

## 2021 Report

# IUCN SSC Bat Specialist Group



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**NUMBER OF MEMBERS**  
75

**SOCIAL MEDIA AND WEBSITE**  
Facebook: @IUCNBatSpecialistGroup  
Website: <https://www.iucnbsg.org>

### Mission statement

- (1) To contribute to the mission and goals of IUCN SSC.
- (2) To ensure the maintenance or recovery of populations of threatened bat populations.
- (3) To ensure that other bat species remain at a favourable conservation status.

### Projected impact 2021–2025

By the end of 2025, we will position bat conservation for success with: (1) fully updated Red List assessments and processes for regional engagement in the assessment process; (2) an application to CITES for listing of two species that are traded as souvenirs, and awareness and experience of the data gathering and proposal process for future applications; (3) adoption by the bat research community of field hygiene practices that minimize pathogen pollution by people and the potential for bat-human transmission of bat-borne microbes; (4) increased public awareness of the conservation plight and ecological significance of bats.

### Targets 2021–2025

- ASSESS**
- T-006** Trade in Bat Species Working Group (TBS WG): gather data to support application to CITES for two distinctive ‘souvenir’ species.
- T-009** Conduct Red List Assessments of Old World Bats.
- PLAN**
- T-002** Human Dimensions of Bat Conservation Working Group (HDBC WG): develop strategies to manage human attitudes and behaviours towards bats in the post-COVID-19 era.
- T-004** Bats and One Health Working Group (OH WG): provide advice to the research and conservation community about safe practices for bat research and the role of bats in emerging infectious disease.
- ACT**
- T-007** Trade in Bat Species Working Group (TBS WG): work with CITES representatives to submit application for two distinctive species.

### NETWORK

- T-001** Establish a Human Dimensions of Bat Conservation Working Group (HDBC WG).
- T-003** Establish a Bats and One Health Working Group (OH WG).
- T-005** Establish a Trade in Bat Species Working Group (TBS WG).
- T-008** Develop an online Red List assessment training pipeline specific to bats.

### Activities and results 2021

#### ASSESS

##### Planning

**T-006** (KSR 5)

**Number of CITES applications: 0**

**Result description:** Materials were gathered and letters sent to countries that might support an application to the Animals Committee for the Painted Woolly Bat (*Kerivoula picta*). We were rather short on time, and none of the countries followed up on the opportunity. The TBS WG continues to pull together material documenting trade in species as souvenirs and has worked

# Preventing human-to-bat transmission of SARS-CoV-2

## Exposure Risks

**Aerosol exposure**  
Infectious droplets from handlers holding bats in close proximity

**Environmental exposure**  
Sharing enclosed, poorly-ventilated spaces with bats, where virus may persist in the air or on surfaces

**Contact exposure**  
Bats coming into contact with contaminated hands or equipment



**AMP:**  
your plan  
to keep  
protecting  
bats

## Mitigation Strategies

### Assess

The level of risk the project poses to bats based on epidemiological context and team status



### Modify

Research activities based on the risk assessment: green, amber or red



### Protect

Adopt good field hygiene: wear masks and gloves, follow disinfection procedures



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

Full recommendations @ <https://tinyurl.com/AMP4bats>

with GBatNet to establish a Bat Exploitation Portal to gather data (<https://survey123.arcgis.com/share/8e8b3a683a944a60aec1d2078d803712>).

### Red List

T-009 (KSR 6)

**Number of global Red List reassessments completed:** 167

**Result description:** A total of 167 assessments/reassessments of Old World Bats were published in 2021.

### PLAN

#### Planning

T-004 (KSR 8)

**Number of technical documents to support the development of conservation plans/strategies:** 4

**Result description:** (1) The OH WG provided updated recommendations (v2.0) for minimising the risk of human-bat transmission of SARS-CoV-2 for researchers, rehabbers and cavers ([https://www.iucnbsg.org/uploads/6/5/0/9/6509077/map\\_recommendations\\_for\\_rehabbers\\_30\\_june\\_2021\\_1\\_.pdf](https://www.iucnbsg.org/uploads/6/5/0/9/6509077/map_recommendations_for_rehabbers_30_june_2021_1_.pdf)); (2) Presentations on the recommendations for working with bats and field hygiene were given at the National Geographic Society's Explorers Festival

(June 2021) and to other Specialist Groups (June 2021); (3) The OH WG published a paper intended to improve communication about zoonotic diseases and minimise misperceptions arising from inappropriate use of key terms (Shapiro, J.T., et al. (2021). 'Setting the Terms for Zoonotic Diseases: Effective Communication for Research, Conservation, and Public Policy'. *Viruses* 13(7):1356. <https://doi.org/10.3390/v13071356>); (4) A presentation promoting the correct use of terms, based on the publication, was given by OH WG members at the 69th Wildlife Disease/14th European Wildlife Disease Association Conference (31 August–2 September 2021).

### Policy

T-002 (KSR 9)

**Number of documents provided to support/guide policy making:** 1

**Result description:** (1) The HDBC WG published a paper in *Biological Conservation* intended to guide human-dimensions bat research (Straka, T.M., Coleman, J., MacDonald, E.A. and Kingston, T. (2021). 'Human dimensions of bat conservation – 10 recommendations to improve and diversify studies of human-bat interactions'. *Biological Conservation* 262:109304. <https://doi.org/10.1016/j.biocon.2021.109304>); (2) The WG initiated

a study to understand the drivers of bat researchers' intention to adopt field hygiene practices that protect against human-bat and bat-human transmission of pathogens. The study is being conducted in a Theory of Planned Behaviour framework. Phase 1, in which we gathered data from a subset of researchers on beliefs about hygiene practices, is complete and we are now developing the full questionnaire; (3) The HDBC WG initiated and hosted a panel at the Royal Anthropological Institute's 'Anthropology and Conservation' Conference in October 2021. Three accepted papers laid the foundation for a lively panel discussion.

### NETWORK

#### Agreements

T-001 (KSR 3)

**HDBC Working Group established and meets regularly (at least 1 x per month):** achieved

**Result description:** The HDBC Working Group was established and comprises a core of five regular members, plus several others who join meetings on an ad hoc basis. The HDBC WG is chaired by Bat Specialist Group (BSG) Co-Chair Kingston and meets weekly.

# Preventing human-to-bat transmission of SARS-CoV-2 for cavers

## Exposure Risks



**Aerosol exposure**  
Infectious droplets from cavers in close proximity to bats



**Environmental exposure**  
Sharing enclosed, poorly-ventilated spaces with bats, where virus may persist in the air



**Contact exposure**  
Cavers coming in contact with bats



**MAP**  
your plan  
to prevent  
transmission to  
cave-dwelling  
bats!

## Mitigation Strategies

### Minimize

Plan routes to avoid bat aggregations, wear mask if passing bats is unavoidable



### Assess

The level of risk the trip poses to bats, avoid caving if you have been exposed or have symptoms



### Protect

Adopt best caving practices, wear masks if passing bats, avoid crowding, clean and disinfect equipment



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Full recommendations version 2.0 @ <https://tinyurl.com/bsg-pubs>

## Preventing human-to-bat transmission of SARS-CoV-2 for bat rehabilitation

### Exposure Risk

- Contact exposure**  
Bats coming into contact with contaminated hands or equipment
- Aerosol exposure**  
Infectious droplets from handler holding bats in close proximity
- Environmental exposure**  
Sharing enclosed, poorly ventilated spaces with bats, where virus may persist in the air or on surface

### Mitigation Strategies

- Minimize** direct contact with bats by keeping handling to a minimum, use face masks, gloves, and closed containers for transportation
- Assess** the risk you may pose of exposing bats to SARS-CoV-2 and avoid contact with bats if you have or suspect you have COVID-19 or have been exposed to someone with or suspected to have COVID-19
- Protect** bats by modifying collection, rehabilitation and release practices to reduce exposure to SARS-CoV-2

MAP your plan to prevent transmission to bats

Complete recommendations @ <https://tinyurl.com/map4rehab>  
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### Capacity building

T-008 (KSR 2)

**Number of people trained in assessment tools:** 7

**Result description:** In 2021, we focused on training people with the existing tools, specifically the Conservation Training on Red List Assessments (<https://www.conservationtraining.org/course/index.php?categoryid=23>). Seven people completed this training. This is giving insights into how we might simplify and specify the process for bats. Red List Authority Coordinator Dave Waldien conducted an initial workshop to further inform development.

### Synergy

T-003 (KSR 3)

**OH WG assesses and advises the bat research and conservation community about safe practices for bat research and the role of bats in emerging infectious diseases:** achieved

**Result description:** The BSG Bats and One Health Working Group was established in 2021. It was largely drawn from the membership of the ad hoc working group assembled in 2020 to address the risk of human-bat transmission of SARS-CoV-2. The multidisciplinary Group includes virologists, ecologists, conservation biologists and disease ecologists, among others, and is chaired by BSG Co-Chair Kingston. The group meets weekly and has a stated vision and mission. The Vision: a world with science-based understanding of the connections between the health of bats, people and ecosystems. The Mission: to advance multidisciplinary integrative research and informed communication to promote bat conservation as essential to one health. See also: <https://www.iucnbsg.org/bat-onehealth-working-group.html>.

T-005 (KSR 3)

**TBS WG established and meets at least 1 x per month:** ongoing

**Result description:** The TBS Working Group was established in 2021, with an initial goal of collating material to support applications to the 31<sup>st</sup> Animals Committee of CITES.

### Acknowledgements

Secretariat of the Pacific Regional Environment Programme (SPREP), Global Union of Bat Diversity Networks (GBatNet), Australasian Bat Society (ABS), Birdlife – Oceania, Texas Tech University, Christopher Newport University, Western Sydney University, Vanuatu Environmental Science Society, NatureFiji-MareqetiViti, Adelaide University, Taronga Conservation Society Australia, Institut Agronomique néo-Calédonien (IAC), Kainake Project, the hundreds of people that contributed to the successful Red List assessments of 233 Old World bats, Rolex Awards for Enterprise, RELCOM, National Geographic Society, CYTED Ibero-American Programme on Science and Technology for Development, and The Whitley Fund for Nature.

### Summary of achievements

**Total number of targets 2021–2025:** 9

**Geographic regions:** 9 Global

**Actions during 2021:**

Assess: 2 (KSR 5, 6)

Plan: 2 (KSR 8, 9)

Network: 4 (KSR 2, 3)

**Overall achievement 2021–2025:**

