

August 8, 2022:

In the Bangor area, the female adult moths have laid their eggs and completed their life cycle. We have not seen a moth in over a week. It is now safe to turn on your outside lights at night, again, without fear of attracting these moths to your property!

Anecdotally, the adult moth population seemed much less noticeable this year in Bangor. I took note of the number of adult moths around a security light that was on every night at Public Works and there were never more than 10 moths on any given morning. Our Service Request/Reporting system seems to support this as we only received 2 reports of moths in the month of July this year versus 57 reports last July. As I mentioned previously, I witnessed several caterpillar deaths earlier this year, due to fungal infection. This was just prior to the cocoon stage. I'm hoping the low moth observations may be due to a high death rate as they were entering cocoons. That is a very unscientific theory and is likely just hopeful thinking on my part.

Though I haven't witnessed any egg sacs starting to hatch in Bangor, the Maine Forest Service has been seeing young caterpillars starting to feed around the State. They are very small (less than 1/4" long) and hard to spot but they leave behind a telltale sign – skeletonized leaves.

These small caterpillars do not shed hairs like the larger ones and, therefore, do not pose a high risk to people. We are unlikely to be bothered by their hairs for the balance of the year. However, I am seeing a lot of old cocoons that still have tightly clumped leaves. When/if these open, they will likely release toxic hairs into the air. If you are trimming branches and disturb these cocoons, hairs from the caterpillar may emerge and cause problems for you. Similarly, if you are mowing your lawn or we experience strong winds, hairs that fell to the ground may get stirred up and cause problems.

Pesticide treatment this time of the year isn't recommended due to the way these young caterpillars feed coupled with the difficulty in identifying where they are active. If you choose to apply pesticide, please do so carefully or hire a State of Maine licensed pesticide applicator to minimize impact to non-target insects. Again, our best and safest bet to reduce the number of caterpillars and their toxic hairs next year will be winter web clipping after the caterpillars spin their winter nests.

You can always find the latest information about browntail moth in Maine by visiting the Maine Forest Service Knockout Browntail Moth page at [Browntail Moth *Euproctis chrysorrhoea* : Forest Health & Monitoring: Bureau of Forestry: Maine DACF](#)

July 6, 2022 Update:

<https://youtu.be/IAOnnW6ykQI>

Adult browntail moths have begun to emerge from their cocoons over the last few days in Bangor. You will see the

white moths have gathered on walls and objects each morning, nearly anywhere there is an outside light left on overnight. This will be especially true on the west side of the city where surveys have indicated a much more robust BTM population. As more of the moths leave the cocoon their numbers will grow and they will become much more noticeable.

Insect traps, bug lights, and other methods of attracting and catching the moths is sure to be ineffective and are more likely to encourage the female moths to lay eggs on your property. The use of bug zappers may also reduce the population of parasitic flies and wasps that are natural enemies of the BTM. The best thing you can do is to turn off your outdoor lights between 9:00 pm and midnight, when the moth is most active.

The City of Bangor has streetlights all over the city and most of these are adjacent resident properties. We will not be turning off these lights, in the interest of public safety. Additionally, there are not enough Electrical Division staff to turn off even a fraction of the lights before the BTM lays its eggs and dies. Future plans for street lighting include remote control options that may allow for dimming during certain hours. Unfortunately, we are not there at this time.

Stay tuned to this page for periodic updates about BTM in Bangor. For more information on the statewide BTM problem, please visit the Maine Forest Service Knock Out Browntail webpage.

June 23, 2022:

Our observations in Bangor indicate that browntail moth is currently entering pupal (cocoon) stage. There are very few feeding larvae (caterpillars) being observed at this point. This means the caterpillars will not be actively shedding their barbed and toxic hairs into the environment much longer. The caterpillar hairs will be encased in the cocoon as it transforms into the adult moth. In July we should see moths emerging from the cocoon to mate. The good news is that the adult moth does not shed these toxic hairs. The bad news is that the process of breaking out of the cocoon allows the hairs from their old caterpillar body can be released into the atmosphere where they can affect people.

The adult moth is very recognizable with bright white wings and a brown fuzzy tail poking out from under the wings. The moth is attracted to lights at night, especially between 9:00 pm and midnight. If residents turn off their porch lights they can avoid attracting the moth to their property. The male moth will cluster around lights and the females will hang back in tree foliage close to the lights. Residents can remove clustered moths (and caterpillars) using a vacuum with HEPA filter and a few inches of soapy water, allowing them to drown in the water for a few days before disposing of them. Removing the moths may feel satisfying but, unfortunately, it is not an effective population control method. The moths that cluster around lights are male and we will never be able to remove enough of them to prevent the females from mating and laying their eggs.

The moths will be laying eggs sacs of approximately 200-400 eggs in August. The eggs will hatch approximately 2 weeks later. These caterpillars will feed on leaves, and you will see skeletonized leaves on affected trees. These trees will end up with winter webs in mid-late October as the caterpillars prepare for winter. During this early feeding period the caterpillars will shed hairs, but the effect doesn't seem to be as severe as in the spring.

Despite the fact that there will be fewer hairs being actively shed by caterpillars, there are still plenty of hairs already in the atmosphere, ready to cause a rash. These hairs will eventually be washed out of trees and into the soil but they remain active there. Raking your lawn, digging a hole, mowing, leaf blowing, etc. can all disturb these hairs and cause them to become airborne again. We recommend that people survey the area where they plan to work or recreate and look for signs of the browntail moth. Trees with old winter webs and cocoons made of leaves and silk are telltale signs that the caterpillar has been active there. If you must be in that type of tree, please take precautions to prevent a rash. Working after a rain, or when there is heavy morning dew, when trees and the ground are wet means, the hairs are less likely to become airborne. Long sleeves, long pants, socks that cover your ankles, closed toe shoes, gloves, and a hat with a brim that covers your neck are all methods of preventing the hairs from landing directly on your skin. Once you leave the affected area you should remove these clothes and put on fresh clothes. This will prevent hairs from moving through the clothes and being forced into your skin. Washing or showering with cool, soapy water can wash the hairs off your skin before they can get into your pores. Some people have experienced success with application of pre-contact poison ivy wipes and similar barrier creams on exposed areas of skin.

The City of Bangor is performing some very limited scope testing of pesticides to identify effective treatments. There will also be a winter web clipping program on public property again in the winter of 2022-2023. The City of Bangor has no program to provide browntail moth mitigation services on private property.

We encourage people to report browntail moth sightings whether they be caterpillars, cocoons, moths, or winter webs. Reports can be entered through our website at [Request for Service - City of Bangor, ME \(bangormaine.gov\)](https://www.bangor.gov/request-for-service).

These reports are mapped with time/date stamps to allow us to gather real-time data that will help us determine the scope of the problem and develop cost effective counter-measures.

Please check in on this page regularly for updates. You can also monitor the Maine Forest Service website at [Browntail Moth Euproctis chrysorrhoea : Forest Health & Monitoring: Bureau of Forestry: Maine DACF](https://www.maine.gov/forestland/forestry/bureau-of-forestry/) for more frequent updates regarding the problem statewide.

May 24, 2022:

Browntail moths in the Bangor area have now exited their nests. Trees with winter nests are likely to be covered with tiny caterpillars that are growing fast. The recent windy weather has knocked a lot of the caterpillars out of trees so you may see a lot of them on the ground under the canopy of the tree, too.

It is well past the point where nest clipping is effective; the nests are now empty. Residents experiencing a large number of BTM caterpillars on their properties have a few options:

1. Call a license insect pesticide applicator to apply pesticide to your affected trees
2. Responsibly apply pesticide, yourself, to your affected trees
3. Pray for a wet month of June to allow the natural enemy of the BTM caterpillar, entomophaga aulicae fungus, to proliferate and kill the BTM

Pesticide application is most effective when the BTM caterpillar is small, so now is an ideal time to treat trees. Please be safe, follow all instructions to protect yourself, and only use in a prescribed manner.

If you have BTM caterpillars on your property and you are stuck dealing with them, please be careful to minimize contact with the irritating hairs. Don't try to clean them up with a leaf blower. Don't mow on dry days. Don't stand under or near infected trees on windy days.

If you do get some hairs on you, or feel the telltale itch, immediately wash the affected area with cold soapy water to wash away as many of the hairs as possible. Avoid hot water as that will open your pores for the hairs to enter. Local pharmacies also sell creams to alleviate the symptoms of the rash.

There is a wealth of knowledge regarding the BTM on the Maine Forestry Service [website](https://www.maine.gov/forestland/forestry/). When you do see outbreaks of moths you can report them to the city, for mapping purposes, through the SeeClickFix app or through the Service Request [page](#) on the City of Bangor Website.

The City of Bangor is not applying pesticides to public properties due to the wide variety of people who use them. While a homeowner can easily determine pesticide sensitivity of those who use their property, this is not something that can be easily determined for public properties across the City. While BTM exposure is unpleasant, we do not want to inadvertently cause an adverse reaction in individuals who are sensitive to pesticides, especially children. Additionally, the City of Bangor will not be applying pesticides to trees on private property.

January 6, 2022:

The City of Bangor has initiated the browntail moth winter operations plan. This includes a survey to determine the extent of the browntail moth infestation on public property, which will be used to guide our winter web clipping efforts. Once the survey is completed the Public Works and Parks & Recreation departments will send out teams to start clipping browntail moth winter webs in parks, roadsides, and other public properties.

Winter web clipping is a very impactful way to limit the spread of the browntail moth. The larvae are very small at this stage, they have not begun to molt, and their webs are tightly woven, which keeps all the caterpillars contained inside. Each web contains up to 400 caterpillars, each having the ability to massively defoliate trees, pupating into moth form, and laying up to 400 more eggs. Each web clipped could potentially prevent up to 160,000 more caterpillars from munching on our trees next year!

Residents can do this same thing to protect their own property. We encourage residents to look at trees on their own land to see if there are winter webs present. The Maine Forest Service (MFS) created a nice video to help you identify the winter webs, clip them, and dispose of them. <https://www.youtube.com/watch?v=L6VmwsXE3lg&t=4s> [embed?]

If you are unable to remove winter webs yourself and would like assistance, MFS has assembled a list of State of Maine licensed arborists here, https://www.maine.gov/dacf/mfs/forest_health/documents/arborists_prune_btm_webs.pdf

If you would like to speak to a State of Maine licensed pesticide applicator about your browntail moth problem, MFS has assembled a list of companies who are willing to treat for browntail moth here, https://www.maine.gov/dacf/mfs/forest_health/invasive_threats/browntail_moth_pesticide_applicator_info.htm

Maine Forest Service also has a page that helps you identify browntail moth winter webs versus abandoned webs of the fall webworm or eastern tent caterpillar. https://www.maine.gov/dacf/mfs/forest_health/insects/browntail_moth_id_winter_nests.htm

Their browntail moth webpage has a wealth of information and will be a great resource if you want additional information about the browntail moth and other methods of management. https://www.maine.gov/dacf/mfs/forest_health/invasive_threats/browntail_moth_info.htm

Lastly, we also ask that residents report their winter web sightings through the city's service request page, <https://bangormaine.gov/request>. By reporting the location of winter webs under the "Browntail Moth Reporting" type of issue, you will help us track the extent of their spread and aid in future planning. Remember, the city is unable to aid residents in removing winter webs on private property but the information regarding their location is still helpful.