Barry Whittaker Flow Visualization September 25, 2007

Get Wet

My intent for this project was to experiment with household fluids to create an observable reaction. Using my digital camera, I hoped to capture a range of motion and interaction within a small quantity of easily obtainable fluids. Since this was to be my first attempt at making images solely with liquids, I wanted to keep the experiment to a smaller scale so that lighting would be manageable.

In this experiment I used corn syrup, food dye, and rubbing alcohol. In this image I placed 1 tablespoon of corn syrup on a 1/8" thick sheet of plexiglass. From a height of approximately 7" I placed one drop of food dye in the middle of the 3 1/2" diameter pool of syrup. After 1 minute, I added one drop of rubbing alcohol from the same height.

To photograph this image, I placed the plexiglass sheet on top of a small, portable lighting table. It was photographed from above with ambient incandescent light from above as well. My intention was to have the fluid well illuminated and minimize the glare on its surface.

For this assignment I photographed with a Canon Rebel XTi, 10 megapixel camera. The lens is a 28 to 120, image stabilized lens. The focal length for this photo was 65 mm and the subject was approximately 1.6' away from the lens. The image was exposed at 1/320 second at f/5.6. The ISO was set at 400. Minimal correction was made to the background to remove the yellow tint at the bottom of the image and a few dust spots (also in the background).

I am pleased with the results. The reaction is completely contained within the frame and successfully illustrates what was observed. The structures formed by this reaction create an image with similarities to images in microscopic photography. This is not quite what I expected, but is a potential area to explore further, specifically in exercising greater control in guiding the experiment in a specific direction.