

Look, up in the sky. It's a bird; no, it's a plane. No it's Super— no, it's a sphinx moth.



It may not be Superman, but it's definitely a super moth. Perhaps you have noticed, early in the morning or about dusk, sphinx moths darting about your flowers with their wings beating so rapidly that all you see is a blur. They scurry from flower to flower, and while hovering very much like a hummingbird, they inject their long beak-like mouth parts, called a proboscis, into the nectaries of flowers, ingesting the sweet nectar. Sphinx moths, also called hawk moths, are frequently

titled hummingbird moths because their feeding habits are reminiscent of hummingbirds. They are not birds; but rather they are insects. Interestingly, all sphinx moths start out as eggs, change to caterpillars and eventually undergo complete metamorphosis reaching the adult stage as moths. About 125 species of sphinx moths inhabit North America. One widespread species in Central Nebraska is the *Hyles lineata*, commonly called the white-lined sphinx moth. Another, called *Manduca quinquemaculata*, is also widespread, and is a major garden pest during its caterpillar stage. This nemesis is better known as the tomato hornworm.

Although most adult sphinx moths are relatively large, it's during their caterpillar stage they are exceptionally large. At maturity, caterpillars often measure nearly three inches in length and one-half inch in diameter. Depending on the species, the caterpillars appear in an assortment of bright colors and patterns. One common characteristic of all sphinx moth caterpillars is a hornlike appendage growing on the dorsal, posterior-end of the worm — thus giving it the name hornworm. When encountered, hornworms appear somewhat intimidating,

but, in reality, their horn is not a stinger —rather it is a harmless, flexible appendage.

Although the tomato hornworm and a few other species are harmful, most hornworm species cause insignificant plant injury. Tomato hornworms feed on tomatoes, eggplants, peppers, potatoes and a few weeds, all which belong to the plant family *Solanaceae*. Because of their size, this garden pest can quickly defoliate plants. Tomato hornworm is difficult to see because of its protective coloring and because it often feeds on interior parts of the plant to avoid direct sunlight during the day. Hornworm damage usually begins in midsummer and continues throughout the remainder of the growing season. Before frost, the hornworm drops from the plant and enters the soil where it pupates over the winter. The following growing season it emerges as an adult moth and spends its adult life feeding on the nectar of flowers, mating, and laying eggs on host plants.



Because the tomato hornworm and other hornworms are so large, the easiest and most effective way to get rid of them is to handpick them as soon as they are detected. Either squash or drop them into a bowl of soapy water. A bad infestation can be treated by applying BT (*Bacillus thuringiensis*). If tomato hornworm is a problem year after year, try rototilling the soil either in late fall or in spring before you plant--this will usually destroy the pupae in the soil.

Like Clark Kent (better known as Superman) needs to change his clothing and appearance in order to fly, so also does the hornworm.

Look again, up in the sky. It's a bird; no, it's a plane. No it's super moth — better known as sphinx moth, hawk moth or hummingbird moth.