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, 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) information about the FSG posted 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 2019

Assess

Research activities

i. Global distribution database for fireflies that includes relevant behavioural and life history data: Checklist sent in by members from Taiwan, Korea, North America, Japan, Central America, Papua New Guinea/Pacific Islands, Bangladesh, Indonesia, India, Philippines, and Australia. This was not entered into the database; it was compiled by the Red List Authority. (KSR #1)

ii. A preliminary KBA for mangrove fireflies workshop was held in July 2019 in Malaysia; we planned a Southeast Asian workshop in Thailand in 2020. (KSR #14, 22)


Network

Membership

i. We have recruited four new members; recruitment is ongoing.

Synergy

i. In Malaysia, formation of the Firefly Komuniti network is involving local communities in firefly conservation, outreach and monitoring as well as tourism. Sharing sessions took place during the annual get-together. (KSR #15)

Communicate

Communication

i. Facebook pages: Fireflyers International; Silent Sparks: The Wondrous World of Fireflies. (KSR #28)

Technical advice

i. The firefly conservation guidelines prepared in cooperation with The Xerces Society have been published: Fallon, C., et al. (2019). Conserving the Jewels of the Night: Guidelines for Protecting Fireflies in the United States and Canada. Portland, Oregon, USA: The Xerces Society for Invertebrate Conservation. (KSR #26)

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Summary of activities 2019

| Components of Species Conservation Cycle: 3/5 | Assess | 3 ⬠ | Network | 2 ⬠ | Communicate | 2 ⬠ | Main KSRs addressed: 1, 14, 15, 22, 26, 28 |

KSR: Key Species Result