YIKES: Mosquitos and Ticks! by Maria Bartlett

What is the Problem?

Spring has sprung... mosquitoes cannot be far behind. Ticks are a problem because we are outside more often. And, grubs may be coming along to invade our lawns over the growing season. How can we protect ourselves and our lawns from these pests in ways that are safe for us and for the environment instead of using harmful pesticides?

What Can You Do About Mosquitoes?

MOST IMPORTANT: Remove all sources of standing water/moisture. Mosquitoes can breed in something as small as a bottle cap of water. Check tires, gutters, tree holes, drains, toys, tarps, wheel barrows, dripping faucets, even low moist areas of the lawn or driveway.

- It takes an egg a few days to mature to a flying insect, so change standing water sources such as bird baths every 3 days.
- For ponds, use solar-powered fountains or pumps to keep water moving since eggs
 can only be laid in still water. Try filling the pond with mosquito eating fish such as
 minnows and bluegills...they eat mosquito larvae, do not require any special sand,
 and are selfsustaining.
- Keep these natural mosquito predators around: birds, dragonflies, beetles, frogs, snails, bats. ·
- Use mesh screens on windows and doors. Cover rain barrels with fine mesh screens on top to prevent egg-laying on the standing water inside.
- Stay indoors during dawn and dusk.
- When sitting outside, set up a fan at low speed: mosquitoes are not strong fliers and will be kept away by the breeze. Burn citronella candles.
- "Mosquito Dunks" are used specifically to kill mosquito larvae when placed in standing water. They contain BTi (bacillus thuringiensis, strain israelensis), a bacteria that is eaten by mosquito larvae and kills them. They can be used where standing water is inaccessible and/or cannot be removed such as with in-ground drains covered by grills.
- Set play equipment in sunny areas of the yard. Mosquitoes congregate in the shade.

How to Avoid Ticks?

- Do not let your pet go into tick-infested areas and/or use safe pet collars/medications.
- When hiking in wooded areas, wear loose, light-colored clothing that covers your body, including your legs so ticks are easy to see. Tuck pants into socks and wear a hat.
- Be sure to always monitor any abnormal bug bites and always conduct tick checks!
- Throw clothing into the dryer for 20 minutes on high heat to kill ticks.
- Ticks will generally not move from wooded areas across mulched/gravel areas so surround your lawn with such a barrier if you have children and pets using your lawn.
- Control field mice in/near your home. Snap traps are a humane nonhazardous method of control. Avoid rodent poisons that also kill mice predators like eagles, foxes, opossums. Set bird feeders away from areas you and children use.

Products To Repel Pests

- Both mosquitoes and ticks can be repelled by using products containing Oil of Lemon Eucalyptus which is a natural and effective product (one brand name: REPEL). It is DEET-free, so it is safe for children over three. (Do not use the oil by itself, only as part of Repel or a similar product.
- Avoid DEET. It is a ground water contaminant and may be harmful for humans.

Spraying Services

There are many such services advertising now...the yard signs and mailed flyers are everywhere! PLEASE RECONSIDER before contracting for one of these services.

- Many use pyrethrum, derived from chrysanthemums, and advertise these sprays as "natural." Pyrethrums from mums and synthetic pyrethroids are both highly toxic to fish, tadpoles, bees and other beneficial insects and are NOT organic compounds. These products should NOT be sprayed across a property as they kill all insects, including pollinators/other beneficial insects.
- Many services are now offering alternative products which are less toxic but still carry risks for the environment as they too harm beneficial insects in addition to ticks and mosquitoes. These products usually contain cedarwood oil in combination with other herbal oils. Garlic oil by itself seems to be the least harmful and has some efficacy.
- All these sprays are done many times during the season and these services are quite expensive. Try the other suggested methods instead!!

USE AVOID

Mosquito Control: Products and Services

BTI (bacillus thuringiensis, strain israelensis) "**Mosquito Dunks**" kill mosquito larvae in standing water that cannot be dumped, ie. yard drains or tree holes.

USE WITH CAUTION

GARLIC SPRAY: If you feel you must spray in your yard, safe and somewhat effective products are garlic sprays like "Mosquito Barrier."

RED CEDAR SPRAY: Works for the mosquito and tick population: spray around the perimeter of the yard once a month; relatively expensive; harsher on the environment than garlic.

Avoid yard spraying services using pyrethrin; it is not natural. According to entomologist Doug Tallamy, sprays kill only about 10% of adult mosquitoes, while beneficial insects such as butterflies, bees and lightning bugs are harmed.





Mosquito/Tick Repellants

Beyond Pesticides recommends OLE (Oil of Lemon Eucalyptus), Picardin and IR3535.







Beyond Pesticides suggests **avoiding DEET and insecticides like Permethrin** (used on clothing and in Tick Tubes).

