

STAY COOL

by Lee Lamb

How do you keep cool during the summer? By glugging a tall glass of lemonade? Running through the sprinkler? Lying under a shady tree? Animals do a lot of these same kinds of things to stay cool. The way they manage body heat is called *thermoregulation*.

DON'T SWEAT IT

Your body's main way of cooling off is sweating. A thin layer of water forms on your skin and evaporates, carrying heat away like steam off a warm drink. On the other hand, dogs and wolves can only sweat a little through their paws, and birds can't sweat at all. Instead, they pant. Breathing causes warm water to evaporate out of the lungs, throat, mouth and tongue. Breathing out sends the water—and heat—from the body.

Many mammals and birds shed thick fur and feathers in the summer. Called *molting*, it is like changing out of a fleece coat into a cotton t-shirt. Shunting, or forcing blood to the surface of thin, naked skin helps animals cool down. Elephant ears, bat wings and bird legs are all great heat dispensers.

NIGHT TIME IS THE RIGHT TIME

In summer, mule deer, badgers and sidewinder rattlesnakes are often active

only in the early morning, late evening or at night. They escape the sun by spending the hottest hours resting in the shade or underground.

GO SKINNYDIPPING

Hippos submerge everything but their nostrils in water holes to beat the heat. Sandpipers splash water all over their feathers and even their nests.

CHILL OUT THE WAPITI WAY

Every spring, elk shed their winter coat—made up of woolly under fur and long outer hairs—for a sleek summer version that's five times cooler. The velvet (fuzzy skin) on bulls' antlers is loaded with blood vessels. Bulls shunt blood to the velvet where it cools before returning to their heart.

Elk climb high in the mountains where the air is cooler. They drink lots of water and often wade, swim and splash in lakes and rivers. They feed at dawn and dusk, and lie around in the cool, shady forest the rest of the day.

CAN YOU FIND WHO'S DOING WHAT?

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| PANTING | ESCAPING |
| MOLTING | SUBMERGING |
| SHUNTING | SKINNYDIPPING |

