

# Fear the Foxtail

*This plant is hazardous to your dog's health.*

At first glance, they seem innocent enough. After all, they are just seed pods looking for a place to lay down their roots. But within that unassuming exterior lurks a menace that can easily wreak havoc with your dog's health.

We aren't talking about some alien life form here, but rather a very earthly phenomenon known as the foxtail. Found all over the United States at various times of the year, these plant parts are the bane of dog owners everywhere.

## You May Ask: What Exactly Are Foxtails?

Most of us have seen foxtails in their natural habitat, whether in a vacant lot, along a roadside or in a mountain meadow. They are simply tail-like clusters of seeds on the stalks of certain types of grasses. The clusters have sharp points designed by nature to penetrate the soil once the cluster comes loose from the plant, enabling the seeds to take hold in the ground and grow roots.

To help ensure that the seeds will be able to take root, the seed cluster contains barbs that make it hard for the cluster to come loose from the soil once it penetrates. The outside of the cluster also harbors a bacterium that contains an enzyme designed to break down cellular matter. This helps the seed burrow into the ground past other plants.

Grasses with this feature can be found all around the country, but are most common in the western United States. The greatest problems with foxtails occur in California. Foxtails are most troublesome to dog owners in the late spring and summer in drier climates because this is when they come loose from the plant and "look for" a place to bury themselves.

The foxtail's unique design provides grasses with a very successful method of reseeding in the wild. Unfortunately, these same features are what make foxtails a big problem for dogs and their owners. When a dog comes in contact with a foxtail, the cluster attaches to his fur and begins to move inward as he moves. The barbs on the cluster keep the foxtail from falling off or "backing out" of the fur, and the enzymes in the foxtail's bacterium begin to break down the dog's hair and tissue. The foxtail begins to work its way into the dog's body, just as it would work its way into the soil, had it landed on the ground instead of the dog.

Any dog that spends time in an area ripe with foxtails is at risk for picking up one or more of these problematic seed casings. "Foxtails are a problem for dogs walked in areas where the producing grasses grow," says William



Foxtails swaying in a warm, summer breeze are pretty. But keep a wide berth when walking your dog during the dry season. The plant's barbed awns can prove deadly to your dog (see inset).

Miller, VMD, a diplomate of the American College of Veterinary Dermatology and Professor of Medicine at Cornell University College of Veterinary Medicine. "Dogs with hairy feet can attract more foxtails, but short-coated dogs are not immune."

## A Serious Canine Hazard

Dogs that come into contact with foxtails stand a good chance of having one of these insidious plant pieces work its way into the body. The result can be a very sick dog. The



degree of illness depends on the area of the body where the foxtail entered, and the amount of damage it has caused.

"Typically, the feet are involved but if the dog runs along with his head down sniffing, the foxtail can enter the nasal passages, eyes or ears," says Dr. Miller. "If he tries to pull the foxtail from his foot or runs through the grassy areas with his tongue out, the foxtail can enter the mouth and stick in the tongue, throat, or tonsils. If the foxtail is not removed, it will penetrate the skin or mucosa — that is, the soft lining of cavities like the mouth and eyes — and migrate deeply into the tissues. Migrated foxtails can be found in the lungs, along the backbone, and in any number of different locations."

It's up to a veterinarian to locate the foxtail inside the dog's body and remove it. The type of surgery involved depends on where the foxtail is lodged.

"The treatment depends on the depth of penetration," says Dr. Miller. "Most dog owners in 'foxtail hotspots' know to examine their dogs after a walk and remove any foxtails they find. Those that have penetrated the skin or mucosal surface must be removed by a veterinarian. The number invading and site of involvement dictate how hard the removal will be."

In cases where the foxtail is beyond the reach of tweezers or forceps, the dog will need to undergo surgery. "In this case, the veterinary surgeon has to follow the foxtail's path of migration and remove it," says Dr. Miller. "That may involve opening a lot of tissue, such as when the chest cavity is involved."

### Prevention is Paramount

Given the potentially destructive action of foxtails that come into contact with dogs, it's imperative that dog owners in foxtail-heavy areas use preventative measures to keep their pets free of this hazardous plant part.

Try to avoid walking your dog in fields or on roadsides where foxtails are prevalent. Since the dry season is the only time foxtails are really a problem, you don't have to worry about walking your dog in these areas when the grass is green.

When camping or hiking with your dog, keep an eye out for foxtails in areas where your dog is walking or running. Try to keep him out of these areas if you can.

In the event that your dog comes into contact with a foxtail-infested area, be sure to go over him carefully to look for any foxtails that may have lodged in his coat. Dogs with thick hair are at greatest risk of you missing a foxtail, so look closely if your dog has an undercoat that could easily hide one of these problematic seed clusters.

To help guard against foxtails, some owners give their dogs a thorough grooming after the dog has come into contact with these plants. This includes combing through the dog's coat with a fine-tooth comb. Owners also exam-

### Another Plant Hazard: the Burdock

Foxtails are not the only plant pieces that can cause problems for dogs. Other plant seed pods, like burdocks, can also lodge in a dog's skin. "Burdocks occur in clusters at the tip of stakes at varying levels above the ground," says Dr. Miller. "As the dog walks by and brushes against the cluster, one or more can attach to his coat. In the process of trying to remove them with his mouth, the dog can develop a stomatitis (sore mouth) or glossitis (sore tongue)."

Dr. Miller continues: "Some of the spikes on the burdock can break off as the dog tries to pull the burdock from his fur and those spikes penetrate the mucosa. Since burdocks are much smaller than foxtails, they tend not to migrate deeply and the body will reject them eventually. As with foxtails, infection can follow penetration, making things much more problematic."

ine the dog's entire body, especially the undersides of the paws, the armpits, the stomach and inside the ears.

Owners of dogs with very thick hair sometimes clip the animals to help prevent foxtails from sticking to the hair and becoming hidden beneath it.

Signs that your dog may have a foxtail in his nose include sudden sneezing, pawing at his nose, and bleeding from one or both nostrils. As the foxtail works its way deeper into your dog's sinuses, his reaction may eventually dissipate, leading you to believe that whatever was bothering him has gone away. In reality, the foxtail has become even more dangerously embedded and may cause severe infection.

A foxtail lodged in your dog's ear will cause him to paw at his ear, tilt his head, shake his head, whimper or whine, and even move in a stiff manner when he walks. You may not be able to see the foxtail since it may have become embedded deep within the ear.

Foxtails sometimes become lodged in the eyes, and cause redness, swelling, tearing, squinting, and mucous discharge. Your dog may paw at his eye, but you may not be able to see the foxtail if it has lodged beneath his eyelid.

Your dog may even swallow a foxtail, causing him to gag, retch, cough, eat grass, and/or stretch his neck and swallow repeatedly.

### Don't Delay for Veterinary Intervention

If you suspect your dog has encountered a foxtail that has entered his body — and you can't find or remove the foxtail yourself — take him to your veterinarian immediately. It's important to act quickly. Foxtails can cause serious and sometimes fatal infections.

"Foxtails are an avoidable problem," says Dr. Miller. "The owner needs to learn what they look like on the plant and avoid areas where they grow. If avoidance is impossible, a thorough examination of the dog after a walk is a must." DW

By Audrey Pavia