

# 3 Reasons Your Dog's Urine Kills Your Grass – And What to Do About It

One of the most common questions vets answer is, 'Why does my dog's urine kill my grass?' This problem must be addressed on 2 fronts - what to do for your dog, and what to do for your lawn. Advice for both, inside.

Analysis by Dr. Karen Shaw Becker

## STORY AT-A-GLANCE

- Most veterinarians at one time or another get questions from clients about why their dog's urine burns the grass ... and what they can do about it
- There are three reasons a dog's urine burns grass: an alkaline pH, concentrated (vs. dilute) urine, and nitrogen load. The most important factor of the three is urine pH
- Dogs are carnivores, and as such, their urine pH should be on the acidic side – ideally from 6 to 6.5, but no more than 7. A urine pH over 7 will not only burn your grass, it can predispose your pet to struvite crystals and other urinary tract disorders
- A dog's urine pH can often be maintained in the healthy range by feeding a species-appropriate diet — low-carb, grain-free, potato-free, and preferably fresh or at least canned food for the increased moisture content
- If improving your dog's urine pH doesn't fully resolve the problem of your burned lawn, alternatives are to water down the spots where he urinates, or cover the area with about an inch of compost to help rebalance the soil pH

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A question veterinarians get asked all the time by pet owners is, "Why does my dog's urine seem to kill my grass?" And "Is there anything I can do about it?" Actually, there is. Your pet's urine pH has a lot to do with whether your grass stays green.

Since winter is on the way and in many parts of the U.S. people won't be thinking about their lawns for a few months, I thought now would be a good time to offer some tips on how to naturally adjust your dog's urine pH so he or she will be less likely to burn the grass next spring and summer.

## The Three Reasons a Dog's Urine Burns the Grass

There are three primary reasons why dog urine burns grass: alkaline urine pH, the concentration of the urine, and its nitrogen load. The most important of these factors is urine pH. The best way to find out which is the causative factor in your dog's situation is to drop a urine sample off at your vet for a urinalysis.

Concentrated urine has more solutes (particles) than dilute urine, which can affect grass health. The reason many people believe female dogs kill more grass than males is because females typically squat and pee in one spot (depositing a whopper load of solutes), whereas males tend to urinate in smaller amounts as they wander from spot to spot.

In my experience, urine nitrogen can affect grass health, but only when the nitrogen load is very high. Normal nitrogenous waste excreted in urine should not kill the grass. But if a dog's urine pH is in the correct range and his urinalysis shows a high nitrogen level, some pet owners have had success reducing urine nitrogen levels with products like Dog Rocks.

## **Your Dog's Urine PH Should Be Between 6 and 6.5**

Dogs are carnivores and should have a slightly acidic urine pH of between 6 and 6.5. (The higher the urine pH, the more alkaline it is.) Vegetarian mammals like rabbits and horses naturally have a very alkaline urine pH. Human urine is naturally slightly more alkaline (6.5-7), and many pet owners wrongly assume their dog's body functions in the same manner as their own.

It's important to keep your healthy dog's urine pH below 7, because a higher pH will not only burn your lawn — it will predispose your dog to developing **struvite crystals**. The flip side of that coin is a urine pH below 6, which can cause dogs to develop a different type of problem — calcium oxalate stones. So for the health of both your dog and your lawn, you should strive to keep your pet's urine pH right around 6.5, and no higher than 7.

I recommend buying pH strips from your vet or at the local drug store to check your pet's urine pH at home so you know when it's in or outside the desired range. In the morning prior to feeding your dog is when you should collect the urine sample. You can either hold the pH tape in the stream of urine while your dog is voiding, or you can catch a urine sample in a container and dip the tape into the sample to check the pH.

This should be done immediately with a fresh sample to insure accuracy. Don't measure urine pH throughout the day after feeding your pet.

## **Dietary Recommendations to Lower Your Dog's Urine pH**

When we feed carnivores a cereal-based diet, their urine becomes alkaline as a result, and alkaline urine burns grass. Meat-based diets are innately acidic, which is perfect for carnivores. Alkalizing diets are not a good idea for carnivores. Not only do they create urine that burns grass, more importantly, they very often are the cause of chronic urinary tract infections (UTIs) because lack of acidity removes the antimicrobial activity in urine.

Alkaline urine can also create cystitis (irritation of the lining of the bladder), crystals, and even uroliths, or stones, that require surgery.

Dry foods increase urine concentrations and also ammonia levels. Ammonia has a pH of 10 or more. A moisture-rich diet promotes a healthy specific gravity (urine concentration) that decreases the likelihood the urine will burn your lawn. In fact, a healthy dog's urine should act as a fertilizer — everywhere she pees, the grass should be twice as dark, lush and tall as surrounding grass.

Often, a dog's urine pH can be maintained naturally between 6 and 6.5 by feeding a species-appropriate diet. To reduce urine pH, you must feed a low-carb, grain-free, potato-free, and preferably fresh or at least canned food diet for the increased moisture content.

There are products on the market to reduce urine pH that contain the acidifying amino acid DL-methionine. This is a safe addition to your dog's diet, but a more logical approach is to simply stop feeding grains and alkalizing foods.

## **Other Tips for Protecting Your Lawn From Urine Scalding**

If you've managed to get your dog's urine pH into the 6 to 6.5 range and his vet says his urinalysis is perfect, but he's still killing your lawn, there are a couple of other ways to deal with those burn marks.

One way is to hose down or at least pour water on the patch of grass as soon as your pet urinates. I have a client who walks his dog in the grassy common area in his condominium complex. He keeps a couple of 16 oz. bottles filled with tap water, and grabs one along with the dog leash and poop bag whenever he takes his dog out to relieve himself. When the dog urinates, my client follows behind him and splashes or pours water on the spot.

Alternatively, you can cover the area with about an inch of compost. These methods will help rebalance the soil pH and reduce urine burning.

## **Sources and References**

[Animal Wellness Center April 30 2013](#)

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