

SUMMARY OF CALHOUN'S MICE "UNIVERSE 25 EXPERIMENT"

John B. Calhoun's famous "Universe 25 Experiment" with mice is one of the best-known studies on how population density affects social behavior. He wanted to see what happens when a community has unlimited resources but becomes crowded over time.

For the experiment, Calhoun built a large enclosure designed to be a "mouse utopia." The habitat could theoretically hold about 3,000 mice. Inside it, he made sure there was everything the animals could need: unlimited food and water, protection from predators, a stable climate, and over 250 nesting areas. In other words, there were no natural limits that should have stopped the population from growing.

At the beginning, only a few pairs of healthy mice were placed in the enclosure. The first phase went exactly as expected: the population grew rapidly, doubling every couple of months. The mice spread out, built nests, and raised their young in relative peace. For a while, it looked like the utopia was working.

But as numbers increased, the mice were forced into closer and closer contact with each other. Even though the enclosure was not yet physically full, the constant interactions created psychological stress. The maximum population was reached at around 2,200 mice, far below the 3,000 the enclosure could have supported. After this point, reproduction slowed down sharply, and disturbing changes in behavior began to appear.

Aggression became common. Some dominant males started attacking weaker mice, sometimes without reason. At the same time, many males gave up competing altogether. These withdrawn mice spent their days eating, sleeping, and cleaning themselves, but they no longer fought for territory or tried to mate. Calhoun called them "the beautiful ones" because their fur remained smooth and perfect, but they had no social or reproductive role.

Females were also affected. Overcrowding and stress made many of them unable to care for their young. Some abandoned their litters, while others became aggressive toward their own offspring. Infant mortality increased dramatically, and fewer and fewer babies survived.

Even though food, water, and space were still available, the colony began to collapse socially. Violence, isolation, and maternal failure replaced normal patterns of community life. Eventually, the mice stopped reproducing altogether. After reaching the peak of 2,200, the population entered a steady decline until the colony completely died out.

Calhoun called this process the "behavioral sink" – the breakdown of normal behavior in conditions of extreme social density. He believed that the results carried lessons for humans, especially in crowded urban environments. Just as the mice showed stress, aggression, and social withdrawal, people in overcrowded cities might face similar risks if social structures break down.

Although later researchers have debated how directly the experiment applies to humans, it remains a powerful example. It shows that material abundance alone is not enough for a healthy society. Without functioning social relationships and enough psychological space, even a "perfect" world can collapse.