

Megan Pope

*Soak It Up: A Study of Removing Oil from Water*

The purpose of my project was to determine which material, natural human hair, color-treated human hair, pet fur, pet hair, sheep's wool, saw dust or nylon fibers, soaked up the most oil out of water. First I filled the leg of pantyhose with one of my materials. Then I placed it in a bin filled with water and a quart of motor oil in it. I moved it to all corners of the bin for two minutes. Afterwards, I spooned all the leftover oil into a measuring cup to determine my results. Some of my materials did very well but nylon fibers did not. It removed only 28% of the oil. It did by far the worst. Sheep's wool removed half the oil, or 50%, doing okay. Color-treated human hair did good removing 59% of the oil. Pet fur and natural hair both did very good removing 62% of the oil. Not far ahead, sawdust did very good removing 66% of the oil. Pet hair did the best removing almost three-fourths, or 75%, of the oil. From my experiment I conclude that man-made materials do not do very well at soaking up oil. Natural materials do much better. I believe that thicker materials do not soak up as much oil as thinner fibers.