Richness of pig's environment affects handling in chute.


The purpose of this experiment was to determine if environmental enrichment would improve the ease of handling pigs.

Sixty-four 42.5-kg Landrace sired pigs were used in a 60 day experiment. Four were assigned to each pen in 2 replicates of a 2x2x2 factorial design.

- Pigs were held in plain pens with minimal presence of humans for 28 days.

- Treatments were imposed the last 31 days:
  1. Toy (T) - three 60cm long, 2.5cm diameter rubber hoses hung 25cm above the floor continuously.
  2. Mingle (M) - quiet petting in pen for 10 minutes per week.
  3. Driving (D) - 50m in the same direction around corridors once a week.

- Pigs were kept in a closed house with 24 hour fluorescent lighting.

- The pens measured 1.35m x 2.25m and had partially slotted flooring with open partitions.

- The pigs had ad-libitum access to standard growing diet and water.

At the end of the trial, each pig was tested in a 4.9m long x 43cm wide x 67.5cm high plywood chute with bars over the top. Each pig was given two minutes to enter and walk through the chute voluntarily to a scale platform at the other end. The chute was lighted by a 15 Watt lamp over the scale and a 60 Watt lamp over the crowd pen. Pigs refusing to enter voluntarily were prodded for 15 seconds with a plastic pipe, then as needed with a battery powered electric prod.

The time it took the pigs enter, the number of pigs entering voluntarily and the number of stops in the chute were not affected by treatment.

- The groups of pigs that received toys, mingling, and both toys and mingling treatments did less backing up in the chute.
  - 4% of pigs with treatments backed up -vs- 38% of the control group pigs. (p < .05)

- The groups that received toys, mingling, and both toys and mingling treatments also required less electrical prodding.
  - 4% of pigs with treatments needed electrical prodding -vs- 25% of the control group pigs. (p < .075)

- Pigs that received two or three treatments were rated calmer than the control group (1.37 +/- .44) and pigs that received only one treatment (2.56 +/- .31) (p < .02)
  - Pigs were rated by two observers blind to treatments on a scale of 1 - 4.
    1=calm and 4=highly excitable.
Providing toys or mingling reduced the pig's excitability and the force required to move an animal through a chute.

The effectiveness of the driving treatment might have been reduced because pigs were driven along the same path every week.