

# SKEETER 101

*Camp Seeley is located at 4,200 feet elevation and there are lots of biting mosquitoes that come out in the early evening and night. Be prepared! Avoid mosquito bites by bringing your own supply of mosquito repellent such as Off. You can also consider taking Vitamin B1 or B12 just before and during camp.*

*The Nurse's Office will have bug spray available for free anytime, however it is important make sure you take responsibility for applying repellent – especially just after dinner. Please read the following information regarding avoiding mosquitoes.*

## How to Avoid Mosquito Bites



Nobody cares for mosquitoes, perhaps because they seem to serve no useful function for humans. For most mosquito species, the female draws food for her developing eggs by inserting her proboscis into the flesh of a mammal or reptile and drawing blood. Unfortunately the mosquito's bite also brings along discomfort, pain, and sometimes disease, or even an allergic reaction in a growing number of cases. Diseases spread by the mosquito are numerous in certain areas and include millions of deaths by malaria each year, as well as recent outbreaks of the West Nile Virus. Not all mosquito species transmit disease to humans, but because they're so small it is difficult to easily tell which species is in your vicinity. Bite prevention is the best cure, so in other words, deter the mosquito before it bites you.

**Kill the mosquito by grabbing it out of the air.** Unless you practice this a great deal, you will find it hard to accomplish and the air of your moving hand gives the mosquito plenty of warning, and can even blow it out of your grasp.

**Kill the mosquito with a mosquito swatter.** The swatter, usually made of a thicker metal or plastic, is mounted on the end of a springy wire, dramatically increasing your chances of hitting a stationary mosquito by increasing the momentum of the swat. You can also use your hand in a similar flipping motion.

**Kill the flying mosquito with a double-handed clap.** Using two hands is more effective than one, as the air coming from each hand will blow the mosquito into the opposing palm.

**If the mosquito lands on your arm, tightening the arm's muscles may cause the mosquito become stuck.** At this point you can just slap at the mosquito, or clench your muscles even more. This sometimes causes the mosquito to fill up with too much blood and explode.

**If all these techniques are not working, you may want to give it another try by catching the mosquito with a transparent cup.** Slowly place a cup (preferably a hard material) over the mosquito and then slide some paper underneath this cup. This gives you control over the mosquito and can provide you with a more pacifistic approach, instead of just killing the mosquito.

## **To Prevent Mosquito Bites**

- **Wear mosquito repellent.** Use insect repellent on uncovered skin surfaces when outdoors, especially during the day. When using sunscreen, apply it before insect repellent.

Repellents containing 30% to 50% DEET (N, N-diethyl-m-toluamide) are recommended for adults and children over 2 months of age and effective for several hours. Repellents with lower amounts of DEET offer shorter-term protection and must be applied more often.

Repellents containing up to 15% picaridin, which must be applied often, are available in the US. Repellents with higher concentrations of picaridin may be available in some regions outside the US.

Protect infants less than 2 months of age by using a carrier draped with mosquito netting with an elastic edge for a tight fit.

Experiment with non chemical solutions such as Citronella (natural plant oil). As with any product, their effectiveness depends on the situation, your own skin chemistry, and the exact type of mosquito you are dealing with. Also tea tree oil and taking vitamin B supplements may help.

*DEET was developed by the United States Army, following its experience of jungle warfare during World War II. It was originally tested as a pesticide on farm fields, and entered military use in 1946 and civilian use in 1957. It was used in Vietnam and Southeast Asia. When used as directed, products containing between 10% to 30% DEET have been found by The American Academy of Pediatrics to be safe to use on children as well as adults but recommends that DEET not be used on infants less than two months old.*

- **Wear loose, long-sleeved shirts and long pants when outdoors.**

Clothing may also be sprayed with repellent containing permethrin or another EPA-registered repellent for greater protection. (Remember: don't use permethrin on skin.)

- **Avoid areas prone to mosquito infestations.** Mosquitoes are often attracted to water, especially standing water.

- **DON'T waste money on an electric hanging bug "zapper."** These have been shown to kill many bugs very effectively but generally the bugs killed are the non-harmful ones. Plus, the noise they generate tends to be obnoxious. Mosquitoes can be more effectively killed by one of the dedicated machines that

use heat and carbon dioxide to attract the mosquitoes and then entrap or kill them using nets, containers or chemicals.

- **Avoid wearing heavy, dark clothing in warm weather.** Mosquitoes are attracted to warm bodies, so staying cool is an effective way to avoid bites.

### **Warnings**

Ultrasonic mosquito devices repel mosquitoes by emitting a high-pitched noise that is supposed to simulate the sound of the dragonfly, the mosquito's natural predator. However, there is no scientific evidence to support these claims.

- Mosquitoes tend to be most active at dawn and dusk - take extra care during these periods.
- If you are going to jungle areas, research malaria prevention.
- Always remember DEET **is** a toxic substance. Use sparingly.

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## **Does Vitamin B1 Repel Mosquitoes ?**

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### **Mosquito Facts**

The American Mosquito Control Association has studied mosquitoes extensively. Mosquitoes are more attracted to some people more than others. Dark clothing attracts mosquitoes and they are able to bite through tight fitting clothing. Standing water attracts mosquitoes and gives them a place to breed.

### **Vitamin B1 Facts**

Vitamin B1 is one of eight B vitamins. It is also called thiamine. As with all the other B vitamins it converts food into energy, B1 is also responsible for protecting your immune system. The average recommended daily amount of B1 for adults is 1.5 mg, any more than that will be secreted by your body through sweat.

### **What is the Claim?**

There have been studies done in the quest to find out if taking vitamin B1 will repel mosquitoes. The unsubstantiated claim is that when you take up to 300 mg of vitamin B1 per day your body will secrete an odor undetected by humans, but that mosquitoes find abhorrent and will result in keeping the mosquitoes away.

### **The Results**

Unfortunately there is not any proof to be found that taking vitamin B1 will ward off those pesky mosquitoes. The University of Wisconsin conducted studies with humans taking vitamin B1 in a laboratory setting. The outcome provided no evidence to suggest using vitamin B1 had any effect on the mosquitoes.

## What Can You Do?

According to the American Mosquito Control Association the best way you can ward off mosquitoes is by following three rules: drain any standing water, dress in light colored clothing, as it's unattractive to most mosquitoes, and defend yourself using repellents approved by the Environmental Protection Agency, such as those containing the ingredient Deet and lemon eucalyptus oil. Check the repellent labels for the recommended usage for children. Repellants do not kill the mosquitoes, but they do help in keeping them away from you.

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## **Mosquitoes from San Bernardino County have tested positive for West Nile Virus**

Michael P. Neufeld | May 26, 2012



**By Michael P. Neufeld**

San Bernardino, CA – The West Nile Virus has been reported in mosquitoes in San Bernardino County.

The state laboratory has now confirmed mosquitoes collected on the border of Fontana and Ontario on Wednesday, April 25, tested positive for West Nile Virus. This is the first positive indicator of West Nile Virus in 2012 in the area served by the County of San Bernardino's Mosquito and Vector Control Program.

### **PROTECTION SUGGESTIONS**

San Bernardino County residents can protect themselves from West Nile Virus by taking these precautions:

- **Drain or Dump** – Remove all standing water around your property where mosquitoes lay eggs such as birdbaths, green swimming pools, ponds, old tires, buckets, clogged gutters, or even puddles from leaky sprinklers.
- **Dawn and Dusk** – Avoid spending time outside when mosquitoes are most active.
- **Dress** – Wear shoes, socks, and long pants and long-sleeved shirts that are loose fitting and light colored.
- **DEET** – Apply insect repellent containing DEET according to manufacturer's directions.
- **Doors** – Make sure doors and windows have tight-fitting screens. Repair or replace screens that have tears or holes to prevent mosquitoes from entering your home.