Microbead Invasion

Prough, Rylie

Microbeads were found in the Great Lakes and studies show how marine life, such as zooplankton, are mistaking them for food, and how the microbeads are potentially harming them. Organisms cannot digest the microbeads, and microbeads can absorb toxins in the water and harm organisms when consumed. Not only are microbeads posing a problem in water ways, but also in septic systems, sea salt companies and in fertilization used for crops. Now knowing that scientists have discovered microbeads in the Great Lakes, I wanted to assess if microbeads are polluting local lakes and rivers in Northeastern Indiana by collecting qualitative data. I tested seven different bodies of water. Since microbeads float on water and are hydrophobic, I collected the samples 100 yards off shore on the wind driven side of the lake because weather patterns could play a role of the location of the beads. After the collection of the water samples, I transferred them to a local lab, and they conducted a TSS test. I observed all the filters under a digital microscope and found all the samples showed evidence of microbeads. I compared the findings to microbeads that came from hygiene products, which posed as my control. The microbeads were spherical and different colors such as neon green, purple, and sky blue; not colors usually found in a body of water. I concluded that out of all the bodies of water that I tested, they all contained microbeads. It is so important to know about what is polluting the environment because, in the long run, the problem can get worse. To see if a product contains microbeads, look for the word "Polyethylene" on the ingredients list on the back of the product container. Polyethylene is a cheap, plastic material used by companies to help exfoliate skin.

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