

We are facing an environmental crisis of biblical proportions right here in Ontario, and its not global warming, oil spills, or the news flavor of the day.

Let me explain. The country of India has a population of over 1.2 billion people. About 300 million of their population, worship the common rat. Yes, the lice and flea infested, disease carrying, plague famous rat. We Canadians have much in common with these people as we too worship a rat. No ordinary rat, but a real big one, the beaver.

When beaver dam a clear flowing stream or river, (if you can still find one that hasn't been dammed) a radical change takes place in the physical and chemical properties of the water. As the shallow water spreads over the forest floor the oxygen levels fall quickly due to the consumption of oxygen by the organic layer to near zero, the temperature rises, and the organic load from the leaves and vegetation goes through the roof. The water now starved of oxygen, acidifies. The fish and aquatic life in the stream are now long dead. The abundance of hydrogen ions from this acidification attack any complete molecules in the soil such as sulphates ( $\text{SO}_4$ ), Ferric hydroxide ( $\text{Fe}^{+++}$ ), and phosphates ( $\text{PO}_4^{-3}$ ). You can smell the robbing of oxygen from sulphates by the rotten egg odour of swamp gas. This rotten egg odour is also caused by the submerged vegetation decomposing without oxygen. The iron and phosphorous are released into the water stream as their complete compounds are relieved of their oxygen. Methyl mercury reducing bacteria release into the water stream the mercury accumulated over decades in the wood of the trees of the flooded forest. This mercury is now free to move downstream to bioaccumulate up the food chain rendering sport fish unfit to eat. The water now has a very brown discolouration and unpleasant odour. If this chemical cocktail is suddenly released into downstream lakes by way of dam breakage, it sets the stage for massive algae blooms if the right amount of sunlight and temperature are on stage. The bottom line is that this giant rat has turned clean water into putrid effluent.

And then there are the feces. Being a rodent, they eat and defecate like a goose. The flooding of the forest floor absorbs the coliform and feces of all the other animals that formally lived there before the flooding. And you want to blame the septic systems on your lake for the bacterial counts? Keep in mind that we are the only animal that disposes of our waste in an organized fashion.

Eventually everyone in Ontario north of Barrie will be affected in some way. Whether by your lake water quality, well water that is recharged by surface water and all wells are. The fact that every brook, creek, and river has been dammed, means water levels in the great lakes will be lower. After all that's where the water in the great lakes comes from, the watershed. And you wonder why the water levels in the Great Lakes are so low? You have witnessed the biggest engineering project in Ontario that was done with no environmental review or permits. Engineered, constructed and completed at no cost to taxpayers!

There is also the destruction of habitat. The almost total loss of cedar swamps that provided winter habitat to so many animal species. The destruction of sphagnum bogs that are one of the best purifiers of water we have. The destruction of natural marshes that provide nesting habitat for so many waterfowl and again great purifiers of water. The loss of so many unique species of plant life like the pitcher plant or the orchid reginea.

The cessation of trapping for their furs and our killing of their natural predators has allowed the beaver population to explode and they are doubling at an ever increasing rate. If we don't bring this infestation of these giant rats under control we will pay a huge cost in the loss of our water quality, destruction of our forests, damage to highways, roads and other infrastructure, and diversity of plant and animal life as the habitat is destroyed. Next time you take a drive north, south, or east of Parry Sound take note of all the beaver dams you can see from the road and then magnify this over the whole watershed of the upper great lakes and it is truly that extensive. A little overwhelming, isn't it?

Our governments at all levels seem inept at dealing with this even though they see the evidence every day. Through lack of education and our propensity to do as the people of India do and worship our national rat we turn a blind eye to the barabarrick destruction they commit. If you came home and found your house infested with rats, how long would it take you to call an exterminator? When they infest our lakes we worship and protect them.

Our local governments send out toilet police to inspect septic systems, or like Seguin township waste money and hire consultants to study phosphorous levels which are totally irrelevant to water quality in our area. Some cottage groups even believe the brown water is cause by leaky septics ignoring that thousands of acres of beaver swamps drain into their bay or lake.

It is a sad day when so few people where blessed with so much high quality fresh water that we take such a pitiful care of it and lack any insitefull understanding of how our environment works. Maybe if we have a pandemic caused by some here to unknown virus from this rat we'll take action. Our religion of rat worship consumes us.

May all your rats be blessed.

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