

IUCN SSC Global Freshwater Macroinvertebrate Sampling Protocols Task Force



CO-CHAIR

John Simaika

IHE Delft Institute
for Water Education,
Stellenbosch, Delft,
The Netherlands



CO-CHAIR

Andreas Bruder

University of Applied
Sciences and Arts of
Southern Switzerland,
Bellinzona,
Switzerland

NUMBER OF MEMBERS

15

Mission statement

Invertebrates are functionally vital to aquatic ecosystems and can indirectly or directly affect human health and well-being. The IUCN SSC Task Force on Global Freshwater Macroinvertebrate Sampling Protocols (GLOSAM) aims to: (1) support the application of bioassessment based on benthic freshwater invertebrates, and (2) establish efficient bioassessment schemes through the standardisation and coordination of sampling protocols across countries.

Targets 2021–2025

ASSESS

T-002 Identify protocols used in other countries and regions and obtain copies for use in this project.

T-003 Establish global overview of macroinvertebrate protocols, including the history of their origin, regulatory context (constraints, traditions) and use.

T-004 Translate into English protocols that are written in a language other than English.

T-005 Participate in developing an agreed plan and timetable for completing the harmonisation of the protocols.

T-006 Participate in setting criteria for assessing the suitability of sampling protocols in biodiversity assessments of freshwater ecosystems.

T-007 Participate in developing guidelines for adjusting sampling effort in using suitable protocols for biodiversity assessments.

T-008 Evaluate one or more sampling protocols using the agreed criteria and guidelines. Adapt the criteria and guidelines based on case studies.

T-009 Contribute to the writing of the harmonised protocol document and a scientific manuscript describing these protocols and exploring their contribution to regional and global assessments of freshwater biodiversity.

T-010 Translate the harmonised protocol in other languages if this is a requirement for its adoption and application in other countries and regions.

NETWORK

T-001 Network within and beyond SSC. Grow membership of the Task Force.

T-011 Promote the harmonised protocol in respective countries, regions and networks.

Activities and results 2021

ASSESS

Research activities

T-002 (KSR 5)

Number of identified protocols: 50

Result description: Through its membership, GLOSAM has started to identify the protocols used in other countries. This task links with the target to 'Establish global overview of macroinvertebrate protocols'. The framework building for the review has already begun. GLOSAM is a small group, and therefore is working towards a resource-lean strategy for major tasks such as building a database of the protocols used worldwide and operationalizing case study areas.

NETWORK

Membership

T-001 (KSR 2)

Number of SSC members recruited: 15

Result description: The Task Force had its first meeting on 20 July 2021. GLOSAM started with 11 members. Three members are from the SSC, two of which are SSC Chairs: Craig Macadam, who co-chairs the Mayfly, Stonefly and Caddisfly Specialist Group and Mary Seddon, Chair of the Mollusc Specialist Group. Two members are the Co-Chairs of the Freshwater Biodiversity Observation Network (FWBON), Andreas



The endangered Ceres Streamjack (*Spesbona angusta*), a river pool specialist endemic to the Western Cape Floristic Region of South Africa
Photo: John P. Simaika



The Wit River (White River) of Bainskloof Pass, near Wellington, South Africa. This high elevation stream is home to a remarkably high number of aquatic macroinvertebrates found nowhere else in the world
Photo: John P. Simaika

Bruder (also Task Force Co-Chair) and Jen Lento. FWBON is a partner organization to GLOSAM. There are currently 15 members in the core group, representative of the main regions of the world. The core group, while now at its maximum, is in flux, with two of the original members having left due to work/life challenges. In the meantime, these members have been replaced by new experts. GLOSAM has also established an advisory to the core group (members who meet monthly and progress the SSC targets). Currently, GLOSAM has five advisors. The advisory consists of members who, when called upon, help give the Task Force strategic direction and advice. These members are required to join regular meetings not more than twice a year. By mid-2023, there will be 10 advisory members. The remaining 25 places for members are for non-core members. These Task Force members will be tasked with to advancing the case study work of the Task Force.

Acknowledgements

We would like to acknowledge an IHE alumni, Miral Adil, for designing GLOSAM's logo.

Summary of achievements

Total number of targets 2021–2025: 11

Geographic regions: 11 Global

Actions during 2021:

Assess: 1 (KSR 5)

Network: 1 (KSR 2)

Overall achievement 2021–2025:

