

## Ferret Physiology Affects How Ferrets Endure Hot Temperatures

**You must understand ferret physiology to understand why hot temperatures are so dangerous to them.**

*By Faith Arnold*

Posted: May 19, 2008, 5 a.m. EDT

Because the survival challenge for ferret ancestors was keeping warm in the winter — their small body size caused them to lose heat rapidly — and staying cool in summer wasn't an issue in their underground burrows, nature provided them with thick, warm fur, but no sweat glands under that fur. We humans can get along very well in quite hot temperatures because we can sweat. By contrast, the ferret's mechanism of excess heat dissipation is very inefficient — panting and dilation of surface blood vessels, particularly in the paws. A dangerously overheated ferret has bright pinkish-red paw pads and pants rapidly. At this point, a ferret may be in heatstroke, and very close to collapse, brain damage and even death.

Ferrets are so small, they absorb excessive heat from their environment very rapidly. They have a small mass with a comparatively large surface area. Think how fast a small baked potato heats up in the oven, compared to a large stuffed turkey. A ferret in a very hot place can die in just a few minutes, much quicker than a large-breed dog. Never leave a ferret in a hot car, not even for five minutes. And if you must, leave the car running with the air conditioner on (but have a spare key and lock it, which still may not keep someone from breaking a window and stealing your car!). Check every few minutes to be sure the engine hasn't stalled.

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