

## Gas Traps

Thursday, 26 July 2007

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**Mosquito Trapping Devices** Many mosquito trapping devices are based on generating carbon dioxide (CO<sub>2</sub>) to lure the mosquitoes to the device. Once in the vicinity of the fan on the device, the mosquitoes are sucked up into the device and into a collection bag where they will die. These devices retail for \$300.00 - \$1400.00 for the initial investment.

The CO<sub>2</sub> baited traps will catch mosquitoes. However, even an impressively large collection, a "bag full", may be a minute percentage of all the blood-seeking females in the area and this will not likely impact large populations of mosquitoes. There are no peer-reviewed, scientific publications that show the devices to be effective for actually controlling mosquitoes, reducing their populations, or reducing biting rates under the range of conditions likely to be found in different homes. Until such scientific evidence exists, one must be careful to avoid unrealistic expectations for these devices as an effective mosquito control strategy for individual homes.

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Some advertisements claim that the trap will decimate a mosquito population in 4 - 6 weeks. The life span of an adult mosquito varies with species and temperature, but populations of many mosquitoes that are the target of these devices will often begin to decline naturally within a few weeks if left alone, particularly if rainfall is intermittent and if professional mosquito control is conducted in the area. There is no evidence at this time that mosquito traps can play a noticeable role in the decline of mosquito populations.

There may be circumstances where the mosquito trapping devices can indeed reduce mosquito-biting activity in a small area for a specific time period. Several factors would have to be optimal for this to be true:

- There should be little wind to disrupt the attractive CO<sub>2</sub> cloud.
  
- The mosquito numbers are low to begin with.
  
- The attractant plume of CO<sub>2</sub> is large enough to outcompete other attractants, i.e., the attraction of groups of people or animals.

As with other such products, "buyer beware" is still good advice. The only available information on how well these devices work are testimonials from those who have purchased them. Such testimonials do not incorporate controlled studies or proper data analysis.