



BUG-REPELLING BASICS






DON'T LET SWATTING AND SCRATCHING RUIN YOUR SUMMER. **PROTECT YOURSELF** WITH THIS GUIDE TO OUTSMARTING THE BIGGEST BUZZ KILLS.

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KNOW YOUR ENEMY

Whether your goal is to avoid or to annihilate, if you want to beat a bug, first you have to think like one. Below, *Real Simple*'s expert information on where they lurk, what they love, and how you can exploit their fatal weaknesses.

	WHERE DO THEY HANG OUT?	WHAT ATTRACTS THEM?	THEIR KRYPTONITE	WHAT ELSE YOU NEED TO KNOW
 <p>mosquitoes</p>	<p>These chronic outdoor-party crashers can be found NEAR LAKES, MARSHES, LAGOONS, POOLS, OR ANY OTHER BODY OF WATER. (No-see-ums, those barely visible gnats, gravitate to the same soggy places.)</p>	<p>BODY HEAT AND MOISTURE, which they need to lay eggs and feed young. "There's a saying—water plus seven days equals mosquitoes," says George Hamilton, chair of entomology at Rutgers University, in New Brunswick, New Jersey.</p>	<p>INSECT REPELLENTS THAT CONTAIN DEET work well on individual bugs (see page 122 for more info). To keep swarms away, twice a week empty any standing water in birdbaths and kids' toys or pet bowls that have been left out in the yard.</p>	<p>THEY ARE AT THEIR WORST AT SUNRISE AND DUSK. Notify public-health officers about rain-filled pools on foreclosed properties; they will empty them to prevent the spread of mosquito-borne West Nile virus.</p>
 <p>things that sting</p>	<p>There are many kinds of bees, wasps, hornets, and yellow jackets. Their nests can be found IN TREES OR BUSHES, UNDER THE EAVES OF BUILDINGS, OR EVEN ON THE GROUND. Be careful when walking outside barefoot.</p>	<p>Bees and yellow jackets like SWEET THINGS, so don't leave open soda cans outdoors or they may fly in. Honeybees like THE COLORS OF FLOWERS, but they can't see red (so you're safe next to the geraniums).</p>	<p>The best way not to get stung is to LEAVE THEM ALONE. Never swat at one or the whole colony might chase after you for several hundred feet to defend their nest. For preventative measures to keep them away, see page 125.</p>	<p>IF YOU ARE ALLERGIC TO BEE STINGS, you must carry an EpiPen to prevent anaphylactic shock if you are stung. Even if you are not allergic, your reaction may become more severe with each sting.</p>
 <p>fire ants</p>	<p>Originally from South America, fire ants were introduced into the United States in the 1930s. They love WARM PLACES and live in MOUNDS, USUALLY IN GRASSY AREAS, across the southern half of the country.</p>	<p>Omnivores, they eat ANYTHING FROM LEAVES TO BABY BIRDS (<i>eek!</i>) and will attack if a nest is threatened. Hundreds will swarm, injecting venom that feels like a burn and that can cause anaphylactic shock to the allergic.</p>	<p>There's no silver bullet when it comes to putting off these pests. Products containing chemicals such as PERMETHRIN, BIFENTHRIN, AND HYDRAMETHYLNON only control, rather than destroy, a fire-ant population.</p>	<p>SOME PEOPLE SWEAR BY FILLING MOUNDS with grits, bleach, or Drano (not so eco-friendly). But unlike most insects, fire ants have many nests. Entomologists say you won't kill them with these remedies; at best, you'll make them relocate.</p>
 <p>greenhead flies</p>	<p>These biting horseflies develop in COASTAL MARSHES in July and August and are especially problematic on Cape Cod and the Jersey Shore, where black wooden box traps are installed on certain beaches to snare them.</p>	<p>They like LARGE, DARK OBJECTS, probably because their natural food sources are cattle and deer. (But they will bite you when they can't find Bambi.) Many of their cousins, such as blackflies, have similar feeding habits.</p>	<p>The best defense against greenheads is PERMETHRIN, which can be found in products such as Permanone. It's wise to save this for intolerable cases, as it can give skin a rash; spray it on clothes only.</p>	<p>GREENHEADS ATTACK DURING THE DAY. Because they are larger than most insects, greenheads are often not bothered by a normal amount of insect repellent on skin, even if it contains DEET.</p>
 <p>ticks</p>	<p>The black-legged tick that spreads Lyme disease is common in THE NORTH-EAST AND THE UPPER MIDWEST, where it hangs out in THE WOODS, looking to feed on the exposed skin of hikers.</p>	<p>They want YOUR BLOOD. Ticks can burrow only their mouth parts into skin, so they secrete a glue-like substance to lock themselves in, hang around for 48 to 72 hours engorging themselves, and then drop off.</p>	<p>THE BEST DEFENSE IS NOT LETTING THEM NEAR SKIN. In the woods, wear light-colored long pants (tucked into socks), long sleeves, and a hat so ticks are easy to spot. Use repellent with DEET on exposed skin and permethrin on clothes.</p>	<p>AFTER A WALK IN THE WOODS, CHECK ANY EXPOSED SKIN for ticks; they are tiny enough to get through socks, so also inspect feet. If you do find one, remove it slowly with a tweezer. See a doctor if you develop a bull's-eye-shaped rash or flu-like symptoms.</p>



YOUR BIGGEST BUG QUESTIONS, ANSWERED

DO FAIR-SKINNED PEOPLE REALLY GET BITTEN BY MOSQUITOES MORE OFTEN?

No. And neither do women nor redheads nor any other specific group. Part of what attracts mosquitoes is the amount of carbon dioxide, heat, and moisture that a person emits. Unfortunately, those factors are determined by genetics, and they're hard to measure. The one phenomenon that scientists have noticed is that "the more you sweat, the more attractive you can become to mosquitoes," says James E. Cilek, professor of entomology at Florida A & M University, in Panama City. But they are not sure why. Whether this has to do with the scent or the moisture in perspiration isn't clear.

HOW CAN I UNINVITE BUGS FROM AN OUTDOOR SUMMER PARTY?

Avoid scheduling your event at dusk, when mosquitoes and no-see-ums are most plentiful, and cover food between trips to the buffet. Your best bet among repellents, says Cilek, is probably a yard spray (try Cutter Bug Free Deck & Patio Outdoor Fogger; \$9.50, campingsurvival.com). Candles containing citronella oil have been found to be effective in repelling bugs, but they deter only those that are hovering within three feet of the candle. As for electronic bug zappers, they trap only the insects that happen upon them.

HOW DO I KEEP NO-SEE-UMS OUT OF THE HOUSE IF THEY ARE SMALL ENOUGH TO GET THROUGH DOOR AND WINDOW SCREENS?

Give them a little air: These tiny bugs can't survive in a breeze of more than about two miles an hour. Try using overhead fans in the house or on the porch, or manipulate the air current with a couple of strategically placed box fans.



Most bug bites don't require treatment. But if yours gets increasingly red, feels warm, or starts to ooze, see a doctor. Those are possible signs of infection.

WHAT IS THE BEST WAY TO DEAL WITH AN ITCHY BITE?

Keep your hands off, says Robin Ashinoff, a dermatologist at Hackensack University Medical Center, in New Jersey: "The more you scratch, the more you release histamines, chemicals that cause the itchy sensation, which makes you scratch even more." Hydrocortisone or even an ice cube will temporarily soothe the tickle. And oral antihistamines, like Benadryl and Zyrtec, are also helpful to both kids and adults.

WHAT EXACTLY IS DEET, AND WHY DO SOME PEOPLE AVOID IT?

DEET is a highly effective chemical that confuses the receptors on the antennae of many insects, so bugs are warded off but not killed. The main concern with DEET is its possible toxicity. According to the Environmental Protection Agency, in the almost 50 years that the chemical has been used in the United States, there have been rare cases of reactions to DEET, which have ranged from skin irritation to death in those who used excessive amounts. But most experts agree that when used correctly, DEET does not pose a health risk for adults. Common sense: Don't apply it more frequently or leave it on skin for longer than the package directions specify. And avoid using DEET around food, in small, enclosed spaces, or on open sores.

When it comes to children, the American Academy of Pediatrics recommends using a



Bees don't discriminate. They are just as liable to sting your dog as they are you. And as with humans, a dog may react to a bee sting more intensely with each occurrence. So if your pet's nose swells up after a romp in the yard, get him to a vet pronto.

product with a maximum DEET concentration of 30 percent. (Caveat: Never use a repellent with DEET on a baby less than two months old.) "Avoid putting it around the eyes or the mouth or on the hands of small children," says Miran J. Song, a pediatrician at the Tuba City Regional Health Care Corporation, in Arizona.

The good news is, you can choose a DEET product with a concentration to match your needs. For example, Off! brand insect repellents come in formulations with a DEET content of 5 percent (the FamilyCare products) to 98.25 percent (the Deep Woods Sportsmen line). While higher concentrations may repel bugs longer, the Centers for Disease Control and Prevention (CDC) note that products containing more than 50 percent DEET do not repel better than products containing less. If you are bothered by DEET's unpleasant smell, look for repellents that contain the chemical alternative picaridin, which is odorless.

ARE THERE ANY NATURAL INGREDIENTS THAT WORK?

The CDC recommend two naturally derived active ingredients: oil of lemon eucalyptus and the amino acid IR3535. These are called biopesticide repellents (the chemicals DEET and picaridin are conventional repellents). Both are described as offering "reasonably long-lasting protection" against bugs. Oil of lemon eucalyptus is found in Repel Lemon Eucalyptus Insect Repellent (\$7.50, drugstore.com) and Cutter Lemon Eucalyptus (\$8, amazon.com). Some people swear by Avon Skin So Soft to repel mosquitoes; the company has developed Skin So Soft Bug Guard Plus IR3535 Expedition SPF 30 pump spray (\$14, avon.com), which contains the amino acid.

HOW CAN I EASILY FIND OUT WHICH INGREDIENTS A PRODUCT CONTAINS?

For one-stop ingredient research, go to state.ceris.purdue.edu to search the National Pesticide Information Retrieval System

(which is affiliated with Purdue University, in West Lafayette, Indiana). Here you'll find information that includes a list of insect repellents that are licensed in your state, broken down by active ingredient and the type of pest that it targets.

HOW DO I LAYER SUNSCREEN AND INSECT REPELLENT?

Apply sunscreen, allow it to dry, then put bug spray on top. Sunscreen should be directly on the skin to increase its absorption, while bug spray should sit on the surface, since that's where the bugs want to land, says Robin Ashinoff, medical director of dermatologic and laser surgery at Hackensack University Medical Center, in New Jersey. You can find two-in-ones, but if you'll be outside for an extended time, use separate products, since sunscreen needs to be reapplied more frequently than bug spray. Keep in mind that some studies have shown that the two are not always as effective when used together.

HOW CAN I BEE-PROOF MY HOUSE AND YARD?

If your property is a magnet for bees, the department of entomology at Texas A & M University, in College Station, Texas, suggests searching your home's outside walls for nests, sealing any cracks in the walls or around a chimney that are larger than an eighth of an inch, and installing screens over rain spouts and large cavities in tree trunks. If you do find a hive, don't risk the bees' wrath. Call a professional bee-removal service or a pest-control operator.

YUMMY

POOL

ROOMY SUITES

OUTDOOR GRILL

A VACATION WITH HOT BREAKFAST INCLUDED IS A PRETTY SUITE DEAL.

You don't have to worry about breakfast or dinner.* Of course, if you want to do the cooking, there's always a full kitchen in your suite. Family meals together aren't just part of a great vacation, they're part of feeling right at home.

HOMWOOD SUITES
Hilton
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