Summer 2019 Nature Notes

The heat of summer is upon us! It's time for sunscreen and sweaty days working in the yard. Not all animals can sweat to keep cool like we do, so how do they do it???

1. Sweating

Only higher primates (monkeys, apes, humans) and horses can sweat to keep cool. Other animals lack sweat glands.



2. Peeing Themselves

Vultures, and storks, cool off by peeing/pooping on their legs. This works by evaporative cooling, just like sweat.



3. <u>Mud</u>

Pigs actually roll in the mud to keep cool. The water in mud evaporates slower than just water, so they stay cooler for longer.



4. BIG Ears

Rabbits can constrict or dilate the blood vessels in their ears, either to keep heat in or allow heat to escape.



5. Panting

Panting expels hot breath as quickly as possible, bringing cool air into contact with the moist throat and lungs.



6. Hiding

Animals know as well as we do that the shade is cooler. Reptiles control their temperature with the environment, so move to shade or sun depending on what they need.



7. Estivation

Some animals bury in the ground and sleep through the heat to prevent drying out, similar to hibernating through the cold.



8. Throat vibrations

The technical term is 'gular fluttering'.

Doves, owls, hawks, and other birds can increase vibration in throat membranes, exposing moist membranes to air, and increasing evaporation.

