

Oak processionary moth

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Species Description

Scientific name: *Thaumetopoea processionea*

Native to: Central and southern Europe

Habitat: Closely associated with oak trees, but occasionally observed on other broad leaved species, e.g. sweet chestnut, hazel, beech, birch and hornbeam

Adult flies July to September, it is well camouflaged against the bark of an oak tree and therefore can be difficult to spot. Its wingspan is 30-40mm, mottled grey wings with a comma shaped marking on centre of forewing.

Caterpillar is seen from May to July, it has a grey body and dark head, with long white hairs protruding from reddish-brown warts along length of body. Older caterpillars have a dark stripe along middle of back and whitish line along each side. Usually found living and feeding on oak trees, clusters together while feeding and forms nose-to-tail processions while moving.

Nest are made from distinctive white silken webbing and positioned on trunks and branches of oak trees. They range in size from a few centimetres wide to stretching several feet up the trunk. Nests are accompanied by white, silken trails on trunks and branches, both nest and trails discolour after a short time which makes them more difficult to see.

Oak processionary moth was first introduced to Great Britain in 2006 through the importation of contaminated oak plants from continental Europe. In 2020 a nest was discovered in Dublin on recently planted oak trees imported from Belgium, however this nest has since been eradicated. It has now again been discovered (June 2023) in a housing estate in Dublin, nests and four trees have been removed. Where large populations occur, they can strip a whole oak tree bare, leaving them more vulnerable to other pests, diseases and stresses.

Oak processionary moth is a health risk to humans and animals who come in contact with the hairs of older caterpillars. They can cause skin and eye irritations, sore throats, breathing difficulties and, rarely, allergic reactions.

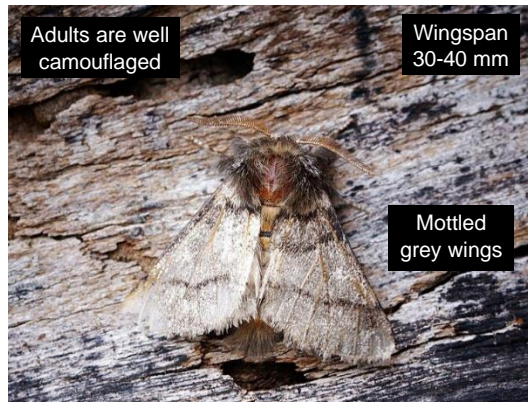


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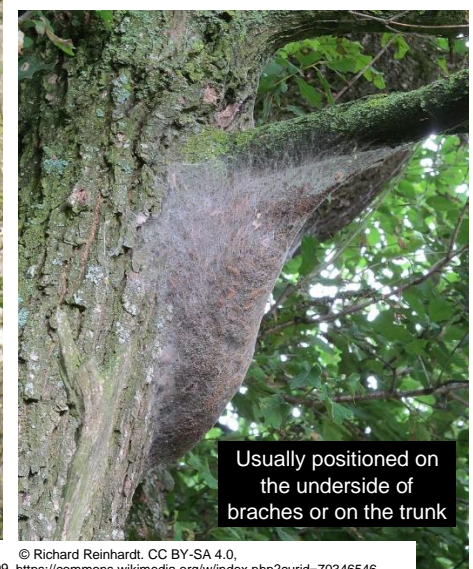
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Suspected sightings in Ireland should be treated with extreme caution and notified immediately to the Department of Agriculture, Food and the Marine with your contact details and geolocation of the sighting by emailing: plantandpests@agriculture.gov.ie or by telephone 01-505 8885.

Identification throughout the year

Caterpillars are generally seen from May – July and have a distinctive habit of moving in nose-to-tail processions in late spring and early summer. Nests are built in early summer. Adults can be seen from July – September.

Health risks

There is no health risk posed from moths (the adult form of the species). Health risks are caused by tiny hairs from older caterpillars, which when threatened or disturbed can be shed. The hairs can be blown by the wind and accumulate in nests which can fall to the ground. The risk of exposure to these hairs is highest in May and June.

If you believe you have found an oak processionary moth caterpillar or nest, keep a safe distance and please report it immediately.

Report sightings in Ireland to DAFM by emailing plantandpests@agriculture.gov.ie or by telephone 01-505 8885.

Similar Native Species

The caterpillars of oak processionary moth are highly distinctive due to the long white hairs and reddish-brown warts. However, some look-a-like caterpillars are pictured below with further details provided in the table on the next page. Adults of the Oak Processionary are similar to other moth species and are difficult to accurately identify.

Lucky moth caterpillar

Malacosoma neustria



© Steve Bennett ukmoths.org.uk

Gypsy moth caterpillar

Lymantria dispar



Small ermine moth caterpillar

Yponomeuta species



Small eggar moth caterpillar

Eriogaster lanestris



© Jennifer Wiggins ukmoths.org.uk

Vapourer moth caterpillar

Orgyia antiqua



© Ian Kimber ukmoths.org.uk

Buff-tip moth caterpillar

Phalera bucephala



Distribution

OPM caterpillars were recorded on one oak tree in Dublin in 2020 and on four oak trees in Dublin in 2023. The nests and trees were destroyed.

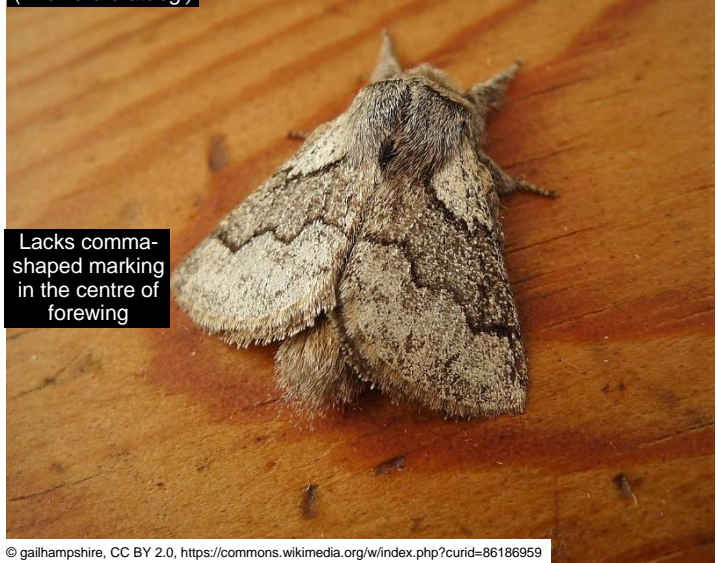


Source: Biodiversity Maps Ireland
<https://maps.biodiversityireland.ie/Species/78906>
Website to be updated with new 2023 sighting.

Similar native adult moths

Pale eggar

Native
(*Trichiura crataegi*)



Lacks comma-shaped marking in the centre of forewing

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References and further reading:

Booy O., Wade M. and Roy H. 2015. Field Guide to Invasive Plants and Animals in Britain. Bloomsbury. London. CABI datasheet - *Thaumetopoea processionea* (oak processionary moth) available <https://www.cabi.org/isc/datasheet/53502>.

This identification guide is adapted from the Northern Ireland Environment Agency's [ID Guide](#) and with information the Forest Research: [Native species that may be mistaken for oak processionary moth - Forest Research](#) (Open Government Licence v3.0).

Expanded details on similar moth species and their caterpillars are provided in the table on the next page.

This table can be used to identify suspect OPM caterpillars. The important characters for identification are in bold. Sizes represent the usual range for caterpillars when encountered, they may be smaller than this in some situations

Name	Hosts and time of year	Nest	Caterpillar
Oak processionary moth	Only on oak , caterpillars build nests May-July, but nests may be found year-round.	Small to large rounded nest on the trunk or branch of the host tree.	Dull , grey-brown to black with pale underside. Hairs are extremely long and pale. Small , 20-30mm.
Lackey moth  © Steve Bennett ukmoths.org.uk	Wide variety of broadleaved trees and shrubs, including oak, in April-June.	Nest spun between host twigs in a tent shape.	Brightly coloured with blue, orange and white stripes. Short ginger hairs. 40-55mm.
Gypsy moth 	Wide variety of broadleaved trees and shrubs, including oak. April-July.	No nest built , but usually found in groups. 20-50mm long egg mass may be mistaken for nest.	Young caterpillars black, but bright blue and orange warts on grey background on mature caterpillar. 10-50mm.
Small ermine 	Broadleaved shrubs and small trees, not found on oak . April-June.	Sheet nest across large areas of the host.	Pale cream to yellow usually with black spots, but variable. Hairless. 15-20mm.
Small eggar  © Jennifer Wiggins ukmoths.org.uk	Generally hawthorn and blackthorn, rare on other broadleaves. Not found on oak , April-July.	Nest spun between host twigs in a tent shape.	Dark with orange-red tufts of hair with white outlines on the body. 30-50mm.
Buff-tip 	Broadleaved trees including oak. July-October .	No nest built but social when young.	Dark but with thin yellow stripes and bands, including a V on the head. Short pale hairs. 30-60mm.
Vapourer  © Ian Kimber ukmoths.org.uk	Wide variety of trees and shrubs, rarely oak. May-September .	No nest, not social .	Colourful but variable. Four pale tufts of hair toward the head and two pairs of forward or side-facing black tufts distinctive. 20-40mm.