What is the DWR doing in response to mange?

The DWR mission is to promote wildlife and human health and safety through science-based techniques. Our focus is on animal welfare, monitoring the impacts of mange on bear populations, and minimizing potential disease transmission.

What you can do to prevent the spread of mange

Mange is spread by direct contact with infested animals and through the sharing of feed, objects, habitat, or areas used by infested animals. You can help reduce the spread of mange by minimizing the congregation of bears (and other animals) by following these simple rules:

- Discontinue feeding birds, deer, feral cats, or other wildlife. If mange infested bears have been reported in the area, stop feeding pets outside and/or pick up the uneaten food.
- Move outside garbage or compost containers into a shed, garage, or other inaccessible location or prevent access with electric fencing.

In Virginia, it is illegal to feed bears, either deliberately or by allowing bears to access trash, wildlife food, or other attractants.

Virginia Administrative Code:

- o 4VAC15-40-281. Unauthorized feeding of bear, deer, or turkey on national forest lands and department-owned lands.
- o 4VAC15-40-282. Unauthorized feeding of bear.
- o 4VAC15-40-286. Unauthorized feeding of wildlife.



Human and Pet Implications

Sarcoptes scabiei is transmissible to humans and pets that have come into direct contact with either an infested bear or an area occupied by or item that touched an infested bear. Human infections typically result in an itchy skin rash that usually resolves without treatment and lasts from several days to several weeks. The disease may be prolonged and possibly require treatment in children or in individuals with compromised immune systems. Human infections can be prevented by avoiding direct contact with bears displaying evidence of mange. If a skin rash develops that you suspect is due to S. scabiei, contact your health care provider. Contact your veterinarian if your pets have interacted with wildlife suspected to be infested with mange.

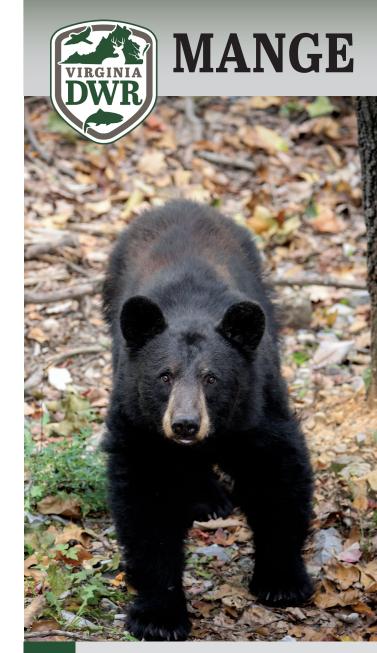
IF YOU SEE A BEAR WITH MANGE, PLEASE CONTACT THE WILDLIFE CONFLICT HELPLINE AT (855) 571-9003. DO NOT APPROACH, FEED, OR ATTEMPT TO TREAT THE ANIMAL WITH MEDICATION.

VirginiaWildlife.gov

Information adapted from Pennsylvania Game Commission (PGC) Black Bear Mange pamphlet 2020.

Photos provided by Virginia residents, partner organizations, and DWR staff.

BLACK BEAR



What You Need to Know



Cause

Mange is a highly contagious skin disease that affects many wild and domestic mammals. It is caused by a mite. The DWR is actively working to understand the disease and the mite that is causing this disease in Virginia's bear population. Results to date indicate that the most common cause of mange in Virginia bears is *Sarcoptes scabiei*, which is a mite that burrows into the skin and can only be seen with the assistance of a microscope.



Transmission

Currently, there are many unknowns related to the occurrence and spread of mange in bears. Research efforts are underway to better define these processes. Mites can transfer to a new host when an unaffected animal comes into direct physical contact with an infested host. In addition, mites that fall off an infested host can persist in the environment and may infect a new animal that enters a site contaminated with mange mites. Because bears are relatively solitary, the biggest risk for environmental transmission likely occurs under conditions where they congregate, either naturally (e.g., dens) or unnaturally (e.g., garbage cans, bait piles, bird feeders and other food resources).

Clinical Signs

The clinical signs of mange are a result of damage to the host's skin by the burrowing mite, the immune reaction of the host's body to the mite, and the physical tears in the skin that occurs through scratching. Clinical signs include:

- Intense itching
- Hair loss
- Thickened, dry skin covered by scabs or tan crusts
- Altered behavior Unaware or not concerned with their surroundings

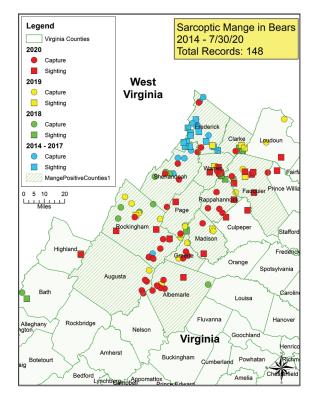
The extent of these clinical signs is variable, ranging from hairless areas on the ears and face or small patches along the body in mild to moderate cases, to hair loss and lesions covering almost the entire body in severe cases. Severely affected bears are typically emaciated, depressed, and often found wandering apparently unaware of their surroundings.



Bear without mange

Mange in Virginia Bears

Virginia's first mange-affected bear was diagnosed in a bear from Rockingham County in 1994. Since 2014, reports of bears with mange have increased in number and geographic spread.



Although mange can be a cause of mortality in Virginia black bears, there is no evidence that the disease is currently limiting populations in any part of the state.

To learn more about mange please visit dwr.virginia.gov/wildlife/diseases/