

WE ♥ DOGS AT TRYON CREEK

and want to ensure their future here with your help!

Dogs in the Tryon Ecosystem

At Tryon Creek State Natural Area, park visitors have the privilege and responsibility of hiking, jogging, and leisurely strolling with their four-legged friends. On any given day, a wide variety of furry, short, hairless and massive dogs can be seen on trails getting exercise that benefits their health and happiness as well! Tryon Creek is unique in this way, as many Portland area greenspaces do not allow dogs leashed or unleashed within their confines.

Why do some natural areas prohibit dogs? Stewarding a natural area requires balancing impacts and benefits of any decision. This short literature review will unpack why we all should be responsible dog stewards to ensure safety, ecological viability, and continued recreational opportunities for humans and their furry friends at Tryon Creek State Natural Area.

There are many benefits from hiking with our four-legged friends in a favorite natural area. Studies have documented negative ecological impacts of dogs' presence in natural areas, but have also shown that "regulations enacted by protected areas combined with responsible management of dog behavior greatly reduce the ecological impact of man's best friend." 6 Read on to learn more about how dogs impact the environment, and how responsible pet owners can reduce those impacts.

Natural Areas promote Biodiversity and Wildlife

Protecting areas like Tryon Creek is part of a larger regional strategy for preserving biodiversity of plants and wildlife. As a second growth forest, Tryon Creek provides habitat for nearly 300 plant species from ground covering waterleaf to towering big leaf maple. Many species depend on park habitat in contrast to surrounding developed areas, or as a stopping point along a corridor of migration. Upland and riparian areas provide refuge and sources of food for mammals like deer, coyotes, chipmunks and bats, in addition to a variety of amphibians like salamanders and tree frogs. The lower reaches of the creek support salmon, while the middle and upper reaches support trout and small sculpin. A large variety of birds from large hawks to hummingbirds and arthropods like mason bees and banana slugs rely on the habitat benefits of Tryon Creek State Natural Area and call it home.

Human Activity in Natural Areas Disturbs Wildlife

Natural areas also provide refuge for humans. With 14 miles of trails crisscrossing the forest, creek, and several small tributaries Tryon Creek State Natural Areas offers recreation activities for nearly 600,000 visitors each year. Physical and mental health benefits from being outdoors and submersed in nature are well-proven and promoted by healthcare professionals. Although beneficial in so many ways, human activity in natural areas disturbs wildlife. At Tryon Creek these benefits of outdoor exercise and activity are often extended to our furry four-legged friends – dogs (although horses are also allowed at Tryon and a few cats and even a pig have been spotted hiking the trails).

Dogs Exacerbate the Impact of Humans on Natural Areas

Whether it is in their size, their speed, or their strength-- dogs vary in characteristics that we might perceive as adorable, amusing, or potentially dangerous. Yet no matter how humans see dogs, as a subspecies of wolves, all dogs are perceived as predators to wildlife 1. There are several major impact categories summarized in a literature review compiled by Metro Parks and Nature in April 2016 that include displacement, stress and mortality in addition to negative health impacts of disease and water pollution. 2

How do Dogs Impact Wildlife and Water Quality?

The presence of dogs causes wildlife to move away from an area either permanently or temporarily. This displacement reduces the amount of habitat available for wildlife to feed, breed and rest within a natural area. The scent of dogs including the smells left from urine and feces repels and effects wildlife even after the dogs are gone. Animals can even become less active during the day to avoid dog interactions.

Several studies have found that displacement of large and small mammals can occur from 25- 100 meters off the trail 3. Using the conservative impact of 25 meters around trails at Tryon Creek, that area would include 207 acres of the parks total 651 acres, so wildlife would be disturbed and displaced from 32% of the park 2.

This calculation accounts for dogs kept on-leash and on-trail, so the potential disturbance from dogs allowed off leash or in and along the creek only increases this disturbance area.

In general, wildlife can be stressed by natural causes, like seasonal changes to the weather and food availability. Small stresses like this are good for animals to learn to adapt and thrive in their environments. While continued or chronic stresses, like the consistent presence of predators, have negative effects to routine activities like feeding and resting. Which can cause longer-term impacts that slow growth or reproduction rates, and increase vulnerability to sickness and disease.

Given the opportunity and driven by natural instincts, dogs can directly chase and kill many types of small and larger mammals plus, birds and reptiles. A variety of studies across natural areas have documented dogs preying on wildlife. The Metro lit review sites a Portland Audubon account of nearly 1,700 “dog-caught” injured animals treated in their Wildlife Care Center over a twenty-year period 4.

In less direct ways, dogs can also carry and transmit diseases such as rabies and parvovirus to wildlife, as well as parasites like roundworms or salmonella to humans. Other bacteria, like E.coli can end up in waterways like Tryon Creek and its many small tributaries. Most of this transmission is caused by the lack of, or improper, handling of pet waste.

One of Metro’s reasons for not allowing dogs in many of the natural areas they manage is because dog feces pollutes water and Metro is bound by the Oregon Department of Environmental Quality and the federal Clean Water Act to protect water quality 5. Another water quality concern besides E.coli is sediment in streams that can increase when dogs are allowed to roam along and in streams, which increases erosion and impacts aquatic life.

What can we do as individuals to support healthy wildlife habitat and maintain recreation options at Tryon Creek?

Understand and acknowledge these impacts. It might be easier to think otherwise, (“But my Bingo is such a special dog!”) but shifting our mindsets to acknowledge that your presence, your dogs’ presence, or your friend’s dogs’ presence all have negative impacts on the surrounding environment can go a long way in changing your behavior in caring for these shared spaces.

Every Day is a Dog Day at Tryon

Friends of Tryon Creek value the biodiversity of plants and wildlife within and around Tryon Creek State Natural Area, and we also

value the intertwined and interdependent role of humans and domesticated animals in this special urban place.

Appreciate that natural areas like Tryon Creek currently allow dogs. As demands for natural areas increase, popular hiking trails are starting to reconsider the regulations around allowing dogs. If we do our individual part to support dog regulations at Tryon this should not become an issue. With greater awareness and acts of everyday reciprocity, this cherished forest can continue to provide a shared space in which all of its inhabitants and visitors can thrive.

Join Friends of Tryon Creek in educating and celebrating during Dog Days of Summer in July, and join as a member to support an interconnected ecosystem at Tryon that makes room for plants, wildlife, people, and dogs, too.

Take responsibility for your impact and that of your dog by following these easy steps on the Tryon trails:

- Dogs must remain on a 6ft leash at all times (even when no one is around to notice!)
- Dog waste should be picked up and disposed of in a trash can. Bags are provided at a number of trailheads near the Nature Center. Trash cans can be found throughout the park.
- Be cognizant of the space your dog takes up and don’t allow it or its leash to get in the way of other hikers.

1. Kats LB, Dill LM. 1998. The scent of death: Chemosensory assessment of predation risk by prey animals. *EcoScience* 5:361-394.
2. The impacts of dogs on wildlife and water quality: A literature review Compiled by Lori Hennings, *Metro Parks and Nature*, April 2016
3. Lenth BE, Knight RL, Brennan ME. 2008. The effects of dogs on wildlife communities. *Natural Areas Journal* 28:218-227.
4. Audubon Society of Portland. 2016. Wildlife Care Center intake summary, 1987-2015. *Derived from Audubon Society of Portland’s database by Joe Liebezeit on April 13, 2016.*
5. Shueler T. 2000. Microbes and urban watersheds: Concentrations, sources, & pathways. *Watershed Protection Techniques* 3:1-12.
6. Parsons A 2016. The ecological impact of humans and dogs on wildlife in protected areas in eastern North America. *Biological Conservation Journal*.