the science of | The St. Johns River

Transcript

Science on the St. Johns:
Microplastics in your Home … our Rivers … and the Ocean …

http://thescienceof.ju.edu/science-on-the-st-johns-microplastics/

Hannah Knighton: Today I'm helping out the St. Johns Riverkeeper on their microplastic awareness project. Here we have a sample from the Ortega River and what we did was take a liter of water and filter it. We found 39 microplastics on this small sample.

Justina Dacey: Microfibers, which you can find in our clothing, such as fleece jackets, nylons, polyesters, and so when you're doing a load of laundry, these microfibers actually get released into water. Then, they go into our water treatment plants which don't have the abilities to filter them out. And so these microfibers actually get into our waterways such as our rivers and lakes and eventually into our oceans.

Microplastics are basically little pieces of that plastic that are considered about smaller then 5 millimeters. They're found in our everyday products such as facial scrubs, deodorants, toothpaste, and come from major plastics such as water bottles that degrade over time from the sun and from the weather.

Haley Camp: Hi. We're talking about microplastics in body scrubs. Right here in this petri dish are the microplastics. You can see there's a lot of microplastics in here and this is what gets put back into the water system.

Narrator: Microbeads added to the body scrub for exfoliation are viewed under the microscope. Microbeads like this are mistaken for fish eggs in waterways and are eaten by some animals, transferring them into food webs. Impacts of microplastics on our waterways have been mounting. It is estimated that 8 trillion microbeads are entering our waterways every day and are impacting food webs and ecosystems. As just one example, recent research has shown that microplastics can significantly reduce oyster reproduction when the oysters ingest them.

There is some good news on the horizon. Some companies have stopped adding microbeads to their beauty products, and the U.S. Government has passed a law that will ban adding microbeads to some products over the next few years. However, there is still a lot of work to be done to decrease microplastics from entering our waterways. Fortunately, advocacy groups and scientists are hard at work making a difference. But it will take all of us to truly reduce this microscopic threat to our aquatic ecosystems.