

FECAL BACTERIA BEST MANAGEMENT PRACTICES (BMPs)

► Wildlife Populations

OVERVIEW

Wildlife populations are important in maintaining ecosystem functions. However, they utilize highly urbanized areas and can persist in larger, problematic numbers (e.g., litter, feeding of wildlife, etc.). In fact, congregations of animals, including Canadian geese and seagulls, are a common sight in urban areas here in Wisconsin. Nuisance congregations of wildlife can contribute larger amounts of fecal bacteria in storm water runoff than what would naturally occur. This is because of the large number of animals and the prevalence of impervious surfaces in urbanized settings.



Photo credit: Wisconsin DNR



Photo credit: Wisconsin DNR

Additionally, storm water ponds can attract waterfowl. Although waterfowl naturally flock to waterbodies, it is important to remember that the intent of storm water ponds is to treat runoff before it enters the environment since storm water outlets discharge to waterways. Since storm water ponds are a treatment system, a nuisance congregation of waterfowl at these ponds can contribute to high levels of fecal bacteria in the pond. Consequently, since fecal matter is high in nutrients such as nitrogen and phosphorus, this can also lead to algae blooms in storm water ponds, creating foul odors and poor aesthetics, and may increase the amount of phosphorus when discharged into the environment.

IMPLEMENTATION

Install “No Feeding Wildlife” Signs

Signs prohibiting the feeding of wildlife can discourage wildlife congregations. The signs can also contain educational information about the importance of not feeding wildlife and how it ties into reducing storm water pollution.

- Brings awareness to the issue of fecal bacteria from urban wildlife.
- Relies on individual responsibility and behavior change and could be difficult to enforce.

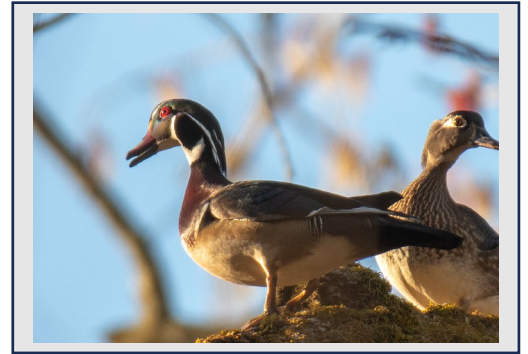


Photo: Wisconsin DNR.

Adopting Ordinances That Prohibit The Feeding Of Wildlife

Adopting an ordinance allows communities to enforce the prohibition on feeding wildlife. Stopping feeding discourages wildlife congregations and subsequently reduces the accumulation of wildlife waste.

- Would be beneficial to combine policy change with educational signage to notify residents of the ordinance.
- Requires time, effort and personnel to enforce the ordinance.

Install Roof Spikes On Buildings

Roof spikes discourage birds from nesting on buildings and near parking lots. This reduces the amount of bird waste on impervious surfaces which can reduce the quantity of fecal bacteria in storm water runoff.

- Relatively easy and inexpensive to install.

- Accumulating debris can make spikes less effective, but requires minimal maintenance to monitor and remove debris.

Use Scare Tactics To Disperse Wildlife Congregations

Installing visual deterrents (i.e., fake predator decoys, reflective or holographic tape) or chasing nuisance wildlife with dogs can discourage flocks from staying in a particular area.

- Dogs require care or services and are more expensive.
- Predator decoys and holographic tape are easier to implement and a cheaper option. However, wildlife can become habituated to them if they are motionless.

Practice Good Housekeeping At Beaches, Parks And Public Parking Lots

This will reduce the amount of food waste and litter, which discourages the congregation of wildlife in large open areas like beaches or public parking lots.



Photo: Wisconsin DNR

- Would require additional staff effort to remove litter and empty trash receptacles on a routine basis.
- Offers other benefits such as improved aesthetics and improving habitats for wildlife.

Plant Tall Vegetation Around Storm Water Ponds

Planting tall vegetation around storm water ponds obstructs the view of predators, deterring waterfowl from entering or feeding near the water.

- Planting riparian buffer vegetation discourages wildlife congregations, and can help reduce pollutants including nitrogen, phosphorus, and fecal bacteria (i.e., outcompeted by native bacteria population or toxins produced by other bacteria).

ADDITIONAL RESOURCES

General

- [Managing Nuisance, Urban and Damaging Wildlife – Wisconsin DNR](#)

Example Ordinances

- [Model Ordinance - Wildlife Feeding \(bernards.org\)](#)
- [Village of Fox Point](#)

Storm Water Pond Vegetation

- [City of Fitchburg Stormwater Pond Vegetation Recommendations - City of Fitchburg](#)
- [Aquatic Plantings – Wisconsin Lake & Pond](#)

Roof Spikes

- [Anti-Bird Spikes: What You Need to Know – Bird B Gone LLC](#)

SOURCES

[National Park Services. Pollution Prevention Fact Sheet: Animal Waste Collection.](#)

[Maryland Sea Grant Extension Brief. Urban and Stormwater Pond Management.](#)

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[Tsai, Y., Zabronsky, H. M., Zia, A., Beckage, B. 2022. Efficacy of Riparian Buffers in Phosphorus Removal: A Meta-Analysis. *Water* 4.](#)

Disclaimer: This fact sheet is intended to be used for informational purposes only. These examples and references are not intended to be comprehensive and do not preclude the use of other technically sound practices.

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