State of the Fireflies of the United States and Canada:



Twice-Wounded Firefly

THREATENED & NEAR THREATENED SPECIES PROFILE

Candace Fallon, Anna Walker, Sara Lewis, and Sarina Jepsen

This species profile was compiled based on information gathered from the IUCN Red List assessments and augmented with new information that has become available since its publication. Full Red List assessments (including range maps) are available at www.iucnredlist.org/.

KEY TO SPECIES PROFILE

Conservation Status

IUCN—Red List ranking

NS—NatureServe Global (G), National (N), and Subnational (S) Conservation Status Rank:

GX NX SX	Not located despite intensive searches and virtually no likelihood of rediscovery
GH NH SH	Known from only historical occurrences but still some hope of rediscovery
G1 N1 S1	At very high risk of extinction or collapse
G2 N2 S2	At high risk of extinction or collapse
G3 N3 S3	At moderate risk of extinction or collapse
G4 N4 S4	At fairly low risk of extinction or collapse
G5 N5 S5	At very low risk or extinction or collapse
GNA NNA SNA	A conservation status rank is not applicable because the species or ecosystem is not a suitable target for conservation activities
GNR NNR SNR	Global rank not yet assessed
GU NU SÚ	Currently unrankable due to lack of information or due to substantially conflicting information about status or trends
G#G# N#N# S#S#	Numeric range rank (e.g., G2G3, G1G3) is used to indicate uncertainty about the exact status of a taxon or ecosystem
	type

SGCN—Species of Greatest Conservation Need, legal designation by state

US ESA—Species' legal status under the US Endangered Species Act

Male Size Ranges

The documented size range for males of each species has been provided in the profiles as follows:



With the smallest size in grey () superimposed over the largest size in green (). When printed at 100% scale, the bars match the lengths provided.

Habitat Threats

Pollution Excess light Energy & mining & run-off

Agriculture Crop

systems Livestock & pasture

loss Trampling / crushing

Habitat

Habitat Loss, Degradation, Fragmentation

Urban & residential development

Commercial &

development



Drought

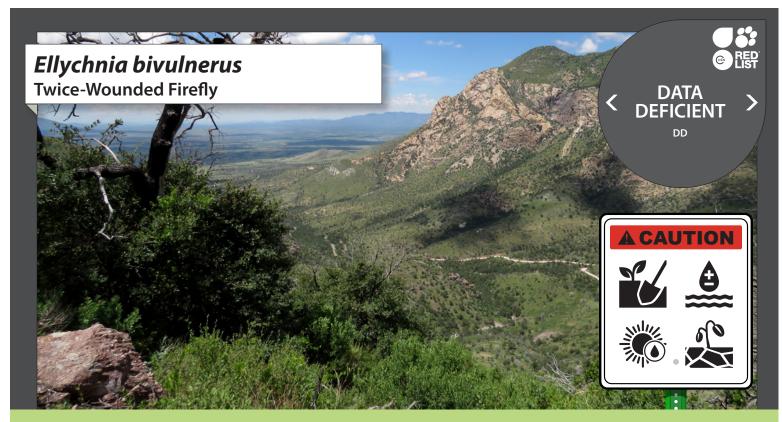
Climate

change

Climate & Severe Weather Severe storms & flooding

Rising temperatures

Water quality



E. bivulnerus (below) is known from Arizona's sky islands, including the Huachuca Mountains (above), (Photos: Katja Schulz / Flickr [above] and Mike Quinn / BugGuide [below and on cover]).

Conservation Status

» IUCN: DD» NS: GU, SNR (AZ)

» **SGCN:** None

» US ESA: Not listed

Distribution

USA—Arizona

Taxonomic Note

This species is also known by the synonym, *Photinus bivulnerus*.

Description

This diurnal firefly is known from oak woodland habitats at 4,000 to 6,000 ft. elevation in the Madrean Sky Islands of southern Arizona. Habitat loss and degradation are likely the main threats to this firefly, although climate change and associated drought are of growing concern.



7.5-8.5 mm

Flash Pattern & Activity Period

This is a daytime dark firefly species that likely uses pheromones to find mates. Although records are scarce, adults appear to be active in July and possibly in June and August. Winged adults of both sexes have minute light organs, which are not known to be used in courtship.