IUCN SSC Cave Invertebrate Specialist Group



2018 Report



Louis Deharveng

Chair

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Location/Affiliation

(1) Museum national d'Histoire naturelle, Paris, France(2) JNCC, Peterborough, UK

Number of members

81

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 invertebrates associated with karst and caves habitats. Our goal is to contribute to increase the knowledge of these animals and plants 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.

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 own website; (2) develop virtual library in own website.

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

Scientific meetings: (1) participation at the 21st International Conference on Subterranean Biology; (2) participation at the International Union of Speleology in Lyon (France).

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

Pilosaphaenops whitteni Photo: Sunbin Huang





Activities and results 2018

Assess

Red List

- i. Eighty-seven species of cave Trechinae from China have been assessed and are under review; the remaining are under assessment. (KSR #2)
- **ii.** Increasing the number of cave invertebrate species assessed for the Red List, focusing on the most threatened, is under discussion with CISG members. (KSR #1)
- iii. We have completed a list of potential candidates for Red Listing of cave species from Maros karst, South Sulawesi, and are now waiting for their assessment by an Indonesian partner. (KSR #1)
- iv. Six cave flatworm species from Italy are under assessment. (KSR #1)
- v. A preliminary list of cave species from Georgia has been provided by our Georgian partner and discussed with him, and their assessment is about to be initiated. (KSR #1)

Network

Membership

i. Recruitment is in fact increasing naturally by requests of different specialists to join CISG, with no special campaign necessary.

Proposal development and funding

i. The first call for candidates of the Tony Whitten Fund for Grants on Cave Biodiversity of Southeast Asia for 2020 was launched in May 2018 to CISG members and labs working in the region.

Communicate

Communication

i. Human and financial resources to create and maintain a website are lacking; an offer to help by a US member is under discussion. (KSR #28)

Research activities

i. All 20 potential contributions to the special issue of *Raffles Bulletin of Zoology* (RBZ) have been received and reviewed; most have been accepted; we are waiting for revised manuscripts. (KSR #43)

Scientific meetings

i. Planned communications for the 21st International Conference on Subterranean Biology have been done and are available online at ARPHA (Authoring, Reviewing, Publishing, Hosting, Archiving). (KSR #28)

Synergy

i. CISG members of different regions agreed to act as focal group leaders (Balkans, France, USA); other contacts are under discussion. (KSR #29)

Acknowledgements

We thank the Toyota funding for the Red Listing workshop organised in Cambridge in January 2018 and associated assessment completion. Red-listing and other CISG tasks were done in close collaboration with Ana Komericki and Jut Wynne, appointed by IUCN as Programme Officers to the CISG. We thank Global Wildlife Conservation and Flora Fauna International for the one year grant awarded to Ana Komericki for her part-time work in CISG.

Summary of activities 2018

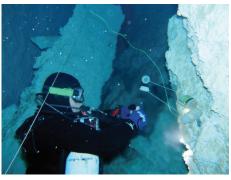
Species Conservation Cycle ratio: 3/5

Communicate 4 |||||

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

KSR: Key Species Result







Top: Collecting cave microfauna near a bait, Sulawesi Photo: Anne Bedos Middle: Traps for crustacean placed by divers in a cave sump, Vanuatu Photo: Franck Bréhier Bottom: Collecting cave arthropods

> near guano patches, Vanuatu Photo: Bernard Lips