Damage:

The caterpillars feed on the leaves of many hardwood trees and shrubs. Common host trees and shrubs include:

- Oak, apple, crabapple, cherry, hawthorn, shadbush, serviceberry, and rugosa rose.

Feeding by browntail caterpillars can cause reduced growth and branch dieback. A number of years at high population levels can lead to mortality of trees and shrubs.

Identification:

***Browntail Caterpillar*:**

- Dark brown with a broken white stripe on each side and two conspicuous red spots on the back. They grow to 1.5 inches (3.8 cm) in length.

Look-a-likes:

- **Eastern tent** caterpillars have a solid whitish line down the middle of the back with a row of oval pale blue spots on each side and are covered with long brown hairs.

- **Gypsy moth** caterpillars have pairs of blue and red spots along their back and are covered with long brown hairs.

***Browntail Moth (adult)*:**

- Only seen in July and August. Both sexes of the browntail moth have snow white wings and a tuft of dark brown hair on the tip of the abdomen.



http://maine.gov/dacf/mfs/

Life Cycle: *Browntail moth (Euproctis Chrysorrhea)*

◊ One generation a year.

◊ Four life stages; egg, larval, pupal, and adult.

◊ Larval stage (caterpillars) lasts from August through to the following June.

◊ In the spring, as soon as the earliest leaf buds open, the caterpillars become active and leave their overwintering webs to feed on tender new leaves. They may devour the leaves as fast as the leaves develop.

◊ When young, the caterpillars return to the webs at night, but later remain out on the leaves overnight, and are fully grown by late June.

◊ The caterpillars then form filmy cocoons between leaves on trees, under eaves, picnic tables, decks, etc.

◊ Adult moths emerge from cocoons in late July and August, laying clusters of eggs on the underside of leaves. The moths are strongly attracted to light.

◊ Caterpillars emerge from the eggs in August and feed on the upper side of the leaves of host trees.

◊ In the fall, colonies of caterpillars build winter webs on the tips of branches. The webs are made from leaves tightly wrapped with white silk. There can be 25 to 400 or more caterpillars in each web.

◊ The caterpillars overwinter within the 2-5 inch (5-10 cm) winter webs. **The webs are found most often on red oak or apple trees.**

Maine Forest Service
(207) 287-2431
www.maineforestservice.gov
Maine Board of Pesticides Control
(207) 287-2731
thinkfirstspraylast.org

Browntail Moth



http://www.maine.gov/dacf/mfs/

Why are they a problem?

The browntail caterpillar has tiny (0.15 mm) hairs that on sensitive individuals cause a skin rash similar to poison ivy and/or trouble breathing.

The microscopic hairs break off the caterpillars and are everywhere in browntail infested areas; on trees, lawns, gardens, decks, picnic tables and in the air.

The hairs can remain toxic for up to THREE YEARS so although the problem is worst from May to July, they may cause a reaction at other times of year as well.

Wind or activities such as mowing, leaf-blowing, etc., can stir up the hairs, leading to a reaction.

The rash and trouble breathing can last anywhere from a few hours to several weeks. It is caused by both a chemical reaction to a toxin in the hairs and physical irritation from the barbed hairs. Contact your physician if a reaction is severe.

www.maine.gov/forestpests#btm

Browntail Precautions

- **Avoid places heavily infested by caterpillars**
- Take a **cool shower and change clothes** after activity that might involve contact with hairs
- **Dry laundry inside** during June and July to avoid hairs getting onto your clothing
- **Use caution** cleaning debris left by caterpillars because the toxin is extremely stable and remains a hazard for a number of years.
- In heavily infested areas, **wear respirator, goggles, and coveralls** (tightly sealed at neck, wrist, and ankles) when:
  - ∗ Mowing, raking, weed-whacking,
  - ∗ Removing webbing, or
  - ∗ Performing any activities that stir up browntail caterpillar hairs
- **Perform the above tasks on damp days or wet down material** with a hose as moisture helps minimize contact by keeping the hairs from becoming airborne.
- **Consult a physician** if you develop a severe reaction

Browntail Control

Non-chemical:

- Clip overwintering webs and destroy by soaking in soapy water or burning. (Wear gloves!)
- Clip webs in the winter and very early spring: October to mid-April.
- If caterpillars are on structures hose down with water and vacuum up with a **HEPA filter vacuum**.

Chemical:

- Look for a licensed arborist/pesticide applicator; licensing ensures they have specialized training and equipment to do the job properly.
- If making a DIY pesticide application on your own property, select a pesticide product carefully:
  - Ensure the intended site is listed on product label,
  - Always **FOLLOW LABEL INSTRUCTIONS**,
  - Preferably, choose a product that lists browntail moth on the label.
- Treat before the end of May to prevent development of the toxic hairs.
- Pesticide use within 250' of marine waters is restricted.

Identifying Winter Webs

Browntail overwinters as colonies of caterpillars in white silk tightly woven around a leaf or leaves in trees or shrubs. These webs contain 25 to 400 caterpillars, are spun in the early fall, and remain firmly attached to the **tips** of small branches all winter. The webs are often confused with silken structures formed by other less serious species of moths.



***Browntail winter web description**:*

- 2-5 inches (5-10 cm) long
- white silk **tightly** woven around a leaf or small number of leaves
- string of white silk tying leaf petiole to twig
- small brown hairy **caterpillars inside** dense silk web
- on branch **tips** of oak, apple, crabapple, cherry, shadbush and rugosa rose (occasionally other trees as well)

Often mistaken for browntail webs: Old fall webworm webs are formed by caterpillars in late summer, engulf the foliage and can become 2 to 3 feet (61-91 cm) long. By mid-fall the caterpillars have left the nests. During winter, the webs often hang loosely from branches.



- Hanging off of branches but NOT at branch tip
- Variable length, 3-24 inches (7-60 cm)
- **Loosely** tied mat of white or grey silk and debris
- Not associated with a leaf - any leaves caught in the web not tied to twig
- Caterpillars not present in web in late fall/winter/spring
- On wide variety of deciduous hosts, especially ash and oak

Remnants of old tents of the **eastern tent caterpillar** can also be mistaken for browntail winter webs. These webs are built in the **crotches** of branches on wild cherry and apple trees in late April and May and may be a foot or more long when fully formed. Eastern tent caterpillars are present in their webs from late April to June.

What eastern tent caterpillars look like:



Spring tent



Old tent in fall/winter

Source: Maine Forest Service