A GRILIFE EXTENSION

¡El Chupacabra! The Science Behind a Latin American Mystery

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The chupacabra, a legendary creature in parts of the Americas, has experienced a resurgence in recent years. The name of this folkloric creature translates from Spanish to "goat-sucker" and has been purported to prey on livestock and pets for decades. News sources and landowner inquiries report seeing these creatures on a fairly regular basis. Some believe this is a supernatural creature, but others see the creature as a natural phenomenon.

The answers to questions such as this are not always simple, but in the case of the chupacabra, there is actual science to explain the creature. This same science can help people manage a disease of wildlife, as well as protect domestic animals and human health.

The chupacabra explained

The chupacabra is most commonly described as a creature with grey, scaly skin, a raised ridge on its back, and viscous teeth. While these traits could describe a creature we have not yet discovered, they actually do match the appearance of several wild animals with severe cases of mange—a disease caused by mite infestation. Most typically, these are coyotes (*Canis latrans*), or rarely, raccoons (*Procyon lotor*) with a severe case of this disease. The characteristic raised ridge is the remnant guard hairs of the ruff, the scales are due to burrowing



Juvenile coyote in an urban setting suffering from mange. Coyotes in this condition pose a health risk to humans and pets. *Source: USDA*

mites, and grey is the coyote's natural skin color (exposed due to hair loss). Thorough examinations of dentition and other anatomical traits confirm this as the species being sighted.

Mange

Mange (sarcoptic or demodectic), also known as scabies, is a debilitating disease that affects a variety of wildlife and domestic animals. This disease is common and highly contagious. In canines it is caused by the mites, *Sarcoptis scabiei* and *Demodex canis*, respectively. These mites burrow into the skin to lay their eggs, this causes skin irritation and **alopecia** (loss of hair).



Taxidermy coyote suffering from mange, identified as "chupacabra." Source: Wikimedia Commons user "Resetel"

Effects on the animal

The symptoms of mange are fairly easy to spot in the field but are not definitive for diagnosis. Common symptoms include: intense itching, skin rash, alopecia, and crusting of the skin. Severely infected animals may lose all their hair, and their body condition degrades. Because severe mite infestations are typically the result of the immune system's inability to deal with such large numbers of mites, the health of the animal may be poor.

What to do if you see an animal like this?

For people who see an animal like this, the most natural reactions are disgust or to humanely dispatch the animal. These are natural reactions, but we need to consider our actions carefully and go a step further.

First, look closely to determine whether the animal you are seeing is a pet with mange. Next, call your local Texas Parks and Wildlife Game Warden or Wildlife Biologist. They may direct you to take the animal or ask for access to the place where it was spotted.

Most importantly, keep an eye on your domestic animals (working dogs, companion animals, etc.) that may be susceptible to mange if you see a wild animal displaying symptoms consistent with this disease. There are no known preventive measures for mange, but it would be wise to consider a regular bathing regime that includes some acaricide treatment if you live in a region where mange

Influence on behavior

In stories and folktales, the chupacabra preys on goats and other small livestock. It is possible that this stems from animal behavior caused by mange. Any predatory animal that is debilitated must seek out easier prey because wild prey is typically agile and wary. In most cases, the losses livestock raisers report as chupacabra predation are animals confined in pens or corrals. This is consistent with predation by a sick animal, such as a coyote with mange.



Figure 1. The progression of mange from Class 1 to Class 3 (from left to right) on the various surfaces of the animal using side, top, and bottom views.



Coyote displaying symptoms of mange consistent with characteristic back hairs described on chupacabra. Source: Calgary Reviews

is common. At the first sign of mange, consult with a licensed veterinarian.

It is possible for humans to contract some degree of mange, which often leads to scaly skin and red-purple rashes on the arms, chest, and neck. This condition, however, usually clears up once the symptomatic animal is removed.

If you are experiencing livestock losses that you believe are due to infected animals as described above, contact a wildlife biologist or wildlife damage specialist, such as those working for Texas Wildlife Services for advice. Identification of infected animals based on sign and feeding on carcasses is essential before any wildlife damage management action can be taken.

Glossary

Acaricide: Substances poisonous to mites or ticks.

Alopecia: The chronic loss of hair in mammals as a result of an allergic reaction or disease that affects the skin and hair coat.

Mange: A condition produced by a number of parasitic mites that burrow into skin and feed on the subcutaneous fluids of mammals. Also commonly known as scabies.

Ruff: A projecting or conspicuously colored ring of feathers or hair around the neck of a bird or mammal.

Resources

Texas Animal Health Commission <u>Tahc.state.tx.us</u> Texas Parks and Wildlife Department <u>tpwd.texas.gov</u> Texas Veterinary Medical Association <u>tvma.azurewebsites.net</u> Texas A&M AgriLife Extension Service <u>agrilifeextension.tamu.edu</u>

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