

The Secret Life of Coffee

The Oklahoma Department of Environmental Quality is encouraging citizens to examine and rethink their consumption habits during the third Oklahoma Use Less Stuff Week from April 19-26, 2003. DEQ's Bryce Hulseley announced, "During the April 22 Earth Day season, the DEQ wants to provide food for thought for Oklahoma citizens about their everyday habits with our Use Less Stuff Campaign. This article examines the entire journey our morning coffee makes on its way to our cup." The following information is provided by John C. Ryan from his book, Stuff--The Secret Lives of Everyday Things.

One cup of coffee takes 100 beans that grew in Columbia on a small mountain farm cleared of forest systems for cattle ranching and coffee and fruit trees. Pesticides were necessary due to the removal of birds and other insect eaters. The beans were picked by hand, the pulp is removed (2 pounds per pound of beans) and dumped into the Cauca River where it consumes oxygen needed by fish. The beans are dried in the sun and shipped to New Orleans on a freighter made in Japan from Korean steel made from iron mined in Australia and fueled by Venezuelan oil. In New Orleans, the beans are roasted with oven burning natural gas from Texas—then packaged in four-layer bags made of polyethylene, nylon, aluminum foil and polyester. Finally, they are trucked to a warehouse in Oklahoma City or Tulsa and delivered by a smaller truck to our neighborhood grocery. The beans are carried out in a sealed, wax-lined paper bag and a large brown paper sack made at unbleached kraft paper mills in Oregon. One-fifth gallon of gasoline was burned during the five-mile round trip to the market.

Before we can conjure up our brew, we will need a grinder. We measured beans into a disposable plastic scoop molded in New Jersey and spooned it into a grinder which was assembled in China from imported steel, aluminum, copper and plastic parts and powered by electricity generated at Ross Dam on the Skagit River in the Washington Cascades. We dumped the ground coffee into a gold-plated mesh filter made in Switzerland of German steel and Russian gold and put it into a plastic and steel drip coffeemaker

Oh, yes! We must use water for our brew. Eight ounces of tap water from a processing plant is poured into a coffee pot; originally the water came from Lake Atoka where it is pumped nearly 200 miles for Oklahoma City consumers. The pump was probably powered by a coal-fired electricity generating plant in Muskogee, with the coal transported to Oklahoma from Wyoming. An element heated the water to more than 200° F with power generated by an OG&E gas-fired power plant. The hot water seeped through the ground coffee and dissolved some its oils and solids. The brew trickled into glass carafe and was poured into a mug made in Taiwan. Later, we washed the mug using two gallons of water.

If you use cream, you stir in one ounce of cream from a grain-fed dairy cow in Union City. Cows like to wade into streams and drink and graze on streamside grasses and willows, so the water gets warmer and muddier, make life difficult for the sunfish and bass living in the stream. Some farmers fence cattle out of waterbodies to minimize such impacts. The two teaspoons of

sugar you measured out came from cane fields (former sawgrass marshes) in Florida. Water that used to flow across these marshes and into the Everglades is now drained into canals and sent directly to the ocean or irrigates fields, where it picks up nutrients and pesticides. Populations of all vertebrates—from turtles to storks—have fallen 75 to 95 percent in Everglades National Park.

When examining the waste involved, we find that the cow's manure was rich in nitrogen and phosphorus.

Since the soils of the cow pasture were unable to absorb all the manure, it washed up into the stream when it rained, fertilizing algae which absorbed oxygen from the water, making life more difficult for the fish living in the stream. Two hours later, your body metabolizes the coffee and most of the water and nutrients are passed into the Oklahoma City sewer system where it is mixed with other organic and inorganic waste. They then traveled under the streets of the city to Oklahoma City's sewage treatment plant on the North Canadian River in Jones where the solids were filtered, concentrated, digested and sterilized with screens, settling tanks, bacteria and chlorine. An engineer deemed the sewage sludge clean enough for agriculture and a trucker hauled it to pulpwood tree farms for use as fertilizer and soil conditioner. A pipe carried the treated liquids a mile into the North Canadian River.

Coffee is the world's second largest legal export commodity (after oil) and is the second largest source of foreign exchange for developing nations. The United States drinks about one-fifth of the world's coffee. If you drink two cups a day, you'll down 34 gallons of java this year, made from 18 pounds of beans. Colombian farms have 12 coffee trees growing to support your personal addiction. Farmers will apply 11 pounds of fertilizers and a few ounces of pesticides to the trees this year. And, Columbia's rivers will swell with 43 pounds of coffee pulp stripped from your beans.

Okay, you don't want to give up coffee--What can you do? Cut back on drinking coffee—it stains your teeth and makes you jumpy anyway. (And nobody likes coffee breath, either!) Buy organic, shade-grown, fair trade coffee. Coffee grown under the shade of mixed trees requires few or no chemical inputs; the leaf litter replenishes soil nutrients and the variety of tree species benefits birds and discourages pest outbreaks. Also, the farmers growing and picking it are making a living wage from their work. Many brands of sustainably produced coffee are available. Contact Use Less Stuff campaign coordinator, Susie Shields, at <Susie.shields@deq.state.ok.us> or 405.702.5166 for more information.

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