

James DeMasi
City of Lander
Weed and Pest
Supervisor

Mosquito Report
June 24, 2013



As July approaches and we leave June behind, it is time to start talking about the mosquito spraying (adulticiding) schedule for the 2013 mosquito season. This spring and early summer has seen tremendous effort and time invested in the prevention of adult mosquito populations (larvaciding) that exceed our predetermined thresholds for nuisance and disease. My department has dedicated roughly 60 man hours a week since the early spring isolating and treating those mosquito development sites that pose the biggest threat. Naturally, we are unable to locate every site or get a “100%” larval kill at every location. It is these variables that eventually call for an adulticiding program. This program takes effect once those aforementioned “predetermined thresholds” are surpassed. As the program here in Lander is a disease vector and nuisance program, those thresholds are determined by sound judgment and reasonable apprehension of the risks involved. This year the trap threshold (how many mosquitos are found in a trap in a given night) has been set at fifteen mosquitos per trap. I have set up a trap pattern that evenly spaces and triangulates the town of Lander (about 7 traps) which is set up every Monday night, and collected every Tuesday morning. Once a trap has been collected, the number of mosquitos is counted, and the West Nile Virus vector (*Culex Tarsalis*) isolated. The West Nile vectors are then tested to determine what level (if any) of West Nile Virus can be detected. This testing process is called a RAMP test, and yields numbers that indicate how much West Nile (and how developed) is in a certain population of test subjects. The Wyoming Mosquito Management Association (WMMA) has adopted a threshold for West Nile Virus at a RAMP reading of 50. This number was moved up only this year from a previous reading of RAMP 30. In the past this program has begun its emergency vector control program at a RAMP reading of 30. This threshold is determined by the status of “high risk area” that Fremont County has based on previous years and cases of West Nile Virus. This emergency threshold will be determined according to the judgment of the City Council.

This year’s schedule for Adulticiding will depend every week on the numbers that the traps yield. The only exception to this rule will be the “pre-Fourth of July” spray that will happen on the second of July (Tuesday). This spray happens every year due to the influx of people spending time outdoors on the Fourth of July. The risk factor becomes much higher with the greater number of people (especially children) visiting Lander for the holiday. With the risk factor increased, the threshold that determines whether or not we adulticide naturally decreases. We will normally spray this summer on Thursday nights (both the North and South side of town). As for the time, it will always be after sunset (on the second of July around 9pm) to completely ensure the safety of bees in town. We will try and be as consistent as possible concerning our route and timing every Thursday, but this of course will be subject to unforeseen variables. If there are any questions concerning the schedule, reasoning, or method of the adulticiding program, please E-mail me at jdemasi@landerwyoming.org or call me at 332-6408.