Feed the gulls, spoil our beaches

By Sandra L. McLellan

Ducks, geese, and gulls enjoying a quiet day at the beach may not be as harmless as they seem at first glance. In recent years, the numbers of these birds populating urban areas have been on the increase, in part due to the easier lifestyle afforded them by humans.

Litter on the beach (we have all seen the abandoned fast food bag or two), open garbage cans, bread, and other leftovers fed to birds from well-meaning citizens provide them with an ample food source. The dearth of predators in urban areas also contributes to a stress-free life.

Canada geese, while perhaps more of a nuisance than gulls, contribute far less E. coli into the environment. In fact, it would take 600 geese to equal the amount of E. coli that can come from one gull.

Waterfowl include nine distinct families of geese, ducks, and swans. Gulls are considered seabirds, not waterfowl, even though some species travel a thousand miles from the ocean. Their prominent presence on the Great Lakes is logical, since the Great Lakes are classified as inland seas. The changing urban environment has caused a population explosion because of new food sources and habitats, i.e. landfills, shopping malls.

For some birds, their migration patterns have changed as they adapt from the natural environment to the urban environment, causing them to stay in an area year round. One of the most common birds on the Great Lakes is the Ring-billed Gull (Larus delawarensis). It is estimated their species has experienced a hundredfold increase in the number of mating pairs since the 1970s. Physical droppings—one gram of gull feces can contain over 300 million E. coli cells.

Canada geese, while perhaps more of a nuisance than gulls, contribute far less E. coli into the environment. In fact, it would take 600 geese to equal the amount of E. coli that can come from one gull.

Studies by the Great Lakes WATER Institute have found that beach sand and parking lot storm runoff carry very high levels of E. coli, upwards of 1,000 to 100,000 E. coli cells per 100 ml, which is well over the acceptable limit of 235 E. coli per 100 ml for recreational water.

Certain beaches may be more prone to harboring large gull populations. Expansive open areas are ideal loafing grounds for gulls because they can easily spot predators approaching. Therefore, features such as natural dunes and tall grass might discourage this loafing behavior. In addition, beaches with low amounts of activity allow flocks to sit for hours undisturbed. The loss of lifeguards and the declining use of the beach by the public has contributed to this condition. (Some cities around the Great Lakes
One of the most common birds on the Great Lakes is the Ring-billed Gull (*Larus delawarensis*). It is estimated their species has experienced a hundredfold increase since the 1970s.

So what's the harm in having a great number of waterfowl and other birds? With Canada geese, it only takes a few steps across the beach to see the impact. Gulls, geese, and ducks create an accumulation of fecal droppings on sand, grass, and pavement. Their waste carries a large amount of bacteria, particularly fecal indicator bacteria such as E. coli (*Escherichia coli*). Fecal bacteria from birds can be washed into the water during rainstorms from the sand or parking lots into the beach water. Any fecal material introduced into surface waters, particularly at beaches, impairs water quality.

Bird waste from our feathered beachgoers is not only a nuisance and a detriment to clean water, but also affects how often we can use the beach. Water quality advisories are issued at beaches when levels of E. coli exceed 235 E. coli cells per 100 ml (approximately 5 oz) of water. Gulls contribute the largest amount of E. coli from their feces—have tried employing herding dogs to keep the gulls from settling into a beach area.)

As mentioned above, food sources such as litter, open garbage cans, or active feeding of the birds are also strong attractants.

So what can people do to improve the situation? For starters, don't feed the birds. In nature, there is a balance between the environment and the living creatures it will support. When that balance is tipped, there are unforeseen consequences. Water quality is the obvious consequence, but there are also consequences for the birds.

By allowing a population to expand beyond what the natural environment can support, these birds become dependent on this food source. Over time, the birds lose their natural ability to fend for themselves. Birds in unnaturally concentrated numbers also have a greater chance of spreading disease. Finally, there are consequences for "non-nuisance" birds. The overcrowding can have a negative impact on more rare bird species that just can't compete. While some people may enjoy seeing large flocks of gulls on our lakefront, we may actually be missing out on viewing their more diverse and interesting brethren.

Dr. McLellan is an assistant scientist with UW-Milwaukee's Great Lakes Water Institute, 600 E. Greenfield Ave. Her research interests include the connections between environmental processes and human health, especially as relates to the ecology of waterborne pathogens.