

# 'On a mission': the peculiar life of the endangered golden sun moth

Elliot Williams • November 25 2018 - 12:00AM

Imagine living for just five days, not being able to eat anything and having to produce up to 300 babies. Plus, the number of places you can live keeps shrinking.

That's the whirlwind life of the golden sun moth, the critically endangered insect that calls Canberra home.

Late November is peak sun moth season as the gold and black-winged creatures leave their underground homes and emerge to mate.

But ACT Parks and Conservation ecologist Brett Howland said there's a catch. They only have between three and five days to secure a mate and breed before they will die of starvation.

The golden sun moth lives for years as a larvae underground, feeding on the roots of certain native grasses, primarily varieties of wallaby grass.

However when they emerge as fully grown moths they have no mouths. They cannot feed and must rely on their fat stores which run out in a matter of days.



A female golden sun moth at Macgregor. Photo: ACT Parks and Conservation



A male golden sun moth at Jerrabomberra Wetlands. The male does not have the bright golden wings like the female. Photo: ACT Parks and Conservation

Dr Howland said the moth had become critically endangered because of a lack of suitable habitats, with the larvae thriving in grasslands with short grasses meaning appropriate grazing management was crucial.

At least three high profile developments in Yarralumla and Barton have hit hurdles in past because they are proposed on land which is home to the sun moths.

The moths only appear under very certain conditions during late November and early December, he said. It must be a hot day, with no rain or wind and they'll only fly roughly between 10am and 2pm.

"They really make it hard for them to find each other," Dr Howland said.

The females are the more attractive of the species, Dr Howland said, boasting the big golden wings from which they derive their name. They tend not to fly, preferring to perch on the ground as the, primarily black, males will fly in search of a suitable mate.

"When you see them they look determined," Dr Howland said.

"They're just searching for one thing, definitely on a mission."

According to Dr Howland, one quirk that had evolved from the lack of native wallaby grasses is that the moths discovered Chilean needle grass, an introduced species.

He said it was a unique situation where a native species had adapted to thrive on a weed, but the only issue was Chilean needle grass is incredibly destructive to native flora.

Another problem with the moth is that people often dispute its status as an endangered species.

"This species in its natural habitat, you can have so many they'll be bouncing off your windshield," Dr Howland said.

"What we have to remember is they've lost 90-95 per cent of their habitat and then they are only in certain spots where they do have suitable habitats.

"So they're common where they're found but they aren't found commonly."

A spokeswoman for the National Capital Authority advised the three developments - [Yarralumla's Canberra Brickworks](#), the proposed [Bangladesh High Commission](#) and Barton's proposed [Department of Finance building](#) - were still without approval.

The brickworks development requires both NCA and ACT government approval and has not progressed beyond geotechnical surveys. No application has been made regarding construction of the Bangladesh High Commission and a decision on the finance department's application to remove vegetation has not yet been made.

Dr Howland said if you wanted to spot the golden sun moth around Canberra the next two weeks would be the time to do it. He suggested Mulanggari and Crace grasslands in Gungahlin, Jerrabomberra grasslands and Jarramlee offset area west of Macgregor as good spots to find the moths.