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*How Crude: Oil vs. Dish Soap*

In ocean oil spills, seabirds can get coated in oil, which can cause them to die from cold or poisoning. Rescue teams need an effective cleaning solution that will remove oil from birds' feathers. Some teams use diluted Dawn dish soap, which advertises on its bottle: "Dawn helps save wildlife." The purpose of this experiment was to determine if Dawn is the best at removing oil from bird feathers. My procedure involved mixing canola oil and cocoa to resemble crude oil. The oil was then poured onto a 3.5% saltwater solution. Goose feathers were dipped into the oil and then cleaned with six different cleaning solutions. Three were shampoos, and three were dish soaps, including Dawn. The dry weight of the feathers was compared before and after the experiment to determine which soap removed the most oil. I found that Palmolive and Dawn tied for first place, leaving only .01 grams of oil. Aveeno baby shampoo came in second, and Johnson's baby shampoo came in third. Trader Joe's shampoo and Ultra Dishmate dish soap tied for last place. Though Palmolive doesn't advertise that it helps wildlife, it performed just as well as Dawn. Aveeno performed almost as well. Aveeno could be field-tested by rescue teams as an alternative to dish soap. Because it is made for babies and is advertised as "tear-free", it might be less irritating to birds' eyes and skin.