https://phys.org/news/2019-12-delaware-firefly-gulf-coast-bee.html

## Delaware firefly, Gulf Coast bee move toward endangered species protection

by Center for Biological Diversity

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The U.S. Fish and Wildlife Service announced today it will move forward with considering Endangered Species Act protection for the <u>Bethany Beach</u> firefly and Gulf Coast solitary bee.

Both coastal species face increasing threats from climate-driven sea-level rise, unchecked coastal development and pesticides.

Today's positive findings come in response to petitions filed earlier this year by the Center for Biological Diversity. Protecting the two insects under the Endangered Species Act would be a historic first for both for fireflies and native, solitary bees in the continental United States.

"This is great news for these two imperiled insects, but we can't prevent their extinction without actually giving them the emergency-room protection that only the Endangered Species Act can offer," said Dr. Tara Cornelisse, a scientist at the Center who was lead author of the petitions. "We're losing insects across the globe, and our rapidly declining fireflies and native bees desperately need our help right now."

The rare Bethany Beach firefly has been documented at only seven sites along the Delaware coast—virtually all of them smaller than a football field. The wetland area that is home to the firefly's largest-remaining population is currently being developed.

By the time the Gulf Coast solitary bee was discovered by scientists in 1993, it was found only in 15 locations from the <u>coast</u> of Mississippi to near Panama City, Florida. In 2012, when the last Florida-wide count was conducted, only 47 individuals were documented at just six sites.

The Fish and Wildlife Service found that protecting the Bethany Beach firefly may be warranted due to several ongoing threats, including wetland conversion and light pollution.

The Gulf Coast solitary bee may be listed as threatened or endangered due to loss of its single host plant, the Coastal Plain honeycomb head.

Both species are also threatened by the failure of current state and regional regulatory mechanisms to protect the insects adequately.

Protecting insects under the act is an important piece of saving the world's insects from what is increasingly understood as an insect apocalypse caused by habitat loss, pesticides, climate change and other threats. Recent evidence shows that more than 40 percent of insect species could be facing extinction.

"In a time when they need all the help we can give, protecting imperiled insects under the Endangered Species Act is vital," said Cornelisse. "Unless the firefly and bee are protected, they'll become victims of the perfect storm of climate change, pesticides and poorly planned coastal development."

The service will now initiate a scientific status review and public comment period before making a final decision on whether to protect the firefly and native bee.