

# HOW HOT IS IT?

By Bruce Auchly  
Illustration by Ed Jenne

**H**ere's nothing new: It's been hot recently.

How hot? So hot, I saw a dog chasing a cat and they were both walking.

So hot, I'm being forced to use passive verbs.

Okay, for those who suffer from the heat, high temperatures are no joke. But maybe nature can teach us a few coping tricks.

In late summer, prairie amphibians like the Great Plains toad take refuge underground, waiting out the heat wave. All amphibians begin their lives in water, developing from eggs to swimming larvae (tadpoles) to adult frogs, toads, or salamanders. After that, adult frogs stay in or near permanent water sources. Most toads and salamanders are more tolerant of dry conditions, but they still need some wet habitats.

Because amphibians have weak lungs, they also breathe through their skin, which can happen only if their bodies are moist. And in the dog days of summer, there's not much moisture on the surface of Montana's prairies.

So, toads and salamanders must find or dig a moist burrow. Then they wait for night or rain to emerge and seek insects. See, it's not just teenagers that sleep in the basement all day and only come out at night.

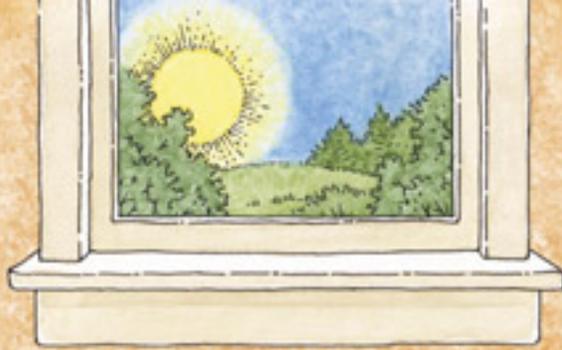
As for insects, by late summer mosquito season has peaked and waned, and grasshoppers are numerous and breeding. Anglers know to put a 'hopper on a hook or use an imitation to catch a trout.

Most grasshoppers breed in late summer and die before winter. Remember the Aesop's fable about the ants and the grasshopper? The one where a starving grasshopper in autumn asks a family of ants for a bite of food. Forget it, the ants say, you played all summer while we worked. I think there's a lesson here. But, ouch.

Anyway, grasshopper eggs overwinter in the soil. Then, depending on the species, they hatch in spring and summer, just in time for hungry prairie songbirds and their nestlings to devour. Thank you, frivolous grasshopper.

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Speaking of birds, by late summer many have already headed south for the winter. Those still here are rarely active at midday. And if it's too hot, some birds get rid of extra body heat by panting, expelling warm, moist air from overheated internal tissues.

The common nighthawk (a bird though not a hawk) uses a peculiar method to beat the heat. It goes into a deep sleep, called torpor, almost like a summer hibernation. To avoid predators, this relative of the whip-poor-will of the South relies on its camouflage to hide while slumbering in the heat of the day.

In late summer, mammals become nocturnal, quiet by day and active at night. Think bears and raccoons. That's not difficult to understand: What would you do while wearing a fur coat this time of year?

Many mammals now wear a summer coat, different from their wintertime garb. For example, white-tailed deer shed their thick winter hair and replace it with thinner reddish-brown hair. By the early fall, their winter hair grows through the summer coat to create a gray or grayish-brown coat.

Elk are similar. Right now, they sport their summer hair, a deep reddish-brown with little or no undercoat, giving them a sleek look. But their winter coat has started to grow already, and by early September, they will begin changing into their darker, thicker attire.

Perhaps nature offers a clue on how to stay cool until fall: Work at night and wear lighter clothing. Or just suffer through it, remembering how cold you were six months ago. 🐻