

Alfalfa Weevil Appearing Early This Year

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An overall mild winter has prompted earlier than normal activity of alfalfa weevil. Degree day (heat units) for alfalfa weevil development has accumulated rapidly over the past couple of weeks. Degree days for the far southern half of the state has exceeded 300 (**fig. 1**). This is the point, after scouting begins, visible signs of early damage can start to be seen.

Alfalfa Weevil Advisor

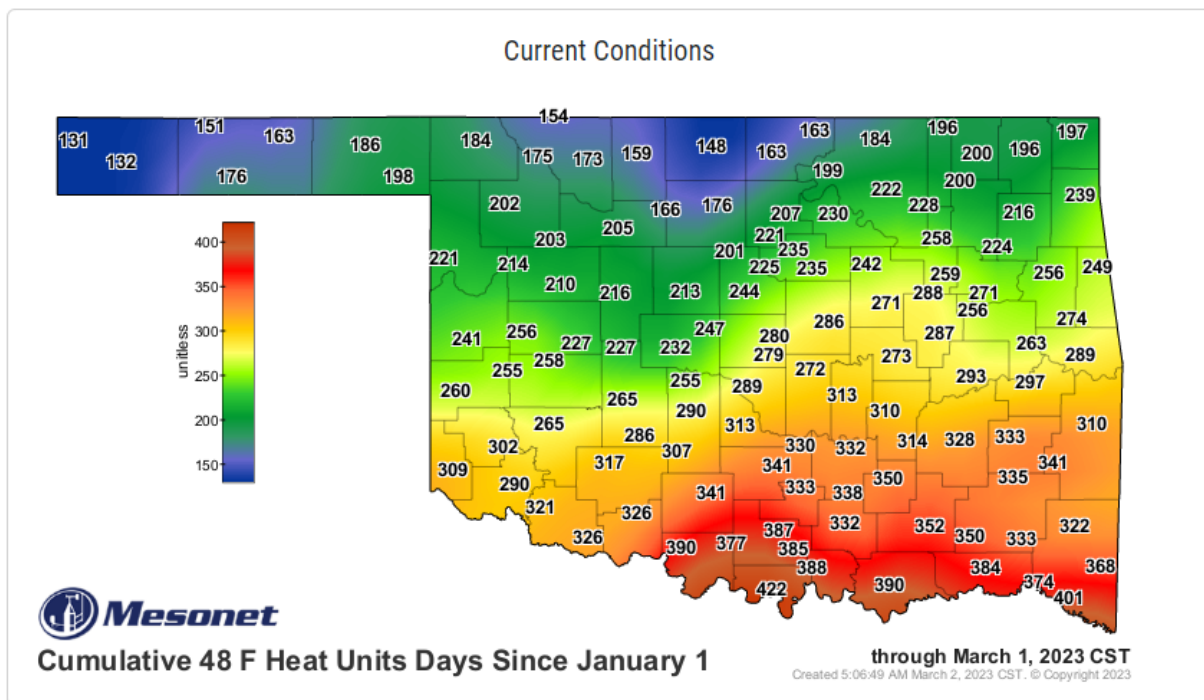


Figure 1. Oklahoma Mesonet.

I have gotten reports of early insecticide applications already being made in counties near the south-central part of the state, where degree days are around 330. At this point most of the larvae found are small, producing light feeding damage. These small larvae may be hard to see, spending their early development (1st instar) in the plant terminals (**fig. 2**), before progressing to leaf feeding and subsequent plant defoliation (**fig. 3**) in later instar stages (2-4). Due to the earlier than normal activity, plant growth is minimal at this point, only having 1.5 -2.0 inches of new growth.

In most years, we are making first threshold applications mid to late March with plant height of about 6-10 inches. Depending on sampling variables, this would normally equate to ≈ 1

larva/stem. With lower plant height and less leaf material, threshold levels can be reduced dramatically. With current plant height, a level of .5 larva/stem or less might warrant an application. A recommendation chart for scouting can be found in CR- 7177, Scouting for the Alfalfa Weevil in Oklahoma.



Figure 2. Small larva in plant terminal.

Photo Credit: Michigan State University.



Figure 3. Plant damage as larvae increase in size.

Photo Credit: Hay and Forage Magazine.

Ready or not alfalfa weevil season is here. As weather permits more activity will occur as temperatures exceed 48 °F. Current forecasts are for somewhat normal condition for the next several days, then cooler/wet conditions toward the end of next week. The cool down and wet weather may help to suppress activity for a time, but as temperatures warm, activity will continue. It is unclear at this point how long the season will stretch out. Weather will dictate a lot of the forthcoming activity.

With application options limited, one early season strategy to consider is a low cost pyrethroid application while larvae are small and more vulnerable. Then, as more growth occurs and if needed, coming back with a different MoA product such as (Indoxacarb) later in the season. A list of currently labeled pyrethroids for alfalfa weevil control can be found in CR-7150, Alfalfa Forage Insect Control. *Please note, I am in the process of updating the above report. Products containing (chlorpyrifos, e.g., Lorsban and Cobalt) can no longer be used.

Monitor degree days in your area and start scouting when appropriate. Pay attention to weather events and have a plan in place when application time comes.