

A Fast Start Followed by a Slow but Steady Spring: What Does it Mean for Insects This Year

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It seems like there are no two years alike! Last year at this time we were about 2-3 weeks behind on growing degree-day units. And, this year, we are about 2-3 weeks ahead. So, what does it all mean, and how will it affect the insect populations this year? The answer to this question is not as simple as one may think. There are several factors that contribute to insect development and population density. Insects are cold-blooded animals that are dependent on temperature for biological activity, most insects are inactive at temperatures below 50 F.

In theory, one would expect insects to begin developing sooner and more quickly if temperatures are above 50 F° earlier than normal. So far, we have accumulated approximately 350 GDD units, and we had only about 100 GDD units at this time last year. This is over a 3.5 X increase! Despite this occurrence, nature somehow seems to find a way to get things back to “normal.”

Last year Japanese beetle adults did not begin to emerge and fly until the first week in July, they typically emerge in late-June. Although the adult beetles emerged later than “normal” last year, GDD units rapidly increased and accumulated in July and August, thus the grubs developed and occurred when we would typically expect.

While we are measurably ahead on the buildup of GDD units so far this year, the accumulation has been relatively



Japanese beetles look menacing when they are “pile up” mating or feeding. Grub control should be applied when the adults are first seen for best control.

slow but steady (consistent) since we experienced the rapid accumulation in March. If we continue to experience the current trend of temperatures and we do not experience any abnormally high heat-unit accumulation, the emergence of Japanese beetle adults will likely be a week or two earlier this year. Consequently, we may see Japanese beetle adults beginning to emerge around the second week in June.

So, what does this mean for your management approach or strategy for managing insect pests such as the Japanese beetle? The appropriate IPM strategy would be to monitor the emergence of Japanese beetle adults by either using pheromone traps or simply observing the preferred hosts for the presence of Japanese beetle adults. As soon as Japanese beetles adults are caught in traps

or observed on plants, respective preventative white grub insecticide treatments should be applied. Be sure to apply an adequate amount of post-treatment water (about 0.10-0.20 inches) immediately following the insecticide application.

Should you decide to forgo a preventative application and go with a curative or rescue treatment, understand that smaller grubs (younger) are much easier to control than larger (older). Because most curative or rescue grub insecticides have a relatively short-residual activity (< 15 days), make sure to closely inspect the turf for the presence of young larvae to ensure maximum control. The bottom line regarding the impact of a fast start followed by a slow but steady spring is that it can be challenging to predict how it will ultimately affect insect pest populations and subsequent damage. Therefore, make sure to regularly monitor and sample for respective insect pests to accurately determine the appropriate management or strategy timing to ensure the greatest likelihood of success.



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