

## Dog Waste in the Environment

The Leave No Trace for Outdoor Ethics organization conducted a study on "canine defecation events" on 45,000 acres of conservation land in Boulder, Colorado. In summary, dog waste left to decompose is really, really harmful.

All wildlife in our conservation lands forage for food in their home environment, which means they're consuming resources and nutrients from the same ecosystem in which they live. After they've digested and absorbed that food, the same resources and nutrients are returned to the ecosystem via their scat. The system is basically a closed loop, with no net gain or loss in nutrients or resources. However, dogs eat pet food rich in nutrients designed to provide them with a complete diet. The dog expels the excess nutrients, such as nitrogen and phosphorus, through its waste. When that is left to decompose in our woods, the excess nutrients are released into the ecosystem.

It was found that those foreign or excessive nutrients can create unstable conditions for native plants and an inviting habitat for invasive plants. Invasives can choke out the native species. Dog waste does not present a closed loop but rather a cycle of damage. If those native plants disappear, then the potential for fewer food sources for the wildlife is presented in our woods.

Additional damage caused by dog waste that is not picked up is to our natural waterways. The decomposing dog waste also contains harmful pathogens. When it rains, these excess nutrients and pathogens runoff into nearby water sources, which then can cause harmful algae blooms in our water ways. Algae blooms make the water murky, green, smelly, and unusable for swimming, boating, or fishing. The algae blooms, as well as the pathogens, can make humans and animals sick.