Color Preference in Poultry Chicks

Neff, Loulou (School: Elko High School)

The goal of my project was to determine the if preference of red in poultry is instinctual and, therefore, present from the time chicks hatch or if it is learned. I researched many experiments on color preference in fully grown chickens and found that most experiments have the same result: red was the favorite color. I hypothesized that this love of red was an instinct in poultry. To test my hypothesis, I used newly hatched chicks. I made feeders of four different colors: red, yellow, blue, and green. Everyday I weighed the feeders and recorded how much food had been eaten out of each feeder. After four days, I separated the chicks into two groups. The control group was given only chick starter and the experimental group was given many red fruits as well as the starter. I continued to weigh the amount eaten from every feeder. Overall, the chicks preferred the yellow feeder. The chicks given red fruits ate more from the red feeder than the control group, but they still seemed to like yellow best. I decided that because the tubs were black, the yellow contrasted the most and, thus, attracted their attention. I did one more experiment to test this. I cut up fruits of the four colors I used and mixed them up. On a white background, the blueberries were chosen the most. My hypothesis that red is instinctually preferred was not supported. Both experiments suggested that baby chicks start out by looking for contrast, and they learn to associate red with delicious foods by the time they are adults.