Study: Dogs help keep microbes from taking over beaches

By Naomi Lubick, Science

If you spent time at the beach this summer, you probably encountered seagulls screeching overhead and eating trash. You probably also encountered their poop.

Seagull droppings can carry disease-causing microbes like Escherichia coli and Enterococcus, which can contaminate beaches and water. Now scientists have found a way to fight back: Release the hounds.

In a new study, researchers show that unleashing dogs keeps the seagulls away—and the water at the beach free of microbes.

Beach managers have been fighting seagulls for decades. The more birds, the more microbes, and the more likely the beach will meet the guidelines for closing, as advised by the Environmental Protection Agency.

In a recent study, researchers from the U.S. Department of Agriculture tried reducing gull populations on Chicago beaches by "oiling" their nests – spraying oil on the eggs to prevent the birds from hatching. That tactic had some short-term success, but its long-term benefits are unclear. Chicago beach managers have also used dogs to chase away gulls, which anecdotal evidence suggests has helped reduce the microbe counts and thus the number of beach closures.

To more definitively connect the gulls' dog-inspired dispersal to microbe concentrations, a team of researchers led by Reagan Reed Converse, an environmental microbiologist at EPA in Chapel Hill, N.C., examined water quality at North Beach in

Racine, Wis.

During the summer, managers regularly “groom” the beach, located on the shores of western Lake Michigan about 100 kilometers north of Chicago, by turning over the sand, which buries any microbes left from bird poop. North Beach’s managers have also worked to remove other sources of pollution, such as sewage runoff, leaving the gulls as the primary source of contaminants in the water.

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