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Cover Option: A layer of chicken wire or wide-mesh hardware cloth can keep the dunk from disappearing. Don't use fine screening that mosquitoes cannot pass through.

Color Option: Color attracts mosquitoes after they've detected the carbon dioxide that we exhale, and that our Buckets of Doom off-gas. The smell is enough, but adding color can help. But which color?

Black has long been considered an attractive color for mosquitoes, and a recent article (linked below) confirms this, but also tests other colors. Winners are **black**, **red**, **orange**, **cyan**. High contrast is also good.

"We find that CO2 induces a strong attraction to specific spectral bands, including those that humans perceive as cyan, orange, and red."

CHILD SAFETY

IF THERE IS THE REMOTEST POSSIBILITY THAT A SMALL CHILD WILL EVER BE NEAR YOUR BUCKET, YOU MUST SECURELY COVER THE BUCKET.

"The U.S. Consumer Product Safety Commission (CPSC) warns that buckets filled with water or other liquids, especially the large five-gallon size, present a drowning hazard to small children."

What If...

...every yard in a neighborhood stopped the expensive and deadly pesticide foggers/barriers/yard sprays to opt for a Mosquito Bucket of Doom?

IMAGINE HOW MANY MORE

*fireflies and butterflies
and bumblebees and birds*

WE'D HAVE!

LET'S MAKE A BUCKET OF DOOM BRIGADE!

LINKS

SidewalkNature post: "Doom-it-Yourself" (different STYLES of buckets) <https://sidewalknature.com/2022/06/12/doom-it-yourself-mosquito-bucket-styles/>

SidewalkNature post: "Don't Forget the Stick (Bucket of Doom)" <https://sidewalknature.com/2022/10/16/dont-forget-the-stick-bucket-of-doom/>

Video of Doug Tallamy on the BTi bucket trick: <https://www.youtube.com/watch?v=TqcDZDNtP-0>

Xerces Society: "Protecting Pollinators from Pesticides:" <https://xerces.org/blog/earth-week-start-now-to-prevent-mosquito-borne-disease-and-keep-pollinators-safe>

"What you need to know about BTi" from the CDC: <https://www.cdc.gov/mosquitoes/mosquito-control/community/bti.html>

Mosquitoes and colors study: <https://www.nature.com/articles/s41467-022-28195-x>

Child Safety quote about buckets in general is taken from this link: <https://www.cpsc.gov/Newsroom/News-Releases/1989/Large-Buckets-Are-Drowning-Hazards-For-Young-Children>

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Mosquito BUCKET of DOOM



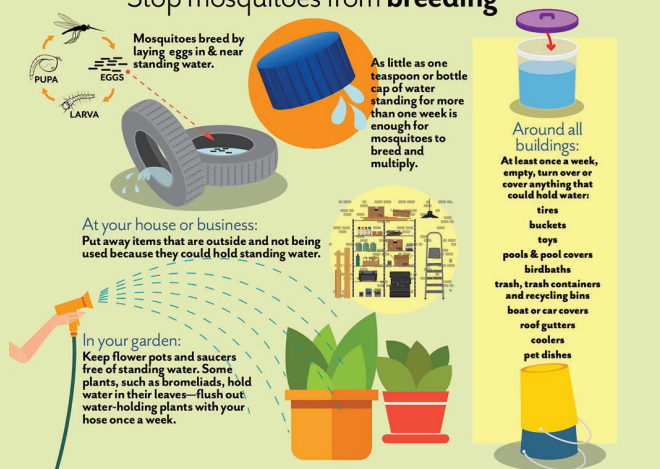
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Everyday wonders in everyday habitat loss
BY JO BRICHETTO

MOSQUITO SEASON IS HERE!

Instead of spraying pesticides
onto our entire yards -
and onto fireflies, ladybugs,
bumblebees, and butterflies -
why not kill **ONLY** mosquitoes?

Stop mosquitoes from breeding



(image from Florida Health)

First, let's PREVENT mosquitoes from breeding in our yards. Get rid of all standing water at least once a week: in plant saucers, trash cans, toys, and gutters.

Then, let's CREATE standing water, but only in a Mosquito Bucket of Doom. It's a safe, cheap, easy way to control mosquitoes, and more effective than sprays and foggers.

A MOSQUITO BUCKET OF DOOM IS JUST WATER, A HANDFUL OF GRASS, A STICK, AND ¼ OF BTI DUNK.

Bti dunks are a larvicide that kills the larval stage of mosquitoes—the hatchlings—captive in the one place you've made it possible for mosquitoes to lay eggs: the standing water in your Mosquito Bucket of Doom.

Compare this to pesticide sprays, barriers and foggers: adulticides that cannot target one particular pest. All pesticide sprays—even "natural" and "organic"—hit and drift onto nearby plants and creatures, including pets and people. Sprays also contaminate our stormwater, drinking water, and soils.

How the Bucket of Doom works:

Your handful of grass in the water rots and releases carbon dioxide to attract mosquitoes ready to lay eggs, but the Bti dunk in the water kills all larvae soon after they hatch.

Bti will not harm anyone else. Fireflies, bees, birds, butterflies, frogs, fish, mammals, pets, and people are safe.

Bti dunks are sold at hardware and garden stores, and for decades have been used in stock tanks, ponds, ditches, and rain barrels. In 2021, a video from Doug Tallamy at Homegrown National Park showed how to use it in a bucket to control mosquitoes. I tested and tweaked it for a year—and added the dual-function stick—then named it "Mosquito Bucket of Doom" in May 2022.

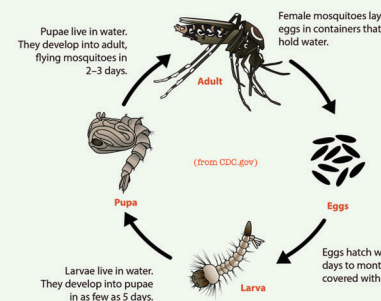
How long will a dunk last?

One dunk treats 100 square feet of water surface for at least 30 days. Using one dunk per bucket is fine, but you can save money by breaking the dunk into four pieces, and adding one quarter-piece (¼) to your bucket each month. Set a calendar alert if necessary.



How much water?

Fill the bucket only half full. Some mosquitoes lay eggs above the water line, where they hatch when submerged with rising water. This is one reason to add a stick: it acts as a woody substrate to invite oviposition. Some mosquitoes lay eggs directly on the water as small, black rafts (with 200 eggs each!), but others lay eggs one at a time, too tiny to see.



How many buckets?

Start with one, increase as needed. Site exposure, elevation, size, airflow, vegetation, and how nearby properties deal with standing water mean every yard is unique. *Show your neighbors what you are doing and why.*

Where to Place a Mosquito Bucket of Doom

Ideal placement is where mosquitoes tend to hang out anyway: in moist shade where there isn't a lot of wind. If all you have is full sun, put it near an object (house, shed, trash can) that will cast shade at some point of the day.

How far from where people sit?

Keep at least a few meters away. The bucket's job is to be the only standing water on your property so it can attract mosquitoes ready to lay eggs.

MODIFICATIONS:

To maximize DOOM and minimize collateral damage:

Stick/Escape Ramp: The stick also acts as an escape ramp. We don't want any creatures to drown: birds, chipmunks, squirrels, bumblebees, etc. Even if you cover the top of the bucket with wide-mesh wire, it will still need a stick.

Floaters vs Sinkers: Dunks float. This is fine unless a curious animal or human removes it, or if it floats out of the bucket during a hard rain. (Drill overflow holes near the top if needed.)

To make a sinker, cut a circle from a mesh veggie bag, tuck the dunk inside, twist the bag shut and attach to the bottom of your stick with a twist-tie. The stick makes it easy to lift and replace the dunk every month.