

# IDENTIFICATION SHEET

## HUNTING BILLBUGS (*Sphenophorus venatus*)

### EGGS

Bean-shaped and creamy-white in colour when first laid. Females deposit eggs at the base of suitable turfgrass plants.

### LARVAE

Slightly curved and grub-like. Thick-bodied, creamy-white in colour with light brown head capsules. They can look like White Grub larvae but lack legs. Billbug larvae appear to undergo five to six instars (developmental stages), but only the last instars are easily found. At present, there is no way to easily identify different billbug larvae to species without genetic fingerprinting, a time-consuming and costly procedure. Adults are required in order to determine the species.

### PUPAE

Often slightly longer than the adults and formed in chambers located at the base of the thatch layer and 1-2cm into the soil. Cream-coloured at first, darkening to red-brown before the adults emerge.

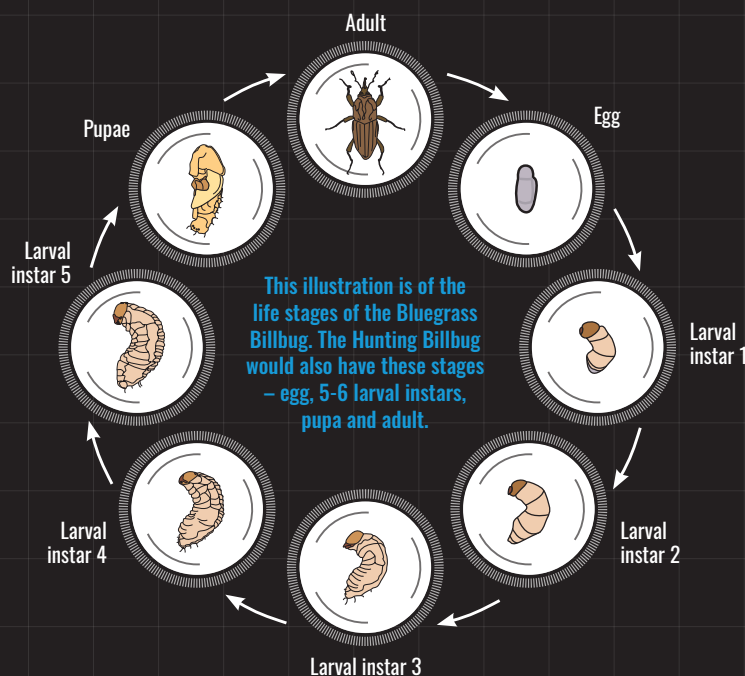
### ADULTS

Elongated weevils that have a combined length of the pronotum (the prominent plate-like structure that covers all or part of the thorax) and head, almost equal to its wing cover length. The head is elongated into a distinctive snout or bill. Often a red-brown colour when they first emerge, but can darken to almost black with time. In some populations, adults may remain a dark brown colour. Clay often sticks to the body which can cause them to look a light tan colour.

### LIFE CYCLE

The annual life cycle can vary considerably from year to year and by country. In temperate zones it appears that adults are the main stage that overwinters. The adult female can lay eggs from early spring into mid-summer. The larval and pupal development often requires 50-60 days, so new adults can appear while some of the overwintered adults are still present. Depending on the temperature, these new adults may lay eggs or go into dormancy until the following spring.

In zones where turf is rarely subjected to freezing temperatures, both larvae and adults can be present. In such situations, up to two generations can be completed during warmer months and if the turf is regularly irrigated, significant numbers of first and second generation adults can be present and laying eggs late in the season. This can result in very high larval populations and severely damage turf during cooler dormancy periods.



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