.g. in case of the Vârghişului Gorge, in collaboration with the local representatives of the National Agency for Protected Areas (ANANP).

In the reporting period, the Wilderness Research and Conservation (WRC) jointly with the Visul Luanei Foundation - Animal Rescue and Rehabilitation Centre have undertaken educational activities (e.g. the International Bat Night in Retezat National Park), bat walks in Bucharest, school presentations (for 324 students ages 12-15), as well as bat rescue and rehabilitation procedures. In the latter case, 24 exclusions for thermal insulation construction sites took place, with 74 injured bat rescues (68 bats released), 2 hibernation colony relocations, and 63 isolated cases of weak bats that were kept in artificial hibernation. Bats were fed and cared for (veterinary care) at the Visul Luanei Animal Rescue and Rehabilitation Centre in Bucharest and were released in April 2021 (species: *Nyctalus noctula*, *Nyctalus leisleri*, *Pipistrellus pipistrellus*, *Pipistrellus kuhlii* and *Vespertilio murinus*). The WRC has also started a large radiotracking project in eastern Romania in order to promote the understanding of the impact of wind turbines on bats. In 2020 the WRC co-organized, together with the CBRC, the 4th (online) edition of the Romanian National Bat Conference, that turned out to be an international conference, with participation from Romania, Moldova, Poland, and Serbia. The conference was sponsored by Pettersson Elektronik AB, Lotek and Natural Timber, while also benefitting from a EUROBATS EPI project.

Currently several transboundary projects are underway in Romania. A project funded by the Conservation Leadership Programme, involving the CBRC, the Myotis Group,

and the National History Museum of Belgrade sets out for the transboundary conservation of *Rhinolophus* species in the Romanian – Serbian Iron Gates region. In addition, a EUROBATS EPI project, involving the CBRC, the Myotis Group, and bat researchers from the Academy of Sciences of Moldova advances transboundary bat conservation in Romania and Moldova. A transboundary project (Bat4Man) run jointly by the NGOs in Romania, Hungary, Ukraine, and Slovakia, aims to conserve colonies in historical buildings, as well to inform and educate the public. Lastly, in 2019-2021, the CBRC took part in the Interreg Danube Transnational Programme Dare2Connect, with a detailed survey and monitoring of the bat fauna in the Iron Gates Natural Park.

In 2019, but also in 2020, the CBRC continued to promote bat conservation through the Bat of the Year initiative. In 2019 the public vote chose *Myotis bechsteinii*, while in 2020 *Barbastella barbastellus* was the Bat of the Year in Romania. In the latter case, the designation was expanded to 2020-2021, aligning the Romanian vote with that of Europe, making *B. barbastellus* the Bat of the Years 2020-2021 in Romania and Europe. Since then and currently, the CBRC disseminates printed and online materials about the species to a dozen of locations in Romania and Europe (protected areas, universities, NGOs, Ministry of Environment, ROMSILVA, EUROBATS, BatLife Europe, etc.).

In the context of the SARS-CoV-2 pandemic, the Romanian bat research community has taken steps to prevent mislabelling bats as culprits, by giving interviews and disseminating online materials, including an article originally written by Merlin D. Tuttle, translated with his permission, and posted in three languages on the www.lilieci.ro portal. In 2019, the intentional destruction of a maternity colony in a church counting more than 300 bats (*R. euryale*, *M. emarginatus*) was reported to the authorities. This destruction took place during renovation works, even though the decision makers were aware of the colony since 2013. Currently, the results of the official investigations and legal decisions are awaited.

SAN MARINO:

There have been no significant changes in the republic since the last report. The financial crisis and the health crisis caused by the pandemic have made the functionality of various sectors of the state very difficult. The conservation of the Piagge Tunnel, the main bat site in the republic, continues to face attempts to use the underground system for tourism. The investigation plan and the awareness-raising activities for the public have continued, owing to the work of the National Natural

History Museum, the Centro Naturalistico Sammarinese. The Museum has also edited its IV volume of memoirs, containing updates regarding the recently completed investigations on bats.

SERBIA:

The national project “Monitoring of bat populations and roosts in Serbia” ended in December 2019. In October 2020, a transboundary project on bat monitoring started. The project was named “Transboundary conservation of horseshoe bats in the Romanian-Serbian Iron Gates” and was funded by the Conservation Leadership Programme. Since 2019, there is an ongoing project on establishing a network of protected Natura 2000 areas in Serbia. Along with other mammal species, new data on bat distribution is being collected in existing and future protected areas in Serbia.

In the late 2020, the book “Bat fauna of Serbia” was published. It contains a comprehensive overview of 31 bat species officially registered in Serbia, data on their distribution, ecology, and conservation status. The book was published by the Serbian Academy of Sciences and Arts and the Natural History Museum in Belgrade.

International Bat Night in 2019 was held in September and it was attended by more than 500 visitors. In 2020 the event was not organised due to the restrictions caused by the COVID-19 pandemic. However, during 2020 bat researchers from the Institute for Biological Research “Siniša Stanković” and the Natural History Museum in Belgrade organized online lectures and had numerous appearances in the media (television, radio, newspapers, and social networks) regarding the connection of bats and (corona)viruses as well as regarding to the ecological services provided by bats. Bat rescue and rehabilitation activities have continued following all recommended precautions and protocols.

Recently, the presence of both *Myotis mystacinus* and *Myotis davidii* have been confirmed in Serbia using genetic markers (both mitochondrial and nuclear), and, unofficially, bat fauna of Serbia now counts 32 species.

SWEDEN:

Out of the 19 bat species found in Sweden, more than half of them are still on the Swedish Red Data List. These are worrying records since very commonly occurring species, such as the northern bat *Eptesicus nilssonii*, might be declining in the areas where this should not be the case. Further monitoring is needed.

The reporting under Article 17 of the Habitats Directive has made it necessary to try to evaluate both the abundance and the distribution of bats in all of Sweden. This was

not possible earlier due to the very large areas needed to be covered (450,295 square kilometers). The results are still an estimation but even so very useful and they have brought some new insights.

As reported earlier, new discoveries have been made regarding which bat species in Sweden are likely to be most vulnerable around wind turbines.

There are ongoing projects concerning the impact on bats around wind turbines, the distribution of insects, of high-flying insects, and bats, as well as the possibility of reduced mortality of bats around wind turbines using different colours and their intensity.

An updated version of the national guidelines on bats (and birds) and wind power plants has been published.

A report on the impact of LED lights on bats and other species has been recently published: *Effects of Light Emitting Diodes on animals and the natural environment and recommendations: with focus on the Nordic countries and sensitive species and areas.*

Despite Covid-19-restrictions, on the International Bat Night 2019 and 2020, there were many very successful events carried out throughout Sweden.

The first bat NGO has now been established in Sweden – BatLife Sweden. It is already fully operational and has its own website: www.batlife-sweden.se/

Open and free of charge for its members, there are several bat-training courses, both planned and already ongoing, online and face-to-face. The latter are, of course, conducted with COVID-19 restrictions in place. BatLife Sweden has already around 180 members, of which at least 25-30 are professional bat workers and bat scientists.

There is an extensive and fast-growing monitoring of bats in Sweden. Several counties already monitor bats on a yearly basis. BatLife Sweden has several permanent stations for registration of bat movements and those stations will shortly be part of the overall monitoring schemes in Sweden.

At Artportalen – the Swedish Species Observation System – the reporting of bats is nowadays organised with reviews and validation of all observations reported.

There is also ongoing important bat research at several Swedish universities.

SWITZERLAND:

As everywhere else, bat protection in Switzerland was in 2020 under the influence of the COVID-19 pandemic. Therefore, many events for the public could not have been

held and many educational courses could not have been operated or had to be delayed.

On the other hand, bat experts and scientists were confronted with the media communicating about bats as virus spreaders, thus making people unsure about bats. Furthermore, the uncertainty whether people working with bats could infect the animals had to be managed as well. Therefore, a media offensive was necessary parallel to specific instructions how to handle bats in the face of COVID-19 pandemic.

Further important developments in 2020 included:

- Implementation of a new standardised preliminary template on infrastructural projects;
- Protection and amelioration of 10 selected flight corridors according to the implementation of an ecological infrastructure through human settlement (until 2021);
- Implementation of the validation standards of the *Swiss Bat Bioacoustic Group* SBBG about bioacoustic evidences;
- Implementation of bats (in 2020 mainly review and translations of texts) in the new Swiss Mammalian Atlas (published in March 2021);
- More than 1,000 volunteers working to protect bats in Switzerland (mainly monitoring of important bat roosts, public relations, animal welfare and rehabilitation).

UNITED KINGDOM¹:

1. Species Trend Information

Due to the restrictions imposed to combat the COVID-19 pandemic, there was a reduction in the number of sites surveyed for the National Bat Monitoring Programme (NBMP) summer surveys in 2020. Nevertheless, the sample sizes proved sufficient for updating the majority of trends for 2020 (only a couple of Wales-level trends could not be updated due to very low sample sizes). Hibernation survey trends were not impacted as the winter 2019/20 survey season was completed ahead of the COVID-19 pandemic. The updated trends for 2020 will be published in the NBMP Annual Report in May 2021. In winter 2020/21 hibernation surveys were not able to go ahead, in line with IUCN guidance on avoiding close contact bat surveys, and this will impact

¹ Prepared by Natural England (NE), NatureScot, and Natural Resources Wales (NRW)

on trend reporting in 2022. However, summer surveys are expected to proceed in 2021 with potentially fewer restrictions than in 2020.

2. Research projects/Guidance Documents

2.1 The update of the Scottish Natural Heritage lead guidance document 'Bats and onshore wind turbines: survey, assessment and mitigation' will be published in the near future.

2.2 Bat Surveys: Good Practice Guidelines (4th edition) is being progressed. The estimated publication date is spring 2022.

2.3 IUCN compliant Red List has been completed for Great Britain and for England, Scotland, and Wales – This is the first assessment of Britain's terrestrial mammals using the [IUCN Red List criteria](#) at a [regional level](#). The Great Britain Red List for Mammals has been produced alongside [A Review of the Population and Conservation Status of British Mammals \(2018\)](#) to assess the status of mammals throughout Great Britain. Separate country-level Red List assessments have also been conducted for England, Scotland, and Wales.

2.4 The State of Mammals in Wales, A Report by the Mammal Society for Natural Resources Wales, Mathews *et al.*, 2020 was launched in November 2020. This publication is a standalone, Welsh specific summary of A review of population and conservation status of British mammals, Mathews *et al.*, 2018. It can be downloaded from <https://www.mammal.org.uk/wp-content/uploads/2020/08/MinW-final-240820-LR.pdf>

2.5 Bat mitigation guidance. The Chartered Institute of Ecology and Environmental Management (CIEEM) is leading on the production of an updated bat mitigation guidance document. It will use the evidence base collected from CIEEMs and Exeter University's project 'Reviewing the evidence on mitigation strategies for bats in buildings: informing best-practice for policy makers and practitioners' (<http://www.cieem.net/bat-mitigation-strategies-research-project>) and Bat Conservation Trust's 'Bearing Witness for Wildlife' project (a 3-year project involving visiting sites where mitigation works were undertaken and monitoring the effectiveness, http://www.bats.org.uk/pages/bearing_witness_for_wildlife_-_bat_roost_mitigation.html).

Additional case studies will be incorporated to demonstrate best practice and the publication is intended to be an on-line resource that can be readily updated. The estimated publication date is still to be confirmed.

- 2.6 Earned Recognition for bats, a pilot project, is a partnership between Natural England, the Bat Conservation Trust and CIEEM. The aims of the project are to design a scheme to streamline the mitigation licensing process for bats in England, raise and maintain professional standards in bat mitigation work and improve outcomes for bats. The project is piloting a competency-based accreditation system for bat professionals, linked to a new licensing process, which streamlines the assessment of applications. The ER concept was introduced to licensing by the Bat Mitigation Class Licence. The ER system develops the concept to enable a greater proportion of cases to be assessed through a more streamlined system.
- 2.7 Ash Die Back and its associated impacts on bats have been at the forefront of discussions in the UK since the loss of Ash trees has been recognised as a significant threat to bats and issue for land managers. Statutory agencies, public bodies, landowners/managers, ecologists, etc. have been in discussions on how to manage risks and develop best working practices. NatureScot, Natural England and Natural Resources Wales have been in discussion with Forestry bodies regarding the need for guidance for practitioners on dealing with bats in trees affected by ash die back - particularly focussing on best practice, licencing, and what to do in “emergency” situations where a licence is not possible.
- 2.8 NatureScot is still providing financial support to the BCT Scottish Bat Officer post, which helps promote bat conservation Scotland with a strong focus on building capacity for bat monitoring/NBMP participation, etc.
- 2.9 Natur am Byth is a collaborative project between nine NGOs and Natural Resources Wales as the lead partner to help secure the future of some of Wales’ most threatened species. If the application to the National Lottery Heritage Fund is successful, the project will also be funded via significant match funding from Natural Resources Wales and the Welsh Government. As part of Natur am Byth, targeted sub-projects will focus on two bat species, the lesser horseshoe and barbastelle bat.
- 2.10 A similar project in Scotland – Species on the Edge – is in development, focussing on the Scottish coast and islands and a suite of threatened species including several bats. It is a partnership comprising NatureScot as the lead partner and seven NGOs.
- 2.11 The Back from the Brink Project is a Heritage Lottery Funded collaborative project between Natural England and conservation NGOs which aims to save 20 of England’s most threatened species from extinction, whilst benefitting over 200 more through 19 projects that span England. The grey long-eared bat is one of the target

species. The aim of this particular project was to ensure that the remaining maternity roosts had sufficient high quality foraging habitats to support the colonies and to improve existing surrounding habitat to facilitate landscape connectivity between roosts to prevent isolated colonies declining due to inbreeding.

NON-PARTY RANGE STATES:

AZERBAIJAN:

There was no improvement regarding the accession to the EUROBATS and the CMS Agreements by the Azerbaijani Government in 2020. Due to the COVID-19 restrictions and associated conditions, the subject of ratification was not brought onto the agenda of the regulatory body - MENR (Ministry of Environment and Natural Resources). However, two meetings with the environmental authorities were held and the way forward was discussed. Currently, the focus was on joining CMS rather than the EUROBATS Agreement (with no obvious progress), this being considered a starting point.

From the scientific perspective, the study of bats in Azerbaijan is still conducted under the umbrella of the Institute of Zoology, and, independently, by Dr. Nijat Hasanov. In 2020 a two-year bat survey (baseline data collation) associated with the proposed wind turbines installation project was launched and is still ongoing. In 2019, under coordination of Dr. Nijat Hasanov and based on the cooperation agreement between EHA- Eco Health Alliance Organization of the USA and the Institute of Zoology, the three-year collaborative research project "Understanding the Risk of Bat-Borne Zoonotic Disease Emergence in Western Asia" started. In 2019-2020, samples (oral and rectal swabs, blood samples and wing punches of 20 bat individuals of 6 species) were collected and submitted to a third-party laboratory for further analysis. The National Academy of Sciences has also launched the studying of terrestrial vertebrates (including bats) assessment for review and update of the National Red Data Book.

A number of educational sessions was organized by the NGO ECOSFERA for a dedicated group of people in Baku, in 2019, in close cooperation and support of a bat expert.

BELARUS:

Since the previous AC meeting, a few bat research projects are ongoing in Belarus:

- Research on species composition and genetic structure of *Pipistrellus*, *Myotis*, and *Plecotus* species complexes at the National Academy of Sciences;

- Bat research within the framework of the project “Polesia - Europe's largest wilderness area”, supported by the Frankfurt Zoological Society and partners;
- The project “Bats and vaults: search and inventory of underground bat shelters in Belarus” (Belarus-Ukraine), supported by EPI, completed in 2020;
- Project “Bat fauna inventory in Northern Belarus”, supported by EMF, completed in 2020.

The Bat Working Group of APB (Birdlife-Belarus) has been reorganized and it started its activities in 2020. International Bat Night 2020 was held via videoconference.

The Ministry of Natural Resources and Environmental Protection of Belarus recognizes the importance of joining the Agreement and in the cooperation with the National Academy of Sciences is preparing all necessary documents.

BOSNIA AND HERZEGOVINA:

There are no developments to report about the deposit of the instrument of accession of Bosnia and Herzegovina to EUROBATS.

In the previous period, the winter monitoring of bats has been extended to the whole of Bosnia and Herzegovina owing to a project supported by the Germany Federal Ministry for the Environment, Nature Conservation and Nuclear Safety.

A regional meeting of bat workers from Slovenia, Serbia, Montenegro, and Bosnia and Herzegovina took place a few days before AC25 via the ZOOM platform.

The number of species of bats in Bosnia and Herzegovina is 32. The Ministry of Environment has been warned that the number of protected bat species is far below the number of known species of bats in Bosnia and Herzegovina.

The release of the Journal of bat research in the Balkans *Hypsugo* has continued.

The corona virus pandemic caused the absence of the activities marking International Bat Night.

EGYPT

1. Research and Publications:

In 2020, two more publications were added to the list of publications resulting from the conducted research project on the Egyptian Fruit Bat (*Rousettus aegyptiacus*) populations in Western Desert in Egypt: (i) Egyptian fruit bats do not preferentially roost with their relatives, which was published in Journal of Zoology, and (ii) Spatial

networks differ when food supply changes: Foraging strategy of Egyptian fruit bats, which was published in PLOS One Journal.

2. Awareness

During the last period, several online articles and posts in the Arabic language on bats and their ecological importance have been published and have received a very positive feedback, such as the article by Professor of Mammalogy Mohamed Basuony of Al-Azhar University. Similarly, awareness raising notes and clarifications have been posted for the National Bat Appreciation Day by a EUROBATS AC member, Wael Shohdi, as a response to the public concerns related to SARS-CoV2 and bats, which had hundreds of shares on social media. Furthermore, Chiroptera facebook page and its group with over 5,400 members have continued to support bat conservation through awareness raising and sharing of knowledge.

MOROCCO:

The bat fauna of Morocco consists of about 30 species. At least 18 species are within the range of European bats. All Moroccan bats are protected by the environmental law 29-05 on the protection of wild fauna and flora and the control of their trade in Morocco. The regulations implementing this law have been published. An extensive training and awareness programme have been planned.

Current research on the Moroccan bats is focusing on their ecology and distribution, including some master's theses of students. Further studies are required to update the bat fauna of Morocco, in addition to the urgently required awareness raising efforts for public/schools and policymakers.

Considering the increased expansion of wind turbine projects in Morocco, the monitoring of bats according to the EUROBATS guidelines becomes mandatory at different stages of the projects. Tracking bat deaths in wind farms during the operational phase is now systematic in all projects.

The most interesting activities carried out as part of the bat conservation awareness framework are:

- Participation in the National Congress of Speleology, Geo-Tourism and Natural Resources Valuation, November 15-18, 2019 – Agadir, Morocco, with the topic on Morocco's bats: diversity, lifestyle, and conservation needs;
- Training of wind farm management teams in bat monitoring and conservation at different stages of the wind projects: construction and operation.

TURKEY:

There is no current news about the ratification of the Agreement. Even though the possibility of prosecution of bats by people has increased due to the SARS-CoV2 pandemic, there has been no report of this taking place in Turkey in mainstream or social media that the Eurobats Advisory Committee members from Turkey are aware of. In 2020, a fieldwork for a survey of coronaviruses in Turkey continued as part of a project that started in 2017. Due to the SARS-CoV2 pandemic, best-practice guidelines issued by EUROBATS and IUCN were followed by the field team, including the wearing of N95 non-ventilated masks to minimize the risk of the virus transmission from the researchers to bats.

OBSERVERS:

Protection and Preservation of Natural Environment in Albania, PPNEA (Albania)

- The borders of the Vjosë-Nartë protected area, located in the south-western part of the country, have been recently proposed to be modified by the national territorial council, presided by the Prime Minister of Albania, without prior public consultation (December 2020). The proposed modification would exclude an important part of the current protected area where the most important colony of *R. ferrumequinum* so far known in Albania (more than 1,000 individuals) has recently been recorded (Théou et Loçe, 2019). Additional protected species have also been recorded in the area and the roost has been used by *R. ferrumequinum* : *R. hipposideros*, *R. euryale*, *M. emarginatus*, *Miniopterus schreibersii*. During the last weeks, official announcements have been made regarding the construction of an international airport in the middle of the protected area as well as of important touristic infrastructures. If implemented, this plan will irreversibly damage the numerous protected species and habitats recorded in this protected area (which also represents an IBA, a site of interest for the RAMSAR convention, a proposed Emerald site and a proposed N2000 site). Considering the situation, PPNEA is extremely concerned about the near future of bat species conservation in this area of Albania, as well as about the lack of enforcement of national laws and the EUROBATS Agreement by the national authorities.
- In 2019, a decree from the Ministry of Tourism and Environment which authorised the use of protected caves (Natural monument, Cat. III of the IUCN) as touristic sites was published (Nr. 414, datë 19.6.2019). During the public consultation period, PPNEA raised its concern on the potential negative impacts this decree would have on bat

species and habitats legally protected until now as “Caves not open to the public”. The first cave targeted to become an official touristic attraction is the Pellumbas cave/Black cave near Tirana, known to host hundreds of specimen from several species listed in the Annex II of the Habitats Directive (*Miniopterus schreibersii*, *Myotis myotis*, *Rhinolophus euryale*, *Rhinolophus hipposideros*, *Rhinolophus ferrumequinum*). Considering national institutions’ actual lack of capacities to monitor bat species and their habitats, PPNEA is concerned that the protocol proposed in the decree for the selection of touristic sites inside protected caves is not feasible, and will lead to the degradation (if not destruction) of habitats and to a high disturbance (if not destruction) of protected species.

- In 2020, all the bat species recorded in Albania (32 species) were added to the new Albanian Red List. The date for the official publication by the Ministry of Tourism and Environment is not yet announced. Until the publication of the new Red List, only 16 bat species are listed in the official Albanian Red List (2013).
- A trans-boundary activity between Albania and Northern Macedonia will be initiated early May 2021 focusing on conservation and study of bat species in the Prespa area (South-East). This activity, implemented by PPNEA (Albania) and MES (Northern Macedonia) is aiming to increase the capacities of local stakeholders (included protected area staff) towards the conservation of bat species in the area, targeting underground and forest habitats. It will also allow the unification of monitoring protocols between the two countries, the implementation of conservation actions for the restoration of threatened known roosts and awareness raising activities towards the general public. This project is fully in line with EUROBATs objectives and the regional action plan on bats published by Greek, Macedonian, Albanian, and French chiropterologists in 2010.

The French Mammal Society / La Société Française pour l’Etude et la Protection des Mammifères, SFEPM (France):

In 2020, the French mammal society (SFEPM) updated its internet site and created a page called “SOS chauves-souris” to give advice to the general public on how to behave when confronted with bats in the house. A hot line for bats is now also available. The results of “SOS bats” 2020 are available in the newsletter “L’Envol des Chiros” n° 30, April 2021.

In the same issue of the newsletter, information was given on what SFEPM knew about a human death by lyssavirus EBV1 that happened in 2019 and had not yet been officially acknowledged. The deceased person was not familiar in the bat

workers' networks, and neither the bat species involved, nor the circumstances of the death of this person had been clarified.

On the 29th of January, 2020, a press release about the new coronavirus was published online.

Despite the havoc created by the COVID-19 – a lock down, curfew, hindrance for most volunteers to continue monitoring bat colonies – 277 events have were organised for the International Bat Night. Although in some places the number of spectators was reduced, 5,466 attendants were registered.

The number of refuges for bats has increased as well since 106 private owners and 18 public ones joined the network. At the end of 2020, the total number of refuges for bats was 1,530.

Unfortunately, the publication within the framework of the EUROBATs Projects Initiative on genetic relationships between French and Spanish Greater Noctule bats could not be accomplished in 2020.

Federal Association for Bat Expertise in Germany / Bundesverband für Fledermauskunde Deutschland e.V., BVF (Germany):

Since AC24 the Bundesverband für Fledermauskunde Deutschland e.V. (BVF) has continued its work on providing information on bat research and protection of bats for the public, officials, and researchers. In summer 2019, together with the German Federal Ministry of Finance, the BVF published a series of postal stamps with three bat species on them (Barbastelle bat, grey long-eared bat, and the lesser horseshoe). A portion of the funds gathered by selling the stamps directly contributed to child welfare actions. The BVF has also published a factsheet on efforts to be undertaken for the bat-friendly use of wind energy. Wind energy is still a major topic for the BVF. The association has actively participated in several project working groups to consult research programs on wind turbines and their effects on bats. The BVF has also submitted a reply on a paper, signed by German parties and associations, dealing with the need to expand the use of wind energy in Germany while disobeying the needs of bat conservation.

In 2020, under the sign of the emerging corona pandemic, the BVF had to lower planned activities in several fields of communication and public information on bats. As a lot of conferences and meetings had been postponed to 2021, the BVF focused on the work in online gatherings and supplying offline media and materials.

In the early days of the pandemic, the BVF published several papers on the known facts of SARS-CoV-2 and bats to objectify the ongoing discussion on this topic. The BVF released a factsheet in English and was active in the EUROBATS working group on the recommendations on potential risks of SARS-CoV-2 transmission from humans to bats. In a joined effort of the major German NGOs in bat conservation, the BVF also published several recommendations for the work on bats under the sign of SARS-CoV-2 in Germany.

In 2019, the BVF started a nation-wide counting programme of the common noctule. The aim of this project, mainly carried out by citizen scientists and voluntary bat workers, was to gather data on the distribution of common noctules compared to former counting programs. For the first time in 2020, the members of the BVF's program joined a paneuropean attempt on a simultaneous counting of common noctules in September 2020.

The Leibniz Institute for Zoo and Wildlife Research / Leibniz-Institut für Zoo- und Wildtierforschung, IZW (Germany)

The IZW has continued its research in the area of bat ecology and bat conservation. It has also continued its collaboration with Latvian colleagues, specifically Gunārs Pētersons, on bat migration (Alcalde et al. 2020). Additionally, the IZW is contributing to the research project Batmobile (administered by NABU Mecklenburg-Vorpommern) which focuses on offshore bat migration (Kruszynski et al. 2021). The institute has also contributed to the ClimBats EU networking project and has sustained its research in the area of climate change and bat conservation (Kravchenko et al. 2020), and the wind energy-bat conflict (Voigt 2021, Voigt et al. 2021). Currently, research on movement interactions of GPS tagged common noctule bats with wind turbines is being conducted, a project funded by the Deutsche Bundesstiftung Umwelt (DBU). Further, the IZW has published work on the immunology of migratory bats (Voigt et al. 2020), and how hibernating bats respond to infections by *Pseudogymnoascus destructans* (Fritze et al. 2021). The institute has also published research on the effect of light pollution on insects (Straka et al. 2021). It has edited and published a German e-book on the wind energy-bat conflict that includes English summaries and figure legends, available at: <https://link.springer.com/book/10.1007/978-3-662-61454-9>. This book has been already downloaded more than 22,000 times.

During the past year, the IZW has hosted the “6th International Berlin Bat Meeting: the human perspective on bats” as an online version with about 250 attendants. In

addition, the IZW organized a German online meeting on the wind turbine-bat conflict, with about 370 participants. In collaboration with the Bundesverband für Fledermauskunde e.V., the IZW organized workshops, yet many of these had to be postponed to this year because of the COVID-19 pandemic. In addition to these, the Institute organized an online workshop on light pollution and bat conservation with Dr Franz Hölker and Dr Emma Stone, with about 80 participants.

The IZW has created videos to highlight research on bats and recent scientific findings (Voigt et al. 2021). These are available here:

<https://www.youtube.com/watch?v=3HhyTZOurns>

<https://www.youtube.com/watch?v=a0vyiqVg4XI>

Finally, in collaboration with the EUROBATs Secretariat, the IZW has translated the German comic “Die große Wanderung” into English to spread the word to the general public about bat migration and the need to protect migratory bats.

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Spanish Bat Society / La Asociación Española para la Conservación y el Estudio de los Murciélagos, SECEMU (Spain):

Firstly, the Spanish Bat Society wants to thank the EUROBATS Secretariat for facilitating the participation of SECEMU at the EUROBATS AC meeting again. Regarding the Spanish accession to the EUROBATS Agreement, there are no news from the respective Ministry.

As expected, most of SECEMU's bat-related activities have been deeply affected by the current pandemic and all the resultant restrictions in place. However, the Society would like to highlight the following tasks it undertook during the period 2020/2021 regarding the COVID-19 pandemic:

- 1) The preparation of local protocols/recommendations for bat workers regarding bat research activities during the pandemic, which followed the guidelines provided by the IUCN and EUROBATS.
- 2) Continuous efforts by a large number of SECEMU members with local media, newspapers, journals, TV, radio, and social networks, as well as political institutions (Health Ministry, CSIC, etc.) to clarify the distinction between the evolutionary origin of the virus and the epidemiological source of the pandemic (potentially from a bat-related virus and completely unknown, respectively).

In fact, on the 31st of March 2020, SECEMU already had an article on its website explaining and clarifying the relation between bats and COVID-19, based on scientific evidence (still valid after more than a year of investigations).

- 3) A close collaboration with the Spanish Society for Virology pursuing the same objectives as mentioned above. See for example:

http://sevirologia.es/media/uploads/InfoSEV%20COVID-19_03.pdf and <https://theconversation.com/esto-es-lo-que-los-virologos-sabemos-hasta-hoy-sobre-el-coronavirus-sars-cov-2-137274>

4) A large amount of educational efforts to explain ecosystem services and economical benefits coming from bats to compensate the bad press that bats are currently facing in this world of quick- and over-information, and the upsurge of new stigma and biased perceptions towards bats from the general public (see for example SECEMU's contribution in "The Conversation" (Los murciélagos, las otras víctimas del Sars-Cov2')).

5) A strong collaboration of some of the Society's members with the campaign *Don't Blame Bats*, with the Bat Conservation Trust, and the King's Business School, which had a big impact within the society due to its great and international outreach.

In terms of bats and wind turbines, several initiatives were also launched in 2020:

1) During 2020 specific allegations were sent to approximately 100 wind farm projects across the country (Aragón, Navarra, Cantabria, Asturias, Galicia, Castilla, and León) which did not count with proper risk (or impact) assessments or did not present appropriate mitigation measures. During 2021, the working group on bats and wind farms has already started sending similar allegations (123 allegations for 151 wind farms) in other regions of the country (Cataluña, País Vasco, Castilla La Mancha).

2) Some members of this working group have also participated in a couple of meetings with the Ministry (MITECO) and the Directive secretariat of the ministry (DG) to discuss the impact of wind turbines on the environment.

3) The Society' members have contributed to and signed a scientific letter that has been published in "Science", focusing on the biodiversity loss that the ongoing boom of green energy might cause (<https://science.sciencemag.org/content/370/6522/1282/tab-e-letters>).

4) The working group has also contacted local governments from all the regions to plead for applying the current guidelines published by EUROBATs, SECEMU, or to ask them to develop their own, succeeding with it in some autonomies (Catalonia, Navarra, etc.).

5) Specific courses to train bat workers, specialised in developing risk assessment projects for wind farms, were carried out during the period 2020-2021.

The biannual Bat Conference that is usually organized by SECEMU with the aim of putting in contact bat researchers and conservationists from Spain, Portugal, Gibraltar, and Andorra, has been postponed due to the pandemic. The conference should have taken place in 2020 and was postponed to the end of 2021 in Murcia.

Finally, the “Journal of Bat Research & Conservation”, directed and managed by the Spanish Bat Society has substantially grown in terms of increasing its editorial reviewer team with international bat scientists and researchers, increasing the number of publications and collaborators, and updating its format and the website. Currently, the journal counts with fully available publications from all continents and covers several different topics, is completely peer-reviewed and free-of-charge.

SECEMU highly encourages all bat experts to use the journal to disseminate their findings, as well as to actively contribute to it. Link: <http://secemu.org/journal-of-bat-research-and-conservation/>

Regarding educational initiatives, more than 50 International Bat Night events have been organized across the country despite the pandemic. They were coordinated either by SECEMU or by the local groups.

BatLife Sweden (Sweden):

The organisation BatLife Sweden was founded on the 1st of March 2019. Today, this non-profit organisation has 178 members. Almost all professional bat-workers in Sweden are members as well as a number of amateurs. The organisation has an active cooperation with the Swedish Species Information Centre concerning:

- a) Validation of bat observations, which are reported on the website “Artportalen” (reports from both professionals and amateurs). Several species are always checked (rarer ones or those tricky to identify) and the other species are only checked if they fall outside of the known distribution of that species.
- b) Red-listing of bat species;
- c) Providing information about bats to the public;
- d) Producing reports from Sweden to the EU about the status and conservation of bats in Sweden in relation to the Habitat Directive.

BatLife Sweden collects long-term data on bat activity through six permanent monitoring stations. These are monitored by automatic bat detectors during the main bat activity period (from the 1st of March to the 30th of November). Now consultant companies manage all of these, and different authorities support the data collection.

In the future the NGO will also manage the stations through voluntary contributions from its members.

BatLife Sweden is organised into nine working groups: (a) Species determination and monitoring stations, (b) Swedish Species Information Centre, (c) Bat events, (d) Guided walks, (e) Surveys, (f) International collaboration, (g) Colonies and bat boxes, (h) National conference, (i) Taxonomy and morphology.

From the 12th till the 14th of November 2021, BatLife Sweden will organise the first Swedish bat conference in Gothenburg. This conference will cover bat research, bat surveys, and other bat studies carried out both by scientists and bat professionals.

The NGO also organises bat courses. At the moment a basic course for beginners is being conducted, covering bat ecology, how to use heterodyne and time-expansion detectors, as well as sound analysis programmes, and how to report the observations. In spring BatLife Sweden will also run a course on how to conduct balk walks. Later this summer a more advanced course about bat trapping will be arranged, aiming at professional bat workers to help them in applying for permits for handling bats.

International work is also important and BatLife Sweden will apply for membership in BatLife Europe, and will collaborate with different international projects. EUROBATs will be an important international platform for networking and exchange of knowledge and information.

Bat Conservation Trust, BCT (UK)

Over the past year, unsurprisingly, BCT has had a strong focus on COVID-19 and SARS-CoV-2. This has included developing and maintaining a set of frequently asked questions (<https://www.bats.org.uk/about-bats/bats-and-disease/covid-19-and-bats>) aimed at members of the public in the UK (which has been used by organisations in several other countries), news items on our website, producing guidance for bat rehabilitators on managing disease risk and keeping bat groups informed. BCT has also collaborated with international colleagues on COVID-19/SARS-CoV-2 guidance for bat rehabilitators, researchers, and cavers, as well as information for a wider general audience. This has included participation in the IUCN Bat Specialist Group, the Global Union of Bat Diversity Networks (GBatNet), a collaboration with SECEMU over #dontblamebats online campaign, and of course with EUROBATs.

BCT has been working on a number of passive acoustic monitoring projects and has developed an IT system which automates the processing of large volumes of sound

recordings. This system was used in a pilot of the British Bat Survey in the South West of England in 2019 (a citizen science programme to monitor bats using Audiomoths), as well as in undertaking a pilot in collaboration with Forestry England to explore the use of acoustic monitoring to inform natural capital accounting and woodland condition monitoring. Building on this success, BCT is currently working with Forest Research to integrate passive acoustic monitoring of bats into the National Forest Inventory field survey, with the aim of undertaking field studies in summer 2021. BCT is also supporting Bat Conservation Ireland to develop a similar woodland survey for the Republic of Ireland. The Trust also partnered with the Government of Jersey to deliver the Jersey Bat Survey, a passive acoustic bat monitoring survey across Jersey.

Following completion of BCT's Roost Mitigation Project the Trust has now published a paper in "Conservation Evidence"

(<https://www.conservationevidence.com/individual-study/8015>) and the full report can be found on its website (<https://cdn.bats.org.uk/images/BWWM-Report-FINAL-11.03.21.pdf?mtime=20210311200652&focal=none>). The results increase BCT's understanding of how to improve efficacy for bat lofts, bat boxes and roost access points and have been fed into the new Bat Mitigation Guidelines which are currently being developed.

BCT has also relaunched its ROOST web pages (<https://www.bats.org.uk/our-work/buildings-planning-and-development/roost-replacement-and-enhancement>).

ROOST aims to promote best practice through the sharing of bat roost mitigation and enhancement case studies, showcasing exemplar work through the Awards and through the Partnership scheme improving products to enhance the built environment for bats.

BCT is working with Natural England and The Chartered Institute of Ecology and Environmental Management on a pilot for a new approach to licensing bat mitigation work in England, which will streamline the licensing process, raise professional standards, and improve outcomes for bats. This approach is known as Earned Recognition. Earned Recognition will work on the basis of assessing and accrediting a consultant's competence in undertaking survey work and designing effective mitigation so that, by using an accredited consultant, developers can experience a more streamlined licensing process for their scheme or project.

Vincent Wildlife Trust, VWT (UK):

The Trust continues to manage its suite of reserves for horseshoe bats in Britain and Ireland. VWT has been carrying out a Roost Resilience Audit of its holdings to ensure the resident colonies are shielded from the worst effects of climate change. By enhancing roosts using proven techniques, such as the installation of hot and cool boxes to provide a range of stable microclimates, the negative impacts of climate change can be significantly reduced. In 2020 the Trust was awarded £180,000 from the UK government's Green Recovery Challenge Fund to start this work in England.

One of the VWT bat reserves was used by the BBC as the hub for a flagship natural history programme called "Into the Bat Cave".

Despite the series of lockdown experienced due to the COVID-19 outbreak, the Trust has been able to continue with its long-term ringing schemes for both Bechstein's bat and barbastelle. This was done by the VWT staff using full PPE.

VWT research programme continues in collaboration with Prof. Fiona Mathews at the University of Sussex. These projects are to 50 percent funded by the Trust. 2020 saw the successful completion of a PhD by Domhnall Finch, who was studying factors effecting landscape permeability in greater horseshoe bats. Kieran O'Malley has continued his studies of barbastelle. The planned fieldwork using volunteers to survey woodlands for maternity roosts had to be postponed due to the COVID-19 pandemic, so that Mr. O'Malley switched his activities to using three-dimensional video recording of road crossing points for the species and running harvesting models.

Papers published in 2019 and 2020 include:

Finch D, Corbacho D, Schofield H, Davison S, Wright P, Broughton R & Mathews F. (2019). Modelling the functional connectivity of landscapes for greater horseshoe bats *Rhinolophus ferrumequinum* at a local scale. *Landscape Ecol* (2020) 35:577–589

Finch D, Schofield H & Mathews F. (2020) Traffic noise playback reduces the activity and feeding behaviour of free-living bats. *Environmental Pollution*. 263.

Wright P, Schofield H, & Mathews F. (2020) Can effective population size estimates be used to monitor population trends of woodland bats? A case study of *Myotis bechsteinii*. *Ecology and Evolution*. 2021;00:1–9.

BatLife EUROPE

BatLife Europe has had a quiet year for obvious reasons. The three yearly partner meeting was due to take place in 2020 but was put on hold due to COVID-19. Plans are now taking place to hold this meeting via Zoom in June 2021, and the partners will be contacted about this in May. BatLife Europe will also be seeking new trustees this year and again the partners will receive information about this in May.

The species chosen by the partners as the bat of the year for 2020/21 was the barbastelle. The partners have been raising awareness of the barbastelle on social media, using the infographics produced by BatLife. The infographics have been translated into different languages. In case a language is missing, BatLife EUROPE would be glad to receive a translation so that the infographics could be shared even more widely.

6. Secretariat Report

The Executive Secretary referred to Doc.EUROBATS.25.5 containing the written Secretariat report and invited the participants of the meeting to pose any questions they had in relation to it. Mr. Streit explained that the time and resources normally used for the organisation of the meetings were redirected at the production of new material for awareness raising activities. He thanked the German government for its voluntary contribution that made this possible as well as his team, especially Ms. Meyer-Cords, who took the lead in this matter. Mr. Streit also drew the participants' attention to the bat comic "Bono's Adventures: The Great Migration", which was available as a hard copy in both German and English. He thanked the Leibniz Institute for Zoo and Wildlife Research for the original version in German, which was co-printed by EUROBATS, and was glad that the Secretariat could now present the English version of the comic as well.

7. Reports from the Intersessional Working Groups Convened before AC25

a) Communication, Bat Conservation and Public Health (met on March 11, 2021)

Professor Paul Racey, the Convenor of the IWG, in addition to the report of the IWG available as Doc.EUROBATS.25.6, referred the participants' attention to the recent publication as a preprint of a paper on the identification of a new Sarbecovirus in horseshoe bats in Europe. 53 faecal samples were analysed, out of which one was positive for the new virus. The authors of the publication as well as the subsequent press releases made it clear that the virus was unlikely to be zoonotic without mutation, but that it presented an opportunity for SARS-CoV-2 and other

Sarbecoviruses for recombination. Bat Conservation Trust and other bat experts were worried that the press could pick up the new virus in the UK the wrong way, which luckily was not the case. Overall, the members of the IWG continued to call out errors in the press where they found them. However, over the lifetime of this activity, more worrying were the errors in scientific literature. It was literature that was going through the process towards publication and, therefore, had some credibility. One of the more egregious examples was a paper that claimed COVID-19 was caused by people eating bats. It was necessary to be more vigilant and pay attention to such scientific papers that were let through into journals and contained false information. A lot of this material appeared via preprint service, which was, in Prof. Racey's view, a dangerous innovation.

b) Evaluation Criteria for Assessment Reports Concerning Bats (met March 16, 2021)

Ms. Ruth Petermann, one of the Co-Convenors of the IWG, referred to the written report from the group's meeting, available as Doc.EUROBATS.25.7. The IWG discussed a draft for the criteria list based on an annex available in the guidelines document of Thuringia that was provisionally translated into English. The IWG found that this document could be adapted for the scope of its work. The members were asked to provide their feedback so that the version could be further developed and tailored for the purposes of the IWG. The Convenors were still awaiting the last comments, which would be included in the draft to be circulated among the members and finalised until AC26. The IWG also planned to prepare a draft resolution for the adoption of this criteria list at the following Meeting of the Parties (MoP).

c) Bats and Light Pollution (met on March 17, 2021)

Dr. Christian Voigt, the Convenor of the IWG, stated that the group discussed four points at its meeting, from which a report was available as Doc.EUROBATS.AC25.8 on the EUROBATS website:

- 1) The need to translate the guidelines (EUROBATS Publication Series No.8) into other languages such as Spanish and French was emphasised. Members of the IWG echoed this need, e.g. to translate the guidelines into Croatian. Sources for funding were discussed.
- 2) It was suggested that the EUROBATS Secretariat should approach the EU Environment for the implementation of the guidelines during the Green Public Procurement procedure.

- 3) The establishment of sub-groups that reviewed distinct subtopics in relation to light pollution and bat conservation was postponed until there would be a need to revise the guidelines.
- 4) It was agreed that a new questionnaire should be developed and circulated for collating more information on the situation in different countries. A draft of the questionnaire was being developed and would be sent to the IWG members in due course.

d) Education (met on March 17, 2021)

Dr. Hossein Zohoori, the Convenor of the IWG, informed that the group decided to make a short educational documentary related to COVID-19 and how bats were being unfairly blamed. The IWG would provide a script and directions for the video recording to be sent to the EUROBATS country representatives, who should then produce a short video of 30-40 seconds. The IWG would then combine these videoclips into an educational video. Responding to a question posed by Ms. Kit Stoner whether the video aimed at children, the Convenor answered that its target group was the general public. A more detailed report from the IWG meeting was available as Doc.EUROBATS.AC25.9.

e) Monitoring and Indicators (met on March 25, 2021)

Mr. Adrià López Baucells, the Convenor of the IWG, stated that the group discussed three topics during its meeting:

- 1) Advances on the questionnaire that was agreed at AC24 to be circulated among the countries;
- 2) Possible intersection of work and tasks with the COST Action project;
- 3) Status quo of the guidelines update.

Referring to Doc.EUROBATS.25.10.Rev.1, which contained the report of the IWG from its meeting, the Convenor explained that quite a few questionnaires with information on current monitoring schemes as well as on suitable techniques for bat monitoring schemes had been collected from different countries, some of which were sent shortly before AC25 and could not have been included in the report. Additionally, a preliminary analysis of the information had been done and initial plots had been prepared to be further discussed with the rest of the IWG members in the upcoming meetings. Regarding the update of the guidelines, the Convenor explained that a draft had been distributed among the members as a google document. The members of the sub-groups had the opportunity to work on the draft in the following weeks and months. The progress made would then be discussed by Mid of May 2021. In June

2021, the following steps would be discussed, since currently the work was mainly being done on Chapters 2 and 3. The Convenor concluded by referring the participants to the appendices, which contained a lot of valuable information.

f) Bats and Climate Change (met on March 29, 2021)

Ms. Daniela Hamidović, one of the Co-Convenors of the IWG, explained that, at its meeting, the group discussed the updates from the ClimBats COST Action as well as a draft questionnaire on the current climate change evidence the AC members were experiencing across the EUROBATS range. The questionnaire was agreed to be distributed, which had already been done prior to AC25. It was also agreed that Dr. Orly Razgour would collect the literature and distribute the information about it by google drive, and that the analysis of the questionnaire responses – in order to determine the possible sub-groups – would be conducted by Dr. Emrah Çoraman and Dr. Henry Schofield. Dr. Hugo Rebelo informed the participants of the IWG meeting that they could join the ClimBats working groups at any time. The next online meeting was scheduled for May 30, 2021. Any information on the ClimBats working groups could be obtained from the working group leaders (WG1: Dr. Razgour; WG2: Ms. Hamidović; WG3: Dr. Mata). A more detailed report of the IWG as well as the questionnaire were included in Doc.EUROBATS.25.11, available on the EUROBATS website.

g) Ad hoc Group to Review the Methodology of Assessing the Conservation Status of Bat Species in the Article 17 Reports (met on March 31, 2021)

Ms. Daniela Hamidović, one of the Co-Convenors of the IWG, explained that the group had met to discuss its work plan and the Terms of Reference. The report from its meeting could be found as Doc.EUROBATS.25.12 on the EUROBATS website. In accordance with target 4 of the EU-EUROBATS joint Action Plan, the group intended to analyse the open data on the European Environment Agency platform from the 2020 data set. Several points were suggested: to analyse current practices based on the data available, to make recommendations to improve practices regarding bats, to propose capacity building to improve the evaluation of conservation status, and to explore the possibility to make the input of the group more official. The IWG suggested that EUROBATS should contact the expert group for reporting under Nature Directives to establish an observer status. In the meantime, it was suggested that all the documents regarding Article 17 bat species check lists and guidelines for the next reporting period could be commented through the members of the expert group of each country if they were also members of the ad hoc group on reporting.

EUROBATS already managed to contact Ms. Angelika Rubin and she agreed for EUROBATS to be given the status of an observer in the expert group on reporting.

h) Wind Turbines and Bat Populations (met on April 8, 2021)

Dr. Luisa Rodrigues, the Convenor of the IWG, explained that the usual progress report of the IWG was being prepared and that it would be made available by mid May 2021 on the EUROBATS website. At its meeting, the IWG decided to prepare an update of the guidelines that would be presented at MoP9. In case the final document was not ready until then, the document would be submitted for approval in the state as it was. During the last three years, the membership of the IWG as well as the topics had changed. Detailed information on this could be obtained from the written report from the IWG meeting available as Doc.EUROBATS.25.13.

8. Progress Reports from Other Intersessional Working Groups

a) IWG on Impact of Roads and Other Traffic Infrastructures

Ms. Jean Matthews, one of the Co-Convenors of the IWG, explained that the IWG had not met but a small group was continuing to work on the guidelines. A poster about the publication was presented to the IENE Conference in January 2021 and a copy of that poster had been sent to the Secretariat.

The publication contents document had been provided as a report on progress and a copy of the draft guidelines had also been sent to the Secretariat prior to AC25 and would be made available on the EUROBATS website. The draft guidelines were intended for the attention of the AC members but not for wider circulation. The IWG was hoping to include more illustrations and case studies. There was a brief example of the case study format in the Annex of the draft. The AC members should contact the Convenor if they had any case studies that could be included, or studies on mitigation methods that the IWG was not aware of. The Convenor concluded by stating that further help was needed with editing and proof-reading the guidelines so that the document could be finalised as soon as possible. Any AC members who could help, or could suggest anyone else who could offer help, should contact the Convenor directly.

b) IWG on Bats Rescue and Rehabilitation

Dr. Lena Goldevska, one of the Co-Convenors, informed the meeting participants that the IWG was in the process of finalising the draft guidelines on Bat Rescue and Rehabilitation. The group had achieved progress in its work; however, the guidelines document had not yet been completed. As soon as it was ready, the draft would be provided to the Secretariat for further circulation among Focal Points for their

approval. This should happen in the following months, so that the final version of the guidelines could be ready for MoP9.

c) IWG on Bats, Insulation and Lining Materials

Dr. Helena Jahelková, the Convenor of the IWG, explained that she had received final feedback from several colleagues and the guidelines document was expected to be completed soon. A draft of the document was intended to be published on the EUROBATS website so that the AC members could comment on it or provide additional case examples linked with bats and buildings.

Mr. Streit explained that the Secretariat had already received the draft guidelines from the IWG on the Impact of Roads and Other Traffic Infrastructure as well as the IWG on Bats, Insulation and Lining Materials and that these guidelines would become available on the EUROBATS website after the meeting. He emphasised that, in case of any comments or questions regarding the guidelines, the Convenors should be contacted directly. Mr. Streit concluded by saying that he was pleased to see how much had already been achieved and he thanked the IWGs for their work on these very important documents which would also be presented at the following MoP.

d) IWG on Insect Decline as a Threat to Bat Populations in Europe

Mr. Jacques Pir, the Convenor of the IWG, explained that the group had recently been established and that, due to the pandemic, work of this IWG progressed in a lesser extent than expected. Nevertheless, the compilation of literature on the main topics of the IWG could have been carried on. Additionally, a meeting of the different subgroup Convenors took place and for the different topics a working agenda could have been established. Mr. Pir expressed his hope that by the following AC a first draft of the guidelines could be distributed to all members of the group for approval. The Convenor concluded that the resolution on insect decline served as a template for other resolutions – e.g. at CMS CoP13 in India a resolution on insect decline and threats to migratory insectivorous species was brought to adoption by the support of Germany, United Kingdom, Switzerland and Israel. A more detailed progress report of the IWG was available on the EUROBATS website as Doc.EUROBATS.AC25.14.

e) IWG on Monitoring of Daily and Seasonal Movements of Bats

Dr. Dino Scaravelli, the Convenor of the IWG, stated that the group was not very active during the last period due to the circumstances caused by the pandemic and the limited resources of the Convenor. The major news to report related to the availability of the new literature as well as to the publication of a recovery of a *P.nathusii* 2,200 km away from the ringing site. This was a significant new record

which had gained a very good coverage in the mass media. The Convenor hoped that more progress would be made to achieve the goals of the group towards the coming MoP. More details, especially on the new literature, were included in the written report of the IWG that was available on the EUROBATS website as Doc.EUROBATS.AC25.15.

f) IWG on Autecological Studies

Professor Stéphane Aulagnier, the Convenor of the IWG, explained that this group had nothing to report as it was only meeting during the AC taking place in the year of the MoP.

g) IWG on Purpose-Built Man-Made Roosts

Dr. Henry Schofield, the Convenor of the IWG, explained that he revised the text of the Review of Purpose-built Roosts for European Bats. Some more information was added to the Review, but it was close to being finalised. Dr. Luisa Rodrigues asked whether the text was ready for publication or whether it was possible to update or add more information. The Convenor agreed that further additions were possible, for which purpose the Review would be placed on the EUROBATS website.

h) The ad hoc Working Group on the Amendment of the Annex to the Agreement

Mr. Tony Hutson, the Convenor of the ad hoc Working Group, explained that he had proposed to reform the group in autumn in order to prepare a draft resolution for AC26. To Mr. Hutson's knowledge, only two issues needed to be discussed. One concerned the *Myotis nattereri* group; the other the status of *Plecotus gaisleri*. Mr. Hutson invited the AC members to share with him any other issues they were aware of that could affect the Annex to the Agreement. Dr. Luisa Rodrigues asked about the species *Myotis crypticus*, which was a new species. In Portugal the Red Data Book was already being revised and a note was also sent directly to the Red List of IUCN, which accepted the new species. Dr. Rodrigues suggested that this species also be included in the EUROBATS Annex.

9. Discussion on Possible Activities for the 30th Anniversary of the Agreement and the 25th International Bat Night

Mr. Streit explained that this agenda point was included in order for the Secretariat to get an idea of what was being prepared and planned within the Agreement area on the occasion of the 30th anniversary of the Agreement and the 25th International Bat Night (IBN). The Secretariat wanted to find out if there were any special events planned and if there was anything the Secretariat could do to help and support the

organisation of these events. As already mentioned, quite some material for this purpose had been produced and could be distributed by the Secretariat. Unfortunately, for the already known reasons, there was no possibility to organise a big central event. However, there was a possibility that this year's IBN events could highlight not only the 25th anniversary of the IBN but also the 30th anniversary of the Agreement.

Dr. Luisa Rodrigues asked about the status of the film about EUROBATS for which images and videos were taken during one of the previous AC meetings. She suggested that such a film would be a good way to celebrate the anniversary. Ms. Hamidović gave an update on the status of the film. She explained that Mr. Boris Krstinić, who was preparing the movie, was still waiting on the historical photos related to the Agreement to be sent to him. The Secretariat had previously agreed to provide these photos. However, most of the photos available were not in the electronic form or did not have the sufficient quality. It was also essential to receive the feedback from the Secretariat regarding the proposed storyline. Ms. Hamidović agreed to resend the storyline and explained that editing a film was very time-consuming, so it could only start after the response was received from the Secretariat whether the proposed storyline was acceptable. Ms. Hamidović concluded by once more asking the meeting participants to share their historical photos with the Secretariat. Mr. Streit explained that the Secretariat had plenty of photos from the previous meetings but did not have many photos from the very first meetings. Luckily for the Agreement, its founding members were still active and Mr. Streit asked them to help in the search for suitable pictures.

Dr. Luisa Rodrigues suggested that a big online ceremony involving all countries could be made on the occasion of the anniversaries, that would at the same time raise public awareness on bats as well as on EUROBATS' work. Such a ceremony would have to be in English since this language was acceptable for the general public in many countries. The Chair of the Advisory Committee, Prof. Danilo Russo, supported this proposal and asked whether this would be technically feasible. Mr. Streit responded that a Zoom meeting could have up to 1,000 participants. Prof. Russo concluded that such an event would be a good way to reach a great number of naturalists and bat lovers all around the world. Dr. Rodrigues commented that the Institute for the Conservation of Nature and Forests, ICNF, in Lisbon, Portugal, organised online conferences for the general public every Tuesday. These events were every week counting more and more participants, including young people and

students, which strengthened the argument for organising such events. Dr. Rodrigues also referred to the video announced by the IWG on Education. She explained that, during the IWG meeting while discussing the preparations for the video, the idea arose that internationally important persons could be asked to say something in favour of bats. For this purpose, Ms. Carla da Silva was trying to contact managers of famous Portuguese football players, such as Cristiano Ronaldo. This was still in the early phase, but she invited the members of the AC, if they had the possibility to get in touch with a celebrity, to use the occasion of the IBN and ask them to make statements in favour of bats.

10. Date and Venue of the 26th Meeting of the Advisory Committee

Mr. Streit explained that, for the previous AC meeting that was planned to take place in Sarajevo, Bosnia and Herzegovina, everything was already in place. A good venue had been selected and the Secretariat had full support of the wonderful hosts. Before AC25 the Secretariat had inquired if the arrangements could be maintained and had received a positive response. It was only necessary to agree with the host country on the precise date of the meeting. It would be around the same time of the year as usual. The date would be communicated as soon as possible and still this year.

11. Any Other Business

Mr. Tony Mitchell-Jones wished to give an update on the EMMA project (the Atlas of European Mammals). It was noticed that several EMMA national coordinators were also present at AC25. The project was making good progress. Currently, there was a call out for draft data sets that would be used to produce maps to help the authors of the species accounts. Already quite a number of these draft data sets had been received, but some were still missing. Mr. Mitchell-Jones wanted to encourage the national coordinators to submit data sets. The aim was to produce complete draft maps early in the summer to help the writers of the species accounts. The completion of the publication was still planned for 2024. Mr. Mitchell-Jones was also in contact with Mr. Tony Hutson in order to make sure that the EMMA and EUROBATS species lists stayed in step.

Dr. Laurent Schley, adding to Mr. Mitchell-Jones' remarks about the EMMA project, asked everybody who had data, not only the EMMA national coordinators, to get in touch with the national coordinators and ensure that this data would flow into the atlas. The final deadline for data submission was in 2023.

Dr. Christian Voigt suggested that, considering the great development faced in tracking bats, the AC should take care that the IWG on Monitoring of Daily and Seasonal Movements of Bats be reactivated. This topic was of great significance and it was related to many other important issues such as light pollution, etc. Dr. Voigt offered his help to co-convene the IWG in question, together with Dr. Scaravelli. The proposal was welcomed by Dr. Scaravelli and the Advisory Committee.

Ms. Daniela Hamidović further explained that she was instructed by different IWGs to make suggestions on 3 points:

- 1) ISO (International Organisation for Standardisation) made a technical committee to re-evaluate all the norms that may contribute to the loss of biodiversity. Many of the norms were outdated and did not include the needs of species, especially those referring to buildings and insulation, light pollution, etc. IUCN was already a member of the technical committee, and it was suggested that EUROBATS should explore the possibility to become a member of this committee as well.
- 2) It was suggested that the guidelines produced by EUROBATS (e.g. the guidelines on light pollution or on insulation) should be discussed by DG Environment Nature Unit to be included in the big procurement of the EU, especially because of the Green deal.
- 3) IUCN had recently presented its guidelines on renewable energy and some AC members had the impression that bats were not well addressed. The suggestion was to make a review of the guidelines and send them to IUCN for improvement.

In continuation, Mr. Streit encouraged all the IWGs to contact the Secretariat if they wished to meet again in the course of the year, or, for those groups that had not yet met, the Secretariat would be glad to organise a meeting. The impression was that there was still a lot of work to be done. The remaining time until the following AC meeting should be well used, and the Secretariat would be glad to help the IWGs progress in their important work.

Ms. Kit Stoner asked about the implementation of the EU-EUROBATS joint Action Plan and whether there was any news with this regard. Mr. Streit explained that since its adoption not much had happened. He thanked Ms. Stoner for the reminder and would use it as an opportunity to contact the EU Commission to revive the activities.

Dr. Luisa Rodrigues reminded the AC members of the resolution dealing with the guidelines for the issuing of permits for capturing wild bats. She suggested that this resolution could be revised for MoP9. Prof. Russo answered that he agreed this was

a very important topic, but that – considering the amount of work still to be finalised before the MoP – this task could be postponed for the period after MoP9.

12. Adoption of the Record of the Meeting

It was explained that the draft record of the meeting could not be adopted during the videoconference, but that it would be circulated for comments after AC25.

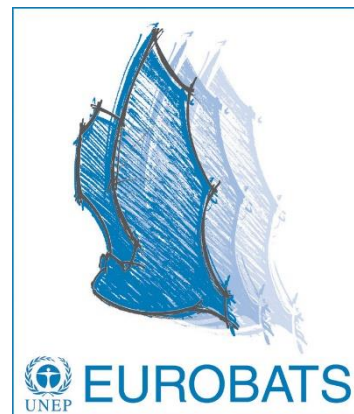
13. Close of the Meeting

In his closing remarks, Mr. Streit stated that it was a great pleasure for the Secretariat to finally see all the AC members again. He expressed his hope that, in the following year, it would be possible to organise a physical meeting and see all the delegates in person. Mr. Streit wished all the participants to stay healthy and hoped that the situation would come to a good end in a not too far future. The Chair of the AC, Professor Russo, thanked the Vice-Chair, Ms. Peterman, for her great assistance as well as the Secretariat and the AC members for a very productive and efficient meeting. There being no other further remarks, the meeting was closed at 11:43.

25th Meeting of the Advisory Committee

Videoconference, 30 April 2021

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