Pigeon Training: Number and Gender Ratio Comparison Affecting Innovation and Ability to Adapt and Learn

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The purpose of this experiment was to test what factors affected the speed of adaptability and learning in pigeons. To do this, I separated the experiment into two parts: gender testing and flock size testing. For gender testing, I set up a bell on a string inside a new coop that I would place the male and female groups in, separately, with the given task being to ring the bell for food. What I found, is the desire to be with their mates was stronger than the desire for food, thus resulting in poor data. Neither gender understood the task, and over time lost interest in it altogether. If I were to redo this, I would find pigeons that were younger and had not yet been mated to have that stronger desire for food over partners. Next, I tested flock sizes, were I tasked varying sizes of groups of pigeons to walk through a hoop on the ground for food. The group sizes are 4, 6, 8, 10, and 12 birds at a time. For this experiment, I rewarded the pigeons using a treat, eggshell, to help with incentive. As expected, the results are better than the gender testing and as hypothesized, the larger the groups got, the faster the pigeons learned the task and accomplished the task. What I count as "accomplished", is 90% of the pigeons in the group need to have walked through the hoop (3/4, 5/6, 7/8, 8/9, 9/10, and 10/12).