The Effect Wood, Paper, Litter, and Hay Beddings Have on the Release of Ammonia from Rabbit Waste

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If rabbit waste is not cleaned adequately, it builds up in the cage and release toxic air particles into its surroundings. One of these toxic particles is ammonia. Ammonia can cause health problems for people and animals that are constantly breathing it in. Different types of bedding absorb and hold different amounts of ammonia. The most common bedding materials used for rabbits are wood shaving, paper, litter and hay beddings. It was hypothesized that paper bedding would prevent the most ammonia from being released. Rabbit waste and bedding was collected and stored in a sealed container, so the concentration of ammonia in the air increased. This was done to see how much ammonia is released in one week. Time, food, water and environment remained the same for each bedding. The amount of ammonia in the air all increased but at different rates. Comparing all beddings to paper, it was found that hay released the most ammonia while litter released the least which is shown by its p-value of .0254. Through this project it was found that the litter bedding trapped the most ammonia, whereas the other bedding materials did not prevent toxic air from being released. With further experimentation it can be better understood how the ammonia is trapped and what bedding material is best to use according to the environment.

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