

The Big, Stinging, and Hungry Caterpillars of the East Coast September 23, 2005

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The Big Bugs of Fall!

How big are “Big Caterpillars?” Some of these caterpillars reach lengths of 4 - 5 inches and some of them look like they were designed by creative artisans. We really do have some spectacular, eye-catching, giant caterpillars that are active in the landscape in the late summer to early fall. Most of these large caterpillars are members of the giant silkworm family called “Saturniidae”. This is a pretty appropriate name for these large caterpillars since Saturn is the second largest planet in our solar system.

When your customer sees a large caterpillar, like the imperial moth, chomping down on their white pine their first reaction to these giant caterpillars may be less than favorable. You can assure them that even though these insects are big and eat a fair amount of foliage their impact on most trees and shrubs is minimal. These giant silk moth caterpillars tend to be solitary feeders and the population is relatively small in most landscapes.

Here are some of the really big caterpillars found in landscapes in August through October:

Imperial moth, *Eacles imperialis*. We had reports of this caterpillar feeding on white pine in the metropolitan area in the fall of 2005. Though they are large, the damage to the white pine is minimal. The caterpillar is green with short, stiff whitish spines covering the body. There are pairs of short yellow colored spine near the head capsule. The spiracles on the side of the abdomen are bright yellow and are somewhat oval shaped.



Imperial moth

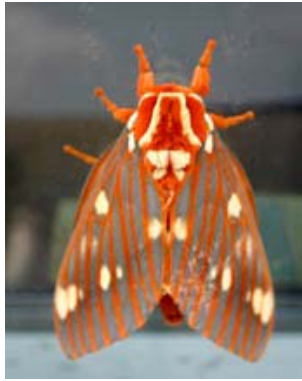


Imperial moth caterpillar

Hickory Horned Devil, *Citheronia regalis*

“Hickory horned” is a good description for this large caterpillar. It is a slightly scary looking caterpillar with large colorful spikes on the dorsal, front side of the body, just behind the head capsule. It is up to 5” in length and an attractive bluish green color. If you handle this caterpillar roughly it will often bend its body back trying to use its spines to discourage any rougher handling. The caterpillar feeds on hickory and walnut trees. The caterpillar is found wandering across lawns in fall looking for a location to create a silken cocoon and pupate. It will spend the

winter in the pupal casing and emerge as a beautiful orange and yellow regal moth with a wingspan of 5 – 6”.



Regal moth



Hickory horned devil caterpillar

Cecropia moth, *Hyalophora cecropia*

This cecropia moth caterpillar is big (3-4” long) and covered with spines that are rounded like balls or knobs stuck on the tip of a spike. The balls/knobs have small spikes on them and spike-balls are orange to red in near the head capsule followed by yellow then blue colored spike-balls. The caterpillar is a general feeder and is found feeding on a wide range of landscape plants. We have had reports of them feeding on viburnum, dogwood, lilac, ash, plum, apple, cherry, and maple. The damage to most plants is not significant. The cocoon containing the pupal case is often found attached to the twigs of small shrubs. This caterpillar becomes a large colorful moth with large eye spots on the wings. The wing span can be 5 – 6”.



Luna moth, *Actias luna*

The larvae of luna moths are bright green with a yellow line running down the side of the caterpillar’s body. This caterpillar feeds on nut trees and is occasionally found feeding on beech trees. This caterpillar is 2 - 3” in length and lacks the spines found on the hickory horned devil and cecropia moths. The adult stage of this silk moth is beautiful. It is a lime green color with eye spots on the fore and hind wings. The moths can be found in summer and are attracted to lights at night.



Male luna moth



Luna moth caterpillar on maple

Stinging Caterpillars to Watch Out For in the Landscape

We only have a couple of stinging caterpillars in United States but the ones we have leave a lasting impression. The saddleback caterpillar, *Sibine stimulea*, is one of the brightest colored stinging caterpillars found in the USA. Its distribution is throughout the east coast of the United States. The larvae can be found feeding on several herbaceous annual and perennial plants such as *Astilbe*, obedient plant, dahlia, canna and phlox, to name a few. The larvae are very distinct in coloration. The larvae are brown with a pronounced bright lime-green saddle covering the center of the body. The caterpillar has hair-like spines that connect to poison glands. Four very prominent projections with spines are found on the anterior and posterior of the caterpillar. If you have gloves on you can pick up the caterpillar and examine it closely. If you look at the bottom of the caterpillar you will notice that it has a slug-like ventral side (bottom). The larvae can be found feeding on a number of weed and cultivated herbaceous perennial species. The damage to plants from feeding is generally insignificant. The sting from the spines on the body of the caterpillar is painfully unforgettable. This is a great caterpillar to examine in the landscape but avoid physical contact with the caterpillar unless you have protective gloves.

Is control needed for these caterpillars?

There are plenty of caterpillars that we need to control in landscapes, such as gypsy moths and clearwing moth borers. The giant silk moths and the saddleback caterpillars are just interesting caterpillars that you will encounter in landscapes but do not need to control. Educate your customers that some bugs are just interesting and should be left alone and enjoyed.