

# EUROBATS Agreement and underground sites in Europe

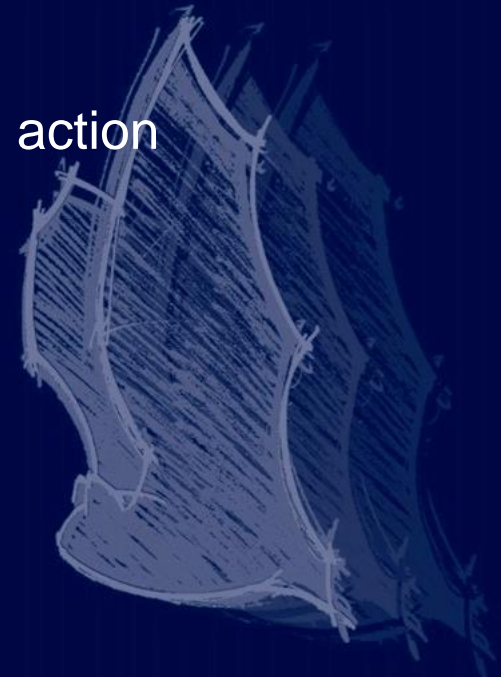


# UNEP/EUROBATS Agreement

***The aim:*** to protect all European bat species through legislation, education, conservation measures and international co-operation with member states and with those who have not yet joined

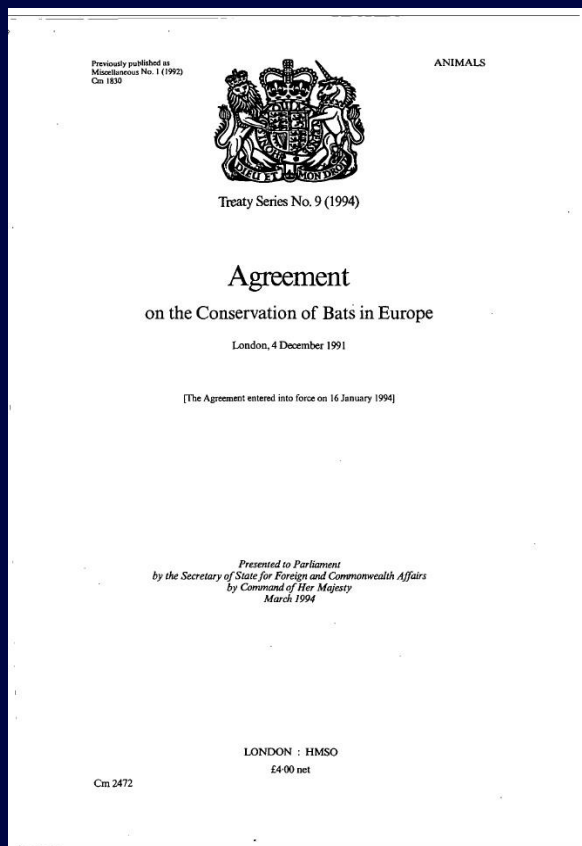
***The mandate:*** Agreement text (as amended in 2000) and its Annexes

***Instruments:*** resolutions, publications, public relations, action plans, EUROBATS project initiative



# UNEP/EUROBATS Agreement

- October 1985: the CMS Conference of Parties instructed its Secretariat to take appropriate measures to develop an Agreement for European bats
- The agreement was signed in London on 4th of December 1991 by Belgium, Denmark, Germany, Luxemburg, Netherlands and the UK
- EUROBATS Secretariat is co-located with the Secretariat of the Bonn Convention (CMS) at the UN Campus in Bonn

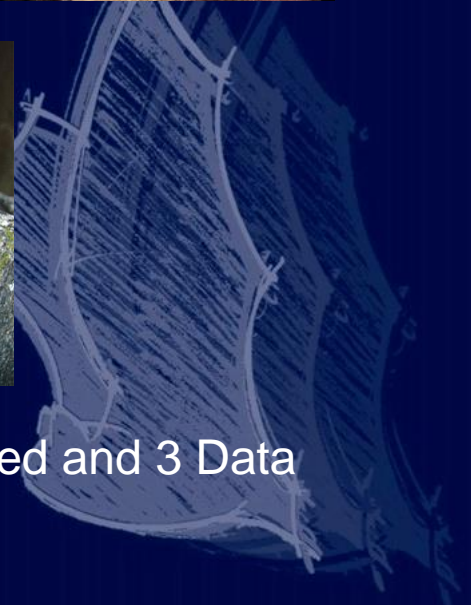


## Species of concern (Annex 1 to the Agreement)

- 51 bat species from Vespertilionidae (42 species), Rhinolophidae (5 species), Miniopteridae (2 species) and single representatives of the Emballonuridae, Mollossidae and Pteropodidae

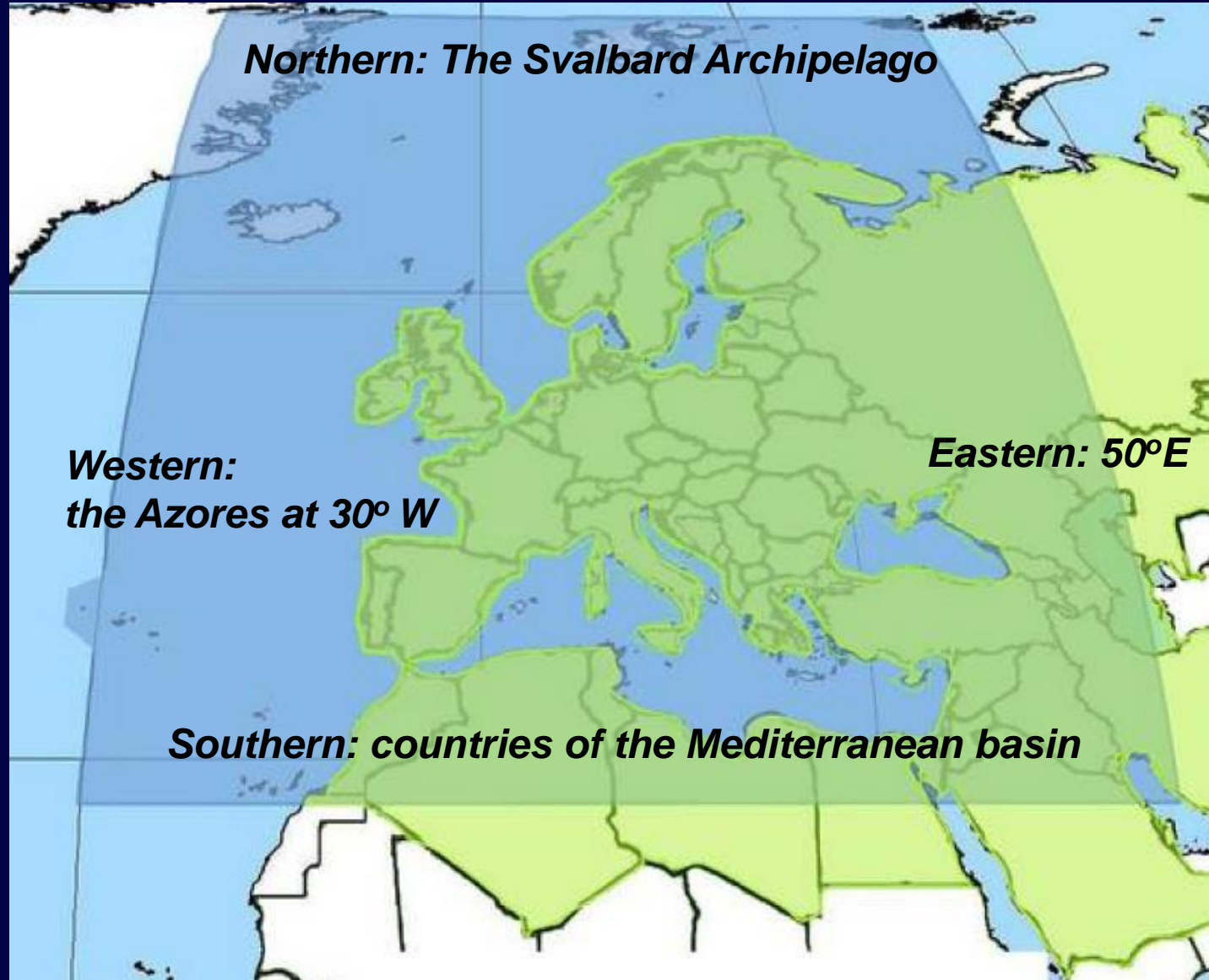


- 3 species are Endangered, 4 Vulnerable, 7 Near Threatened and 3 Data Deficient (IUSN assessment 2021)

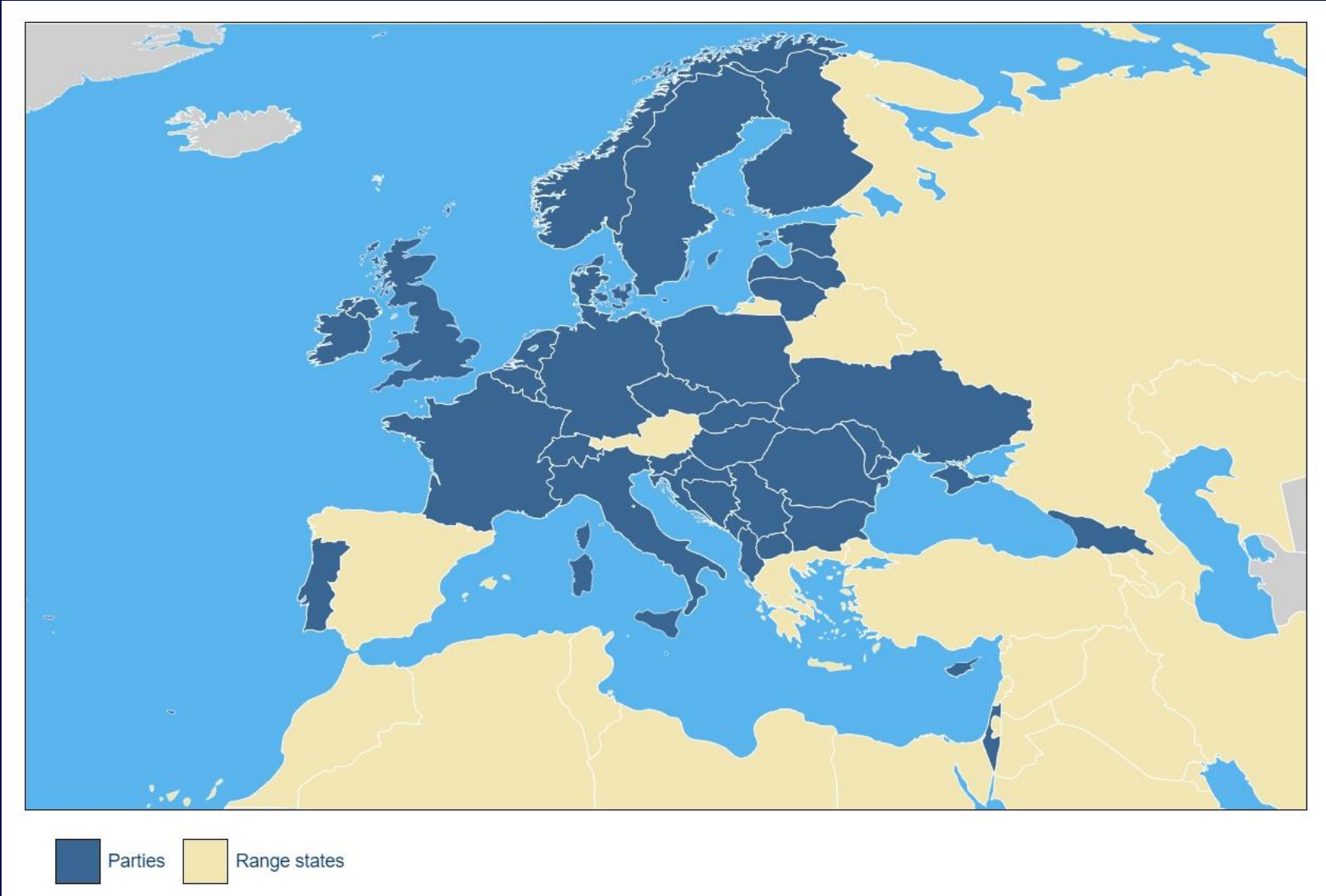




# Area covered by EUROBATS



# EUROBATS membership in 2021: 38 Parties out of 63 Range States



# Meeting of Parties to EUROBATS

A session of the Meeting of Parties (MoP) is held every four years.

In the MoP the Parties:

- provide national reports on the implementation of the Agreement
- agree on the budget and scale of contributions for the next quadrennium
- discuss and adopt Resolutions to assist in implementing the principles of the Agreement





# The Advisory Committee

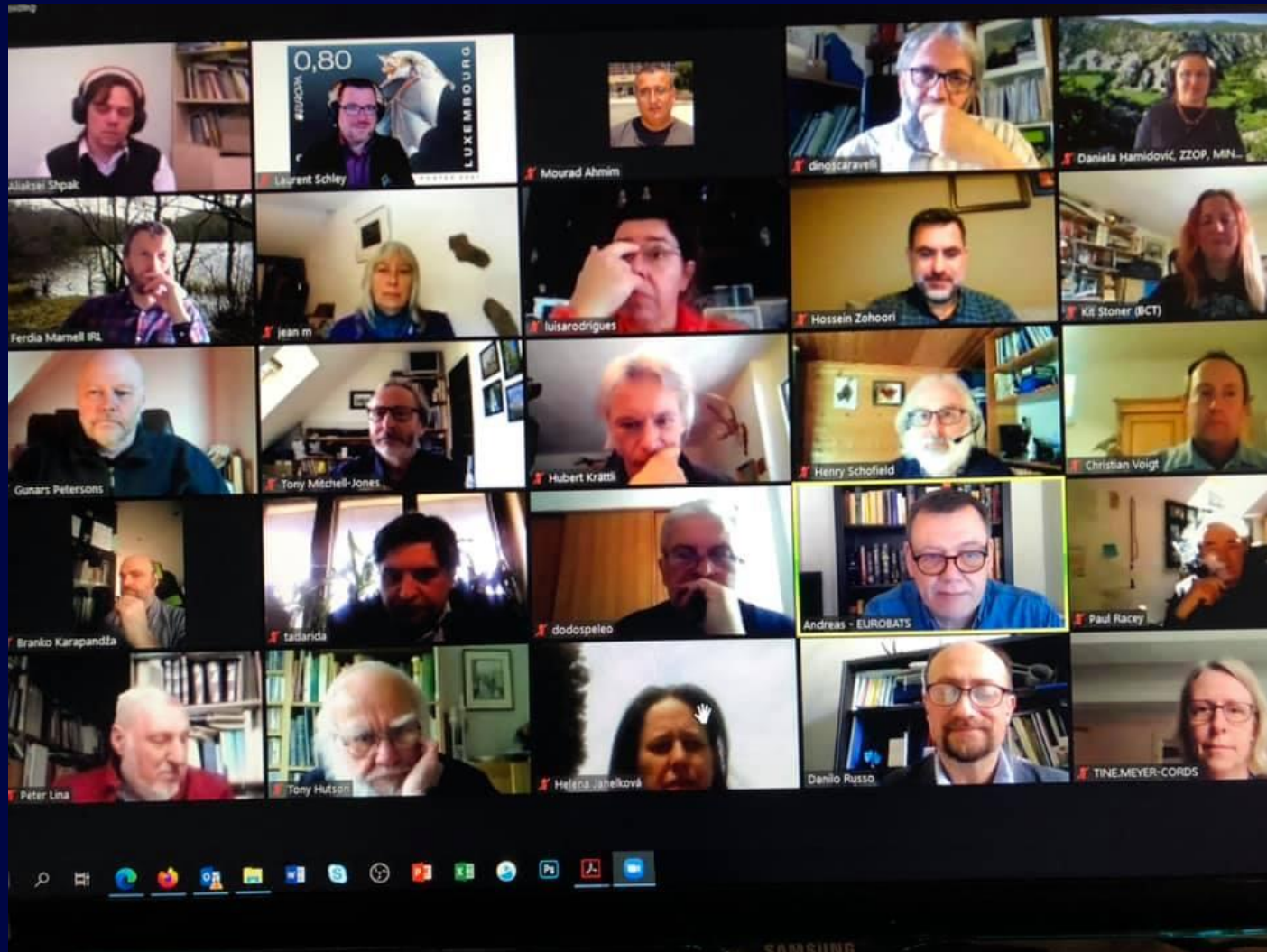


- is open to all Parties and non-Party Range States, NGOs and Observers
- meets annually at meetings organized by the Secretariat
- provides expert advice and information to the Secretariat and the Parties on the conservation and management of bats
- targeted working groups (WG) may be established within the Committee to develop reports or Resolutions
- Intersessional WG are active between meetings





# 25th Meeting of the Advisory Committee Videoconference on 30 April 2021



## Resolutions as a tool for bat conservation

- Following the obligations of Parties to the CMS, Agreements are binding international treaties. Resolutions adopted at the Sessions of the Meeting of Parties are equally binding and may require amendments to be enacted to the national legislation of each Party
- Parties and other range states are requested to provide nominated Focal Points, one for administration and one for scientific aspects.
- National experts gather in the Advisory Committee that identifies most urgent conservation problems and addresses them developing Resolutions
- Each Resolution urges Parties and encourages non-party Range States to undertake concrete actions with respect to one particular problem for bat conservation



## Resolution 4 of 2<sup>nd</sup> Meeting of Parties, Bonn 1998

Parties decided:

- *the following two habitat types should be the subject of specific national research in relation to the conservation of European bats: **underground sites** and forests*
- *the parties should endeavour to provide data on sites specified in annex I and II, as well as an assessment of sites with problems caused by man, by the middle of 2000 to the Secretariat*
- *the Eurobats Secretariat should commission an assessment of all national data*







# EUROBATS



Publication Series  
No.

# 2



## Protecting and managing underground sites for bats

Tony Mitchell-Jones • Zoltán Bihari • Matti Masing • Luisa Rodrigues



- It is often advantageous to protect grilles against rust. This is preferably done by galvanising at the time of manufacture (a hot-dip process) or by coating the grille with an anti-rust preparation such as 'Norusto' or 'Nutrust'. Epoxy resin paints may also be used, but paints with a persistent smell, such as bitumen, should be avoided.
- By careful design and construction it is possible to make a grille that is extremely strong and resistant to damage. However, it must be remembered that no grille can be proof against powerful welding or cutting equipment and that a prolonged and determined attack will eventually breach any

grille. Repair costs are likely to be proportional to the cost of the original grille. It is best to site the grille where it is visible from outside the cave or mine so that potential vandals are deterred.

- The grille must be fitted so that it does not impede air flow into the site. It is generally inadvisable to fit the grille into the narrowest part of an entrance, where it could critically affect air flow. If the narrowest point is the only logical place to put the grille, for example in a doorway, care must be taken to keep the obstruction to a minimum, particularly at floor and roof level.

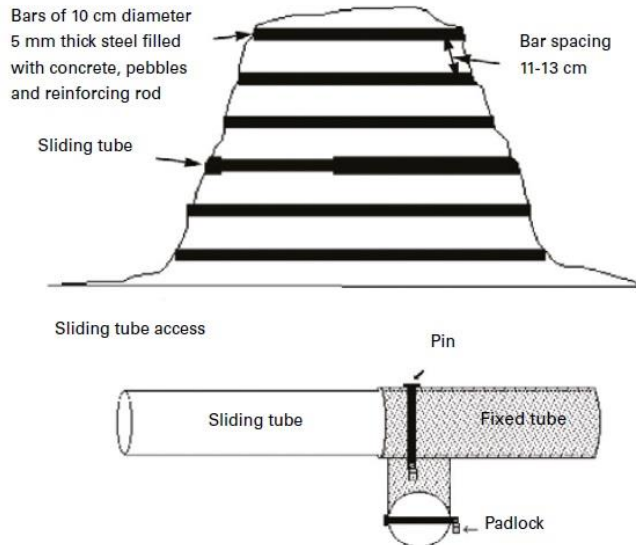


Figure 2. Grille design used in France. The tubes are filled with pebbles, steel and cement, which provide good resistance to cutting.

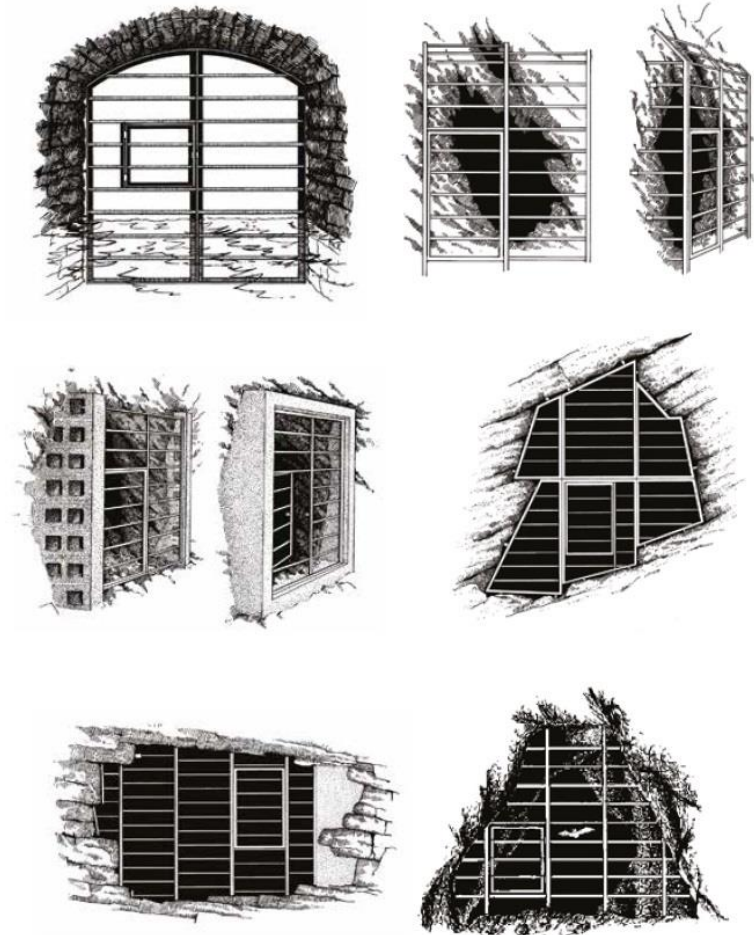


Figure 3. Examples of grilles fitted to horizontal entrances. Grilles can be made oversized and pinned to the rock face, fitted inside the entrance using bolts or pins or built into blockwork to square up and stabilise the entrance. Large grilles can be constructed off-site in sections and bolted or welded on site. A lockable entrance door should always be fitted.

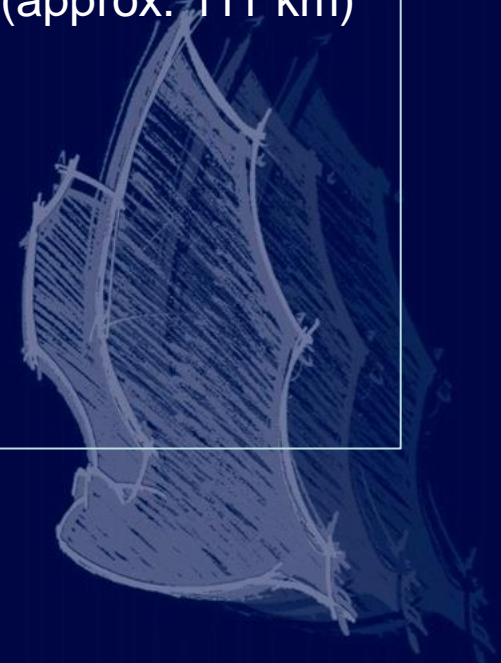
# EUROBATS database of internationally important underground sites contains details of 1,891 sites across the Agreement area

## Sensitivity

Recognising the need to balance the value of publication against the sensitivity of some underground sites to disturbance and the threat posed by uncontrolled tourism, three options were offered:

- A - Publication of standard details (site name, location, species list)
- B - Limited publication; no site name, location degraded to 1° (approx. 111 km)
- C - No publication

Publication code	No. of sites
A – full publication	1,447
B – partial publication	433
C – no publication	15





# EUROBATS database of internationally important underground sites

## Eurobats underground sites

Site name: Show only:   Country:

Detailed species data (0 = present, but no count data)

	Species	Usage	Max count	Year
*				

Record: 1 of 1

Threats to the site:

Notes:

cellar; winter roosting site; only partly secured

For use if detailed species information is not available

No of species:  Max total:  Year:



Find a Site by Name

Latitude:  N Longitude:  E DMS

Publication code:

- Single species site
- Multi-species site

Site type

Site protection

Primary usage

BioZone

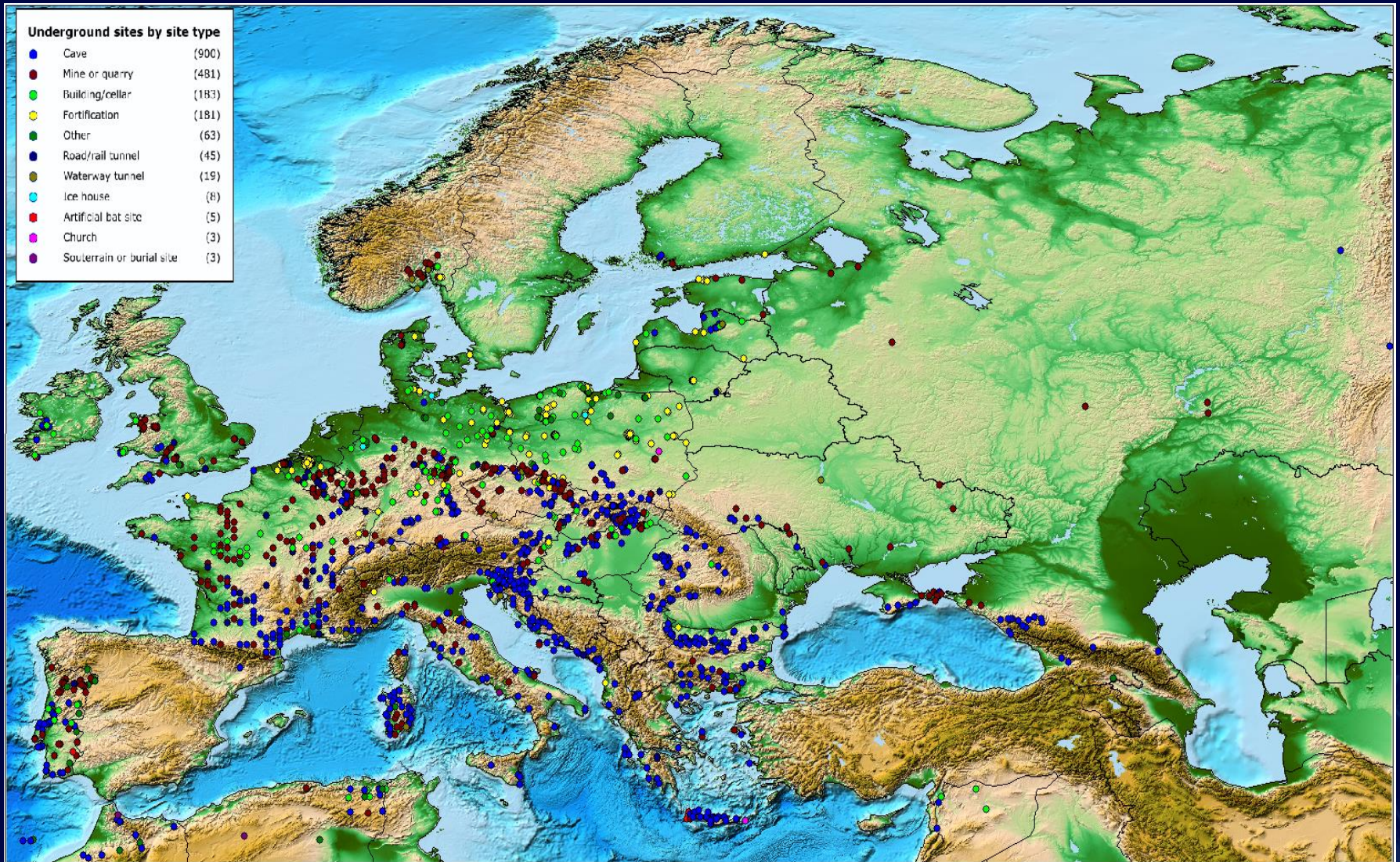
Natura 2000 xref:

Emerald xref:





# EUROBATS database of internationally important underground sites





# EUROBATS database of internationally important underground sites

Caves and mines are most important

Site type	No of sites	Percent
Cave	900	47.59%
Mine or Quarry	481	25.44%
Building/cellar	183	9.68%
Fortification	181	9.57%
Other	63	3.33%
Road/rail tunnel	45	2.38%





# EUROBATS database of internationally important underground sites

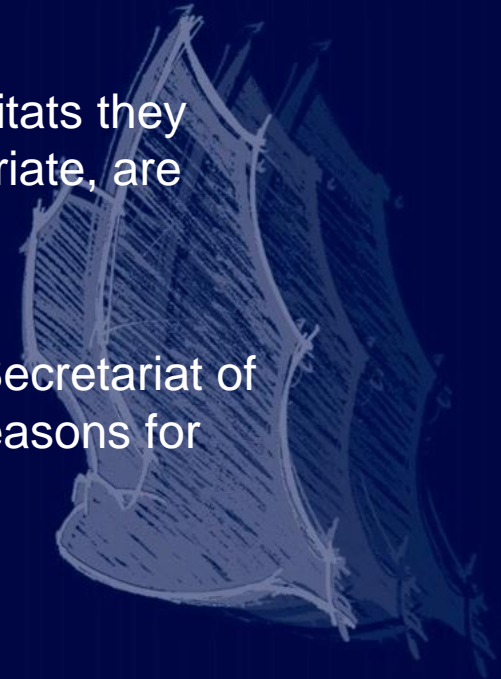
Species	No of Sites	Best site	Best count
<i>Miniopterus schreibersii</i>	402	11003, France	70000
<i>Pipistrellus pipistrellus</i>	73	Erna, Slovakia	58000
<i>Myotis myotis</i>	473	MRU, Nietoperek main system fortifications, Poland	23627
<i>Myotis daubentonii</i>	425	Daugbjerg Kalkgruber, Denmark	17700
<i>Myotis capaccinii</i>	134	Ivanova Voda cave, Bulgaria	15500
<i>Myotis myotis/oxygnathus</i>	14	Shpella e Velces, Albania	10000
<i>Myotis myotis/blythii</i>	139	Peștera de la Izvorul Tăușoare, Romania	8855
<i>Barbastella barbastellus</i>	260	Canyon, Russian Federation	7000
<i>Rhinolophus euryale</i>	236	Orlova Chuka cave, Bulgaria	6300
<i>Myotis emarginatus</i>	285	Madzharovo Mining Complex, Bulgaria	6100
<i>Myotis dasycneme</i>	137	Mønsted Kalkgruber, Denmark	4600
<i>Nyctalus noctula</i>	28	Peștera Ungurului, Romania	4500
<i>Rhinolophus mehelyi</i>	74	Orlova Chuka cave, Bulgaria	4200
<i>Myotis nattereri</i>	326	MRU, Nietoperek main system fortifications, Poland	4042
<i>Myotis blythii</i>	141	Karabudakhkent, Russian Federation	4000

## EUROBATS database of internationally important underground sites

Country	Site name	Max count
Romania	Sura Mare Cave	81,134
France	11003	70,000
Slovakia	Erňa	58,049
Bulgaria	Devetashkata cave	45,503
Bulgaria	Parnitsite cave	42,410
Romania	Huda lui Papara cave	40,329
Croatia	Trbušnjak špilja	39,000
France	13002	35,250
Poland	MRU, Nietoperek main system fortifications (lubuskie)	32,400
Croatia	Kuštrovka špilja	28,350
Bulgaria	Dyavolskoto Garlo cave	28,010
Croatia	Vištica jama	27,975
Croatia	Tradanj špilja	24,500
Portugal	Marvao I	21,505

## Resolution 7.6 Conservation and Management of Important Underground Sites for Bats

- Confirms the importance of the EUROBATS list of underground habitats as a contribution to the maintenance of populations of European bats
- Strongly encourages Parties and Range States that have not yet identified their most important underground habitats to do so
- For sites that are already listed, encourages Parties and Range States to submit updated counts of bats at each site
- Urges Parties to ensure that the important underground habitats they have identified are fully protected by law and, where appropriate, are physically protected against unauthorised entry
- Urges Parties and encourages Range States to inform the Secretariat of listed sites that have been damaged or destroyed and the reasons for this loss





## Underground sites: compliance monitoring

In July 2021, the Green Balkans informed the Secretariat about the installation of improper grilles at two important caves in Bulgaria. It was done as part of the “Life under one roof” LIFE project without previous impact assessment.



Distance between bars: 19 x 50 cm  
(useless to prevent access).

Grilles were susceptible to vandalism  
and made of low-quality rebar steel



## Underground sites: compliance monitoring

Species in Aina-Ini and Samara caves according to the EUROBATS database:  
*Rhinolophus blasii*, *R. euryale*, *R. ferrumequinum*, *R. hipposideros*, *R. mehelyi*, *M. capaccinii*, *M. emarginatus*, *M. myotis* and *Miniopterus schreibersii*.

These species could be deterred by grilles and fences should be installed at such sites!

Monitoring done by the Green Balkans after indicated dramatic decline in numbers for both caves. Only 1 bat found in Samara cave instead of 118 previously reported!

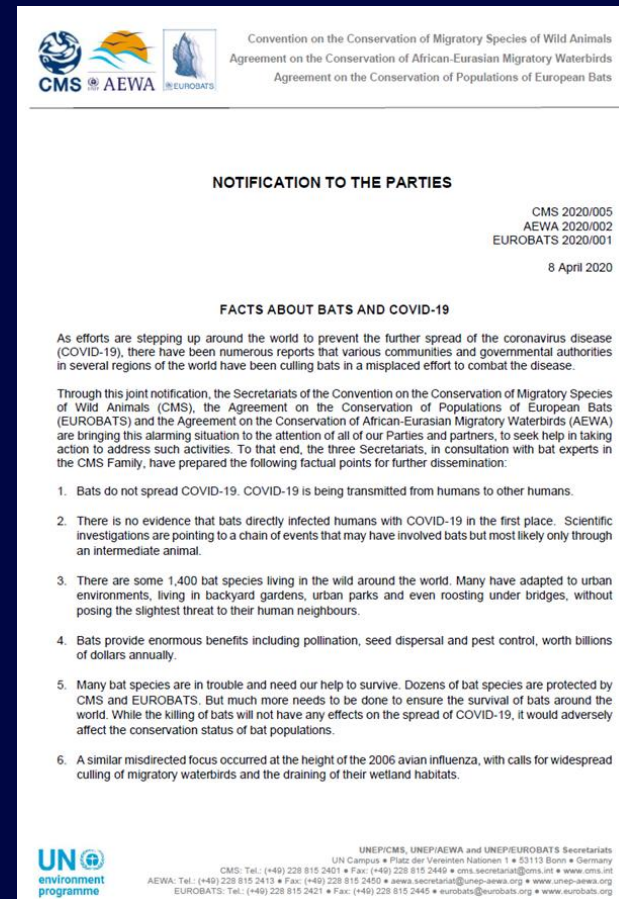


The EUROBATS Secretariat immediately communicated the issue to the Bulgarian Ministry of Environment and Water. Grilles at caves were removed in August 2021.



# COVID Emergency Response: notification sent to 132 governments

1. Bats do not spread COVID-19. COVID-19 is being transmitted from humans to other humans.
2. There is no evidence that bats directly infected humans with COVID-19 in the first place.
3. Bats provide enormous benefits including pollination, seed dispersal and pest control, worth billions of dollars annually.
4. Much more needs to be done to ensure the survival of bats around the world.
5. Killing of bats will not have any effects on the spread of COVID-19, whereas it would adversely affect the conservation status of bat populations.





## Recommendations of the EUROBATS Advisory Committee on potential risks of SARS-CoV-2 transmission from humans to bats (11.05.2020)

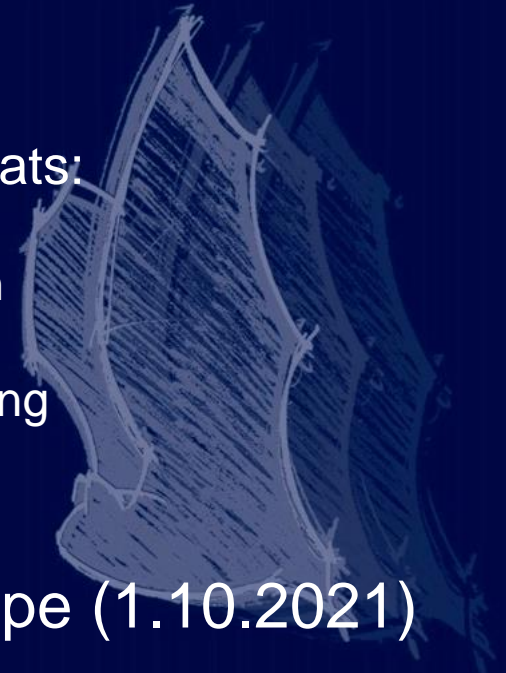
To researchers and volunteers participating in monitoring:

- relevant authorities should consider if activities involving close contact with bats could be postponed or continued
- a bat worker diagnosed with COVID-19, showing symptoms or exposed to a person with known infection should not undertake any form of bat survey or handling of animals (including bats in care)
- Wearing masks, washing hands and washing and disinfecting equipment used in bat rehabilitation or to process bats in the field (callipers, balances etc) before and after use

To cavers and other visitors to underground sites with bats:

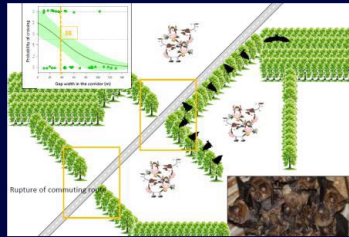
- avoid visiting such sites or parts of the underground site in times when they are inhabited by bat colonies
- keep the maximum possible distance from individual roosting bats

No evidence of human-bat transmission in Europe (1.10.2021)



# New guidelines under development by the EUROBATS AC

Guidance on the impact on bats of roads and other traffic infrastructure



## Guidelines for Bats, Insulation and Lining Materials



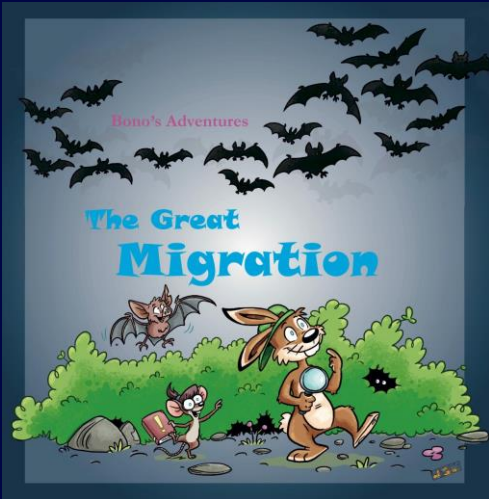
## Review of Purpose-built Roosts for European Bats



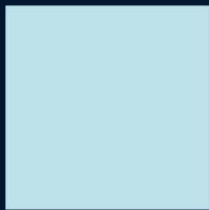


# Anniversary materials for ordering on our website

[www.eurobats.org](http://www.eurobats.org)



## 25 INTERNATIONAL BAT NIGHT



INTERNATIONAL  
BAT NIGHT  
**25**



EUROBATS Secretariat  
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