

# IUCN SSC Cave Invertebrate Specialist Group

2019 Report



Louis Deharveng

## Chair

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## Location/Affiliation

<sup>(1)</sup> Museum national d'Histoire naturelle,  
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## Number of members

82

## Social networks

Facebook:

IUCN SSC Cave Invertebrate Specialist Group

Twitter: @caveinvert



## Mission statement

The Cave Invertebrate Specialist Group (CISG) is a global network of experts working on organisms associated with karst and caves. Our goal is to contribute to increase the knowledge of these animals extremely rich in narrow endemics, and to promote conservation action through Red Listing, mostly focused on species under threats like limestone quarrying or water pollution.

## Projected impact for the 2017-2020 quadrennium

Most cave-restricted and many deep soil species are narrow endemics and vulnerable to disturbance, but very few have been evaluated so far. During the 2017–2020 quadrennium, Red List assessment by CISG will increase significantly, with focus on the most critical sites on earth. This will allow us to provide validated information to the media, to stakeholders and to companies at the origin of the most important threats to this fauna. They will have full knowledge of the impact of their local activities on these biotas. A complementary objective will be to integrate, when possible, basic guidelines about the preservation of highly endemic cave-related fauna in the environmental policy of public and private companies, in first line quarrying companies.

## Targets for the 2017-2020 quadrennium

### Assess

Red List: (1) complete assessments of 132 cave Trechinae from China; (2) increase the number of cave invertebrate species assessed for the Red List, focusing on the most threatened; (3) upgrade the Brazilian cave species from national lists to the IUCN Red List; (4) complete assessments of 20 cave species from Maros karst, South Sulawesi; (5) complete assessment of six cave flatworm species from Italy; (7) complete assessments of several cave species from Georgia; (8) complete assessments of Remipedia; (8) complete assessments of Hon Chong karst species.

### Network

Membership: diversify membership for coverage of all subterranean invertebrate groups and all subterranean habitats.

Proposal development and funding: Tony Whitten fund for grants on cave biodiversity of Southeast Asia.

### Communicate

Communication: (1) develop our own website; (2) develop a virtual library in our own website.

Research activities: prepare a special issue of a taxonomic journal in honour of Tony Whitten.

Scientific meetings: (1) participate at the 21st International Conference on Subterranean Biology; (2) participate at the International Union of Speleology congress in Lyon (France); (3) conservation session and communications at the 25th Conference on Subterranean Biology in Romania.

Synergy: establish a network of regional contact persons for identifying and dealing with regional issues.



*Xuedytes bellus*  
Photo: Huang & Tian

*Libotrechus nishikawai*  
Photo: Huang



## Activities and results 2019

### Assess

#### Red List

- i.** A large portion of the assessments of cave Trechinae from China (N= 87, 66%) were completed and published in 2019, while others are still underway and are expected to be finished and published in early 2021. (KSR #2)
- ii.** Although upgrading of the Brazilian cave species from national lists to the IUCN Red List is an important task for the Group, in 2019 it was delayed due to the focus on initiating new assessments of cave-related taxa. (KSR #2)
- iii.** The expert is preparing the data needed for assessment of six cave flatworm species from Italy. The task is expected to be finished in 2021. (KSR #1)
- iv.** The expert is preparing the data needed for assessments of several cave species from Georgia. The task is expected to be finished in 2021. (KSR #1)

### Network

#### Membership

- i.** The CISG is no longer focusing on acquiring new members. The new member acquired in 2019 joined the Group on their own initiative. Specialists for all large cave groups are now represented among CISG members.

#### Proposal development and funding

- i.** From a large number of young candidates from Southeast Asian countries, six received a Tony Whitten Fund grant for small projects on taxonomy and conservation, mostly on South-east Asian karst invertebrates.

### Communicate

#### Research activities

- i.** The special issue of a taxonomic journal in honour of Tony Whitten is completed with 18 contributions and is expected to be published in the beginning of 2020. Although planned to be published in 2019, the large number of contributions extended the time needed to finish the publication. (KSR #43)

#### Scientific meetings

- i.** Registration for the 18th International Congress of Speleology, organised by the *Union Internationale de Spéléologie* (UIS), opens in 2020. We have initiated a session devoted to cave biodiversity and conservation. (KSR #28)

#### Synergy

- i.** Network of regional contact persons: to date, we have identified contact persons for a few regions, while others are still in progress. (KSR #29)

### Acknowledgements

Thanks to: the Toyota funding for the kick-off Red Listing workshop organised in Cambridge in January 2018 and associated assessment completion; the Global Wildlife Conservation and Fauna & Flora International (FFI) for the one-year grant awarded to Ana Komericki for her part-time work in CISG; FFI for financial support for publication of a special issue dedicated to Tony Whitten in the *Raffles Bulletin of Zoology*; all those who financially contribute The Tony Whitten Conservation Prize.

### Summary of activities 2019

Components of Species Conservation Cycle: 3/5

Assess	4	
Network	2	
Communicate	3	

Main KSRs addressed: 1, 2, 28, 29, 43

KSR: Key Species Result