

State of the Fireflies of the United States and Canada:



Florida Intertidal 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:

9–10 mm



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

<p>Pollution</p> <ul style="list-style-type: none"> Excess light Energy & mining Pesticides & run-off 	<p>Agriculture</p> <ul style="list-style-type: none"> Crop systems Livestock & pasture 	<p>Habitat Loss, Degradation, Fragmentation</p> <ul style="list-style-type: none"> Habitat loss Trampling / crushing Invasive species 	<p>Commercial & development</p> <ul style="list-style-type: none"> Commercial & development Urban & residential development Water quality 	<p>Climate & Severe Weather</p> <ul style="list-style-type: none"> Climate change Severe storms & flooding Rising temperatures Drought Sea level rise
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Micronaspis floridana
Florida Intertidal Firefly



◀ **ENDANGERED** ▶

EN



One of the species' localities in Cedar Key, Florida [above]; *Micronaspis floridana* adult [below]. (Photos: Rain0975 / Flickr [above]; Drew Fulton [below and on cover].)

Conservation Status

- » **IUCN:** EN
- » **NS:** G1G2; S1S2 (FL)
- » **SGCN:** Florida
- » **US ESA:** Not listed

Distribution

USA—Florida; Bahamas

Description



8–12 mm

True to its name, the Florida intertidal firefly inhabits the intertidal zone of salt marshes, mudflats, and mangroves in coastal areas. It occurs along the Florida coast and on some northern islands of the Bahamas. Adults can be active year-round, but particularly from March through May.

This species is threatened by coastal development, light pollution, agricultural activities, and pesticides. Mangroves are among the most endangered coastal habitats in Florida, and many have already been decimated, potentially leading to the decline of this species. Sea-level rise and increasing frequency and severity of hurricanes and other storms may also pose a threat. Several populations in Florida now appear to be locally extinct.

Flash Pattern & Activity Period

Adults may be found year-round but peak activity is in March–May with displays starting 40–90 minutes after sunset. Males emit short single or bimodal yellowish-green flashes every couple of seconds; females respond with prolonged, modulated glow-flashes lasting up to a minute.

	0	1	2	3	4	5	6	Seconds
♂								→ Single flash over half a second, repeated every 1 or 2 seconds
♂								→ Double flash over half a second, repeated every 1 or 2 seconds
♀								→ Response glow for up to a minute