Rider Education Report

A panda walks into a bar and gobbles some beer nuts. Then he pulls out a gun, fires it in the air, and heads for the door. “Hey!” shouts the bartender, but the panda yells back, “I’m a panda. Google me!” and continues out the door. Sure enough, *panda*: “A tree-climbing mammal with distinct black-and-white coloring. Eats shoots and leaves.”
This month I would like to present information about the environmental concerns of our sport. As an outdoor activity, we are subject to all the critters Mother Nature has seen fit to provide. Some of these pests can cause irritation and distraction, but there are things we can do to lessen their impact on our fun.

Let’s examine the Mosquito. Although science has yet to pinpoint what mosquitoes consider an ideal victim, there is a tremendous amount of research being conducted on what compounds and odors people exude that might be attractive to mosquitoes. But with 400 different compounds to examine, researchers are just beginning to scratch the surface.

It's not dinner they are sucking out of you. While male mosquitos do not bite people -- female mosquitoes bite us to harvest proteins from our blood to develop fertile eggs. People with Type O blood are bitten nearly twice as often as those with Type A, while people with all other blood types fall somewhere in the middle.

Mosquitoes locate their victims using an organ called a maxillary palp which detects the carbon dioxide in a person’s breath from as far away as 164 feet. As a result, people who simply exhale more of the gas over time—generally, larger people—have been shown to attract more mosquitoes than others. This is one of the reasons why children get bitten less often than adults.

In addition to carbon dioxide, mosquitoes find victims at closer range by smelling the lactic acid, uric acid, ammonia and other substances expelled via their sweat, and are also attracted to people with higher body temperatures. Strenuous exercise increases the buildup of lactic acid and heat in your body. Genetics also influence the amount of uric acid and other substances naturally emitted by each person. People with high concentrations of steroids or cholesterol on their skin surface attract mosquitoes. Pregnant women have been found to attract roughly twice as many mosquito bites as others, likely because they exhale about 21 percent more carbon dioxide and are on average about 1.26 degrees Fahrenheit warmer than others.

Other research has suggested that the particular types and volume of bacteria that naturally live on our skin affect our attractiveness to mosquitoes. This might be why mosquitoes are especially prone to biting our ankles and feet as these areas naturally have more robust bacteria colonies.

Just a single 12-ounce beer can make you more attractive because drinking alcoholic beverages increases the amount of ethanol excreted in sweat, and it increases body temperature.

Mosquitoes use vision in addition to scent to locate humans, so wearing colors that stand out (black, dark blue or red) may make you easier to find. To minimize your risk of being bitten, wear clothes that cover exposed skin. Insect repellants made with the chemical DEET or Picaridin have been proven effective to repel mosquitoes. As a natural alternative, mosquito plants and citronella candles work well too.

In summary, if you are a Type O, exercising, pregnant woman in a black shirt, I suggest staying indoors. For the rest of us, stay clean, drink water, wear light colored clothing, and use an effective insect repellant. Be sure to stock the first aid kit on your bikes with itch relief for when these pests get past your best efforts of prevention.

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