How to set up a Mosquito Larva Trap and Background Information

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During a talk by Douglas W. Tallamy, an entomologist at the University of Delaware, he suggested controlling mosquitos at the larval stage. Controlling mosquitos at the adult stage requires spraying periodically and the sprays that are used are such a high concentration that they kill all insects, not just mosquitos. Spraying for mosquitos results in a loss of beneficial insects as well as nuisance insects.

Beneficial insects such as bees and butterflies and their larva are being eliminated at an alarming rate. Insects are at the base of the food web; without them, birds and other creatures that rely on insects as food are challenged to find enough food for themselves and their young. When sprayed insects are eaten, the insecticide can build up in predators and affect their health.

This trap works because the adult mosquitos are drawn to the fermenting solution and they lay their eggs. The mosquito dunk that is added has a biological bacterial control that ONLY affects mosquitos. Dr. Tallamy noted in an email that this affects only aquatic Dipteran.

I have tried this method at home in Northern Virginia and in Maine (we vacation close to the water and I placed a bucket under the outdoor table). We have seen an impressive lack of mosquitos and pleasant times outdoors. I am a believer.

Dr. Tallamy has graciously given me permission to include this section from his book, *Nature's Best Hope*, on page 210:

Oppose mindless mosquito spraying by your township or HOA. Contrary to what the fogger operator may have told you, the pyrethroid-based insecticides used by mosquito foggers indiscriminately kill all insects, not just the mosquitos. Ironically, targeting adult mosquitos is the worst and by far the most expensive approach to mosquito control, because mosquitos are best controlled in the larval stage. Put a five-gallon bucket of water in a sunny place in your yard and add a handful of hay or straw. After a few days, the resulting brew is irresistible to gravid (egg-filled) female mosquitos. After the mosquitos have laid their eggs, add a commercially available mosquito dunk tablet that contains *Bacillus thuringiensis* (Bt), a natural larvicide, to your bucket. The eggs will hatch and the larvae will die. This way, you control mosquitos, and only mosquitos, without the use of harmful insecticides.

To learn more about Dr. Tallamy's work, please take a look at this:

A Presentation by Doug Tallamy – Nature's Best Hope https://www.youtube.com/watch?v=WY4aV5hqkxY

It is essential that you also eliminate or reduce the standing water on your property. Please take a look at the information the CDC provides on how to control insects at home.

https://www.cdc.gov/zika/prevention/controlling-mosquitos-at-home.html

The CDC also has information on the mosquito lifecycle here: https://www.cdc.gov/mosquitos/about/life-cycles/

What you need:

- Bucket
- Straw or Hay (funky water from a rain barrel would also work, says Tallamy)
- Water
- Mosquito Dunk (or other brand containing Bacillus thuringiensis (Bt))
- Chicken Wire (or similar) Optional.









Setting Up the Trap

Use an empty bucket:



Add hay or straw to the bucket. I used 3 or 4 handfuls here – 3 or 4 cups.



Add water to the bucket. I fill the bucket up halfway. My ratio of hay to water is about 1 to 4.



Allow the water and organic matter to ferment for a few days. I usually let it sit for 3 days – if it's hot, you probably need less time.

After 3 days, the mixture has fermented. Time to add the Mosquito Dunk.



Place Mosquito Dunk in the bucket on top of the fermenting solution. Dr. Tallamy may know when a mosquito has laid eggs, but I don't; I place the Mosquito Dunk in right before I set the trap outdoors.



Cover with chicken wire (or similar that allows adult mosquitos into the solution, but keeps other critters out). Careful of the sharp points on the chicken wire.

Set in place. Dr. Tallamy recommends a sunny spot; I have placed in dappled shade with good results. The Mosquito Dunk lasts for about a month and I replace the solution after about 3 or 4 weeks.





On top of our deck, I set one under a side table. Under the deck, I set another one on a set of shelves. None of the 3 dogs have shown interest in it after the first couple sniffs. I try to put them close to places we have had issues and keep them out of the way of the dogs getting to them. They should be out of the reach of children as well.

Cleaning up the old solution

Remove the chicken wire and re-use for the next batch.



Strain out the old organic matter and Mosquito Dunk (if there is any obvious solid left). I do this at the drain pipe under our driveway and toss any old Mosquito Dunk solid into the pipe.

Toss the organic matter into your compost pile or trash.



Clean up the old bucket.