Mission statement

Our mission is to compile existing knowledge for ~2000 lampyrid species worldwide on their geographic range, population size, and population trends, to identify major extinction threats and risk factors, to increase public knowledge concerning firefly diversity, ecology and behaviour, and to promote long-term conservation efforts.

Projected impact for the 2017-2020 quadrennium

By the end of 2020, the Firefly Specialist Group (FSG) envisions: (1) compilation and publication of a global review of firefly extinction threats; (2) complete data compilation (extent of occurrence (EOO), area of occupancy (AOO), population size, risk factors) in preparation for Red List assessment for fireflies in certain regions (North America, others); (3) increased communication and educational initiatives through the newly announced World Firefly Day, the Selangor Declaration on firefly conservation, and awareness campaigns conducted in individual member countries.

Targets for the 2017-2020 quadrennium

Assess

Red List: (1) complete Red List assessments for a selection of 1–10 flagship species in one year; (2) complete global Red List assessments of 100–200 species for 2020; (3) develop and disseminate standardised methodologies for monitoring firefly species abundances.

Research activities: (1) develop a global distribution database for fireflies that includes relevant behavioural and life history data, then use this information to inform Red List assessments; (2) determine whether the congregating mangrove fireflies in Malaysia and other Southeast Asian countries could be used to establish Key Biodiversity Areas (KBAs); (3) develop a prioritised list of threats to firefly population persistence within different regions.

Network

Membership: recruit members and appoint regional coordinators.

Synergy: provide guidance and work with local communities to protect threatened species and prevent their extinction.

Communicate

Communication: (1) articulate and share guidelines to promote sustainable firefly ecotourism; (2) ignite public interest and garner local and regional support for firefly conservation and management; (3) develop a medium to track FSG activities and keep members updated; (4) post information about the FSG on the Fireflyers International Network (FIN) website: https://fireflyersinternational.net

Technical advice: disseminate technical information and advice about firefly conservation issues to interested parties.

Activities and results 2020

Assess

Research activities

i. ~130 North American species assessments were submitted to the Red List Unit in December 2020. (KSR #1)

ii. Workshops to determine whether the congregating mangrove fireflies in several Southeast Asian countries could be used to establish KBAs are planned for 2022. (KSR #14, 22)

Network

Membership
i. Thirty-two members recruited from five regions, including new members from Israel, Korea, Brazil, and mainland China; Anna Walker (New Mexico BioPark Society) joined as Project Manager.

Synergy
i. We provided guidance and worked with seven groups to protect threatened species and prevent their extinction. (KSR #15)

Communicate

Communication
i. One guideline to promote sustainable firefly ecotourism was submitted for publication in Conservation Science and Practice. (KSR #15)