

Pecking Targets Reduces Chicken Aggression by Half

ARNOLD S. CHAMOVE D.Sc.

Palmerston North, New Zealand.

ArnoldChamove@Ynnovate.ac.NZ

THE PROBLEM

Hens in battery cages pecking one another reduces economy for the manager and welfare for many hens, and it is likely the cause of the death of some.

A POSSIBLE SOLUTION ?

Foraging behavior (Andersson *et al.*, 2001) has a similar form in domesticated hens as in wild jungle fowl. Uncaged hens, (fig→) frequently wrestle, pull, and peck at flexible foliage. The only non-metallic or flexible objects battery hens have to peck is other hens. How about an alternative target?

TOOLS

Based on the concept of reinstating the natural behaviour of fowl (Chamove, 1989) and to see if allowing non-aggressive, non-nutritive pecking might reduce hen-directed pecking, 3 cages each containing 3 hens (*Gallus gallus domesticus*) in a battery shed



were observed by video recording 3 hours per day from 8 am to obtain 1 day of normative and 2 days of experimental data. Cages had a height in front and back of 43 and 36cm, a width and length of 30 and 45cm.

- ◆ One cage had brown rubber bands (←fig)
- ◆ One had strips of white cotton material
- ◆ One had no additional material, a control cage.

Both experimental cages contained six items, 12cm long X .5cm wide, hanging high on the cage, and each having a spot of red nail polish near the lowest end.

RESULTS

Analysis of every hen-directed peck (Rajecki *et al.* 1979) revealed 6 hens showing pecking, some to

adjacent-caged hens. An analysis of variance showed that in hens with targets (hatched green columns) hen-directed pecking was significantly reduced (from column 1 with no targets present to column 2 with targets available) to under 50% by the presence of rubber and material pecking targets ($F_{2,3} = 34.5$, $p = .008$) (fig→). Hen-pecking seems to be replaced by resilient-object pecking, which actually increases total pecking. Such a dramatic reduction in social aggression seems desirable, especially at such a low cost; and hens are able to perform a natural behavior normally only available by pecking other hens.

REFERENCES

Andersson, M., Nordin, E., Jensen, P. (2001). Domestication effects on foraging strategies in fowl. *Applied Animal Behaviour Science*, 72, 51-62.

Chamove, A.S. (1989). Environmental enrichment: A review. *Animal Technology*, 40, 155-178

Rajecki, D.W., Nerenz, D.R., Freedenberg, T.G. (1979). Components of aggression in chickens and conceptualizations of aggression in general. *Journal of Personality & Social Psychology*, 37, 1902-1914.

