State of the Fireflies of the United States and Canada:



Dot-Dash Firefly, Pennsylvania Firefly

THREATENED & NEAR THREATENED SPECIES PROFILE

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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 SU	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.

Commercial &

development

Habitat Threats

Pollution Excess light Energy & mining





Habitat loss Trampling / crushing



Habitat Loss, Degradation, Fragmentation

Water quality

Climate & Severe Weather

Climate change



Severe storms & flooding Rising



temperatures



Conservation Status

» IUCN: VU » **SGCN:** Delaware

» **US ESA:** Not listed

» **NS**: G₃?; S₁S₂ (DE), SNA (NY, WV), SNR (DC, MD,

NJ, PA, RI), SU (VT)

misidentified species [below]. (Photo: Jim Mullhaupt / Flickr [above]; Jim White [below and on cover].)

Distribution

USA—Delaware, Maryland, New Jersey, New York,

Pennsylvania

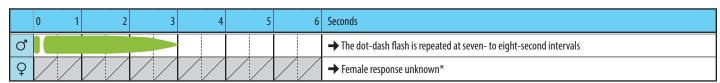


The dot-dash firefly is a habitat specialist associated with high quality tidal and non-tidal freshwater wetlands, such as shrub and forest acidic seepage swamps, emergent marshes, fens, fresh-water tide marshes, and floodplains.

The main threat to this species is habitat degradation due to sea-level rise, development, and invasion of the non-native plant, common reed (Phragmites australis), which can overtake this species' wetland habitats and make them uninhabitable for the firefly.

Flash Pattern & Activity Period

Adults are active in June and July an hour after sunset until midnight. Males emit a characteristic greenish dot-dash flash pattern, comprised of a quick flash followed by a long flash that lasts up to three seconds.



Due to the aggressive mimicry utilized by some "femme fatale" firefly species—some of which have been documented using multiple flash-pattern responses—it has been difficult to determine which flash-patterns are used to attract mates or, alternately, to lure in unsuspecting prey males from other firefly species.

