

Adulticiding Factor Analysis Guidelines*

AFA Low – Total Range from 6 - 9

AFA Medium – Total Range is from 10 – 14

AFA High – Total Range is from 15 – 18

Value

Soil and precipitation conditions have resulted in a cumulative total of less than 2.5 cm of rain and soil saturation is not occurring over the past 7 days.	1
Soil and precipitation conditions have resulted in a cumulative total of between 2.5 cm and 7.5 cm of rain and soil saturation is beginning to occur over the past 7 days.	2
Soil and precipitation conditions have resulted in a cumulative total of greater than 7.5 cm of rain and soil saturation has occur over the past 7 days.	3
Insert value of 1, 2 or 3	
Degree day model (base 14.3 degrees Celsius) threshold is equal to or less than 110.	1
Degree day model (base 14.3 degrees Celsius) threshold is between 110 and 200.	2
Degree day model (base 14.3 degrees Celsius) is greater than 200.	3
Insert value of 1, 2 or 3	
Probability of nuisance adult mosquito emergence in 7 days is small.	1
Probability of nuisance adult mosquito emergence in less than 7 days is increasing.	2
Probability of nuisance adult mosquito emergence in less than 3 days is imminent.	3
Insert value of 1, 2 or 3	
Nuisance mosquito percentages are stable and numbers average 200/trap/night ¹ or less in the 5 CDC/CO ₂ traps for 2 consecutive days.	1
Nuisance mosquito percentages are stable and numbers average more than 200/trap/night in the 5 CDC/CO ₂ traps for 2 consecutive days.	2
Nuisance mosquito percentages are high and are substantially greater than the average of 200/trap/night in the 5 CDC/CO ₂ traps for 2 consecutive days.	3
Insert value of 1, 2 or 3	
Monitoring of the larval development sites indicate less than 25% of mosquitoes at the 1 st to 4 th stage of larval development and no pupae are present in water bodies.	1
Monitoring of the larval development sites indicate less than 25-50% of mosquitoes at the 1 st to 4 th stage of larval development and pupae are present in water bodies.	2
Monitoring of the larval development sites indicate less than 50% of mosquitoes at the 1 st to 4 th stage of larval development and many pupae are present in water bodies.	3
Insert value of 1, 2 or 3	
Average life span of actively feeding nuisance mosquito adults is decreasing.	1
Average life span of actively feeding nuisance mosquito adults is increasing.	2
Average life span of actively feeding nuisance mosquito adults is from a recent emergence or a new generation has emerged.	3
Insert value of 1, 2 or 3	
Total AFA Value	

* Modified from the Pesticide Use Permit issued to the City of Winnipeg, Insect Control Branch.

¹ Converted from the City of Winnipeg's average of 25/night for New Jersey Light Traps with a 25 watt bulb. A conversion factor of 8x was used for CDC/CO₂ traps, see Copps, P. 1983. Habitat Distribution of Mosquitoes in Southern Ontario with an Assessment of Adult Trapping Techniques. M.Sc. Thesis, University of Guelph. 60 pp.