

IUCN SSC Cave Invertebrate Specialist Group



2016-2017 Report



Tony Whitten



Louis Deharveng

Co-Chairs

Tony Whitten (1)
Louis Deharveng (2)

Red List Authority Coordinator

Sonia Khela (3)

Location/Affiliation

(1) Fauna & Flora International, Cambridge, UK
(2) Muséum national d'Histoire naturelle,
Paris, France
(3) JNCC, Peterborough, UK

Number of members

79

Social networks

Facebook account:
<https://www.facebook.com/caveinvertebrates/>
Twitter account:
hashtag #caveinvert



Mission statement

The Cave Invertebrate Specialist Group (CISG) is a global network of experts working on organisms associated to karst and caves. 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.

Main activities by Key Priority Area (2016 & 2017)

Barometer of life

■ Red List

i. We have completed assessments of 31 cave invertebrates and three plants from limestone caves of Hon Chong hills in Viet Nam, probably the most threatened karst on the planet. The assessments have involved nine specialists due to the diversity of concerned groups. (KSR #1)

Capacity building

■ Synergy

i. Programme Officer hired by Fauna & Flora International (FFI) with funds from Global Wildlife Conservation, who are funding half-time position as CISG Programme Officer (PO). PO is based in Phnom Penh, Cambodia, in FFI Cambodia office. PO duties include communication with members, preparing virtual database of cave biology related publications, presenting CISG in various workshops and meetings, engaging with experts on Red List assessments and work on enhancement of Group organization in collaboration with Group Co-Chairs.

Conservation action

■ Research activities

- i. Group Co-Chair Tony Whitten, initiated in 2016 a 2-year project funded by Critical Ecosystem Partnership fund (CEPF), implemented by Fauna & Flora International (FFI), on the subject of Ensuring Conservation Attention to Limestone Specific Biodiversity in South Sulawesi. During the project, biodiversity surveys of caves in the area were done and now the list of species to be assessed for the Red List is prepared by Indonesian expert, Cahyo Rahmadi. (KSR #32)
- ii. A field survey of the distribution of the cave beetle species *Superbotrechus bennetti* in its cave type locality and surrounding area (which are under road development) has identified that the species is still present in the area, and that the construction had no obvious negative impact on the species presence. The survey was financed by FFI Species Fund and conducted by Chinese cave biologists. (KSR #12)

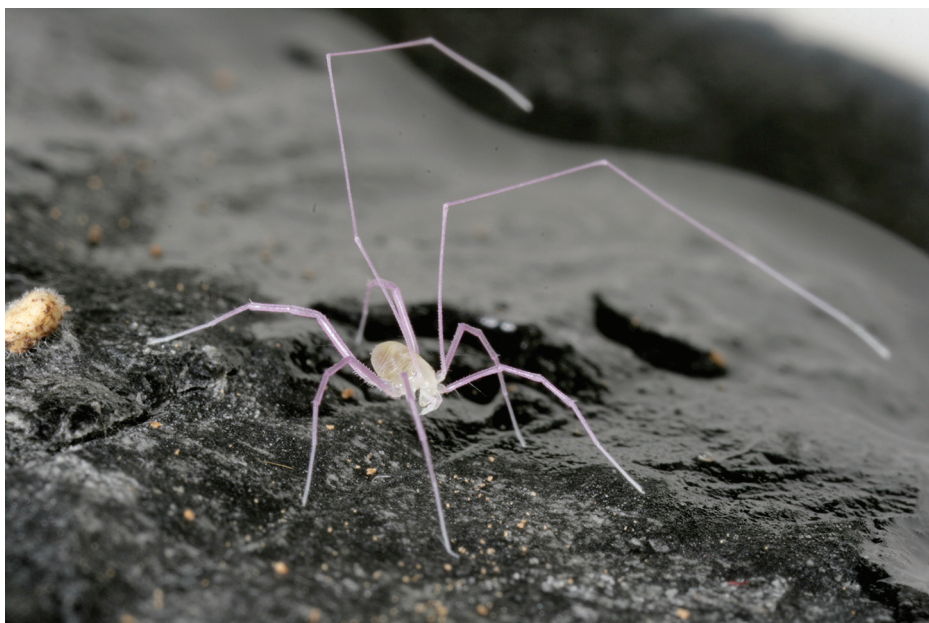
Acknowledgements

We thank the Global Wildlife Conservation for one year funding of the position of Programme Officer from September 2017, and Fauna and Flora International - Species Fund for funding research on potentially Critically Endangered cave beetle Bennet's Superb Cave Beetle, *Superbotrechus bennetti*. For endless enthusiasm and instigating the Group itself, we thank our Group Co-chair, Tony Whitten, who has passed away in November 2017.

Siamacarus sp. (5 mm without legs),
undescribed, terrestrial, Southern Vietnam caves
Photo: M. Lukic



Stenasellus sp. (15 mm), undescribed, aquatic,
Southern Vietnam caves
Photo: M. Lukic



Dongodytes baxian (7 mm),
terrestrial, South China caves
Photo: M. Y. Tian



Giant (30-40 mm) cave aquatic flatworm
(*Dendrocoelum regnardi*), SW France
Photo: M. Lukic



Yuukianura judithae (2 mm),
terrestrial, on guano, Vanuatu
Photo: B. Lips

Targets for the quadrennium 2017-2020

Barometer of life

Red List: (1) complete assessments of 132 cave Trechinae from China; (2) increase number of cave invertebrate species assessed for Red List focusing on the most threatened; (3) upgrade of the Brazilian cave species from national lists to IUCN Red List; (4) complete assessments of 20 cave species from Maros karst, South Sulawesi.

Communications

Communication: depending on available energies (1) develop own website; (2) develop virtual library in own website.

Research activities: preparing a special issue of a taxonomic journal (*Raffles Bulletin of Zoology*, Singapore) in the honour of Tony Whitten.

Scientific meetings: participation at the 21st International Conference on Subterranean Biology, including two communications, one poster and a meeting on conservation issues in subterranean habitats.

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

Increasing diversity of SSC

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

Projected impact for the quadrennium 2017-2020

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 to provide validated information to medias, to stakeholders and to companies at the origin of the most important threats on 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.

Summary of activities (2016-2017)

Key Priority Area ratio: 3/7

Key Priority Areas addressed:

- Barometer of life (1 activity)
- Capacity building (1 activity)
- Conservation action (2 activities)

Main KSRs addressed: 1, 12, 32

Resolutions 2016 WCC: 016

KSR: Key Species Result